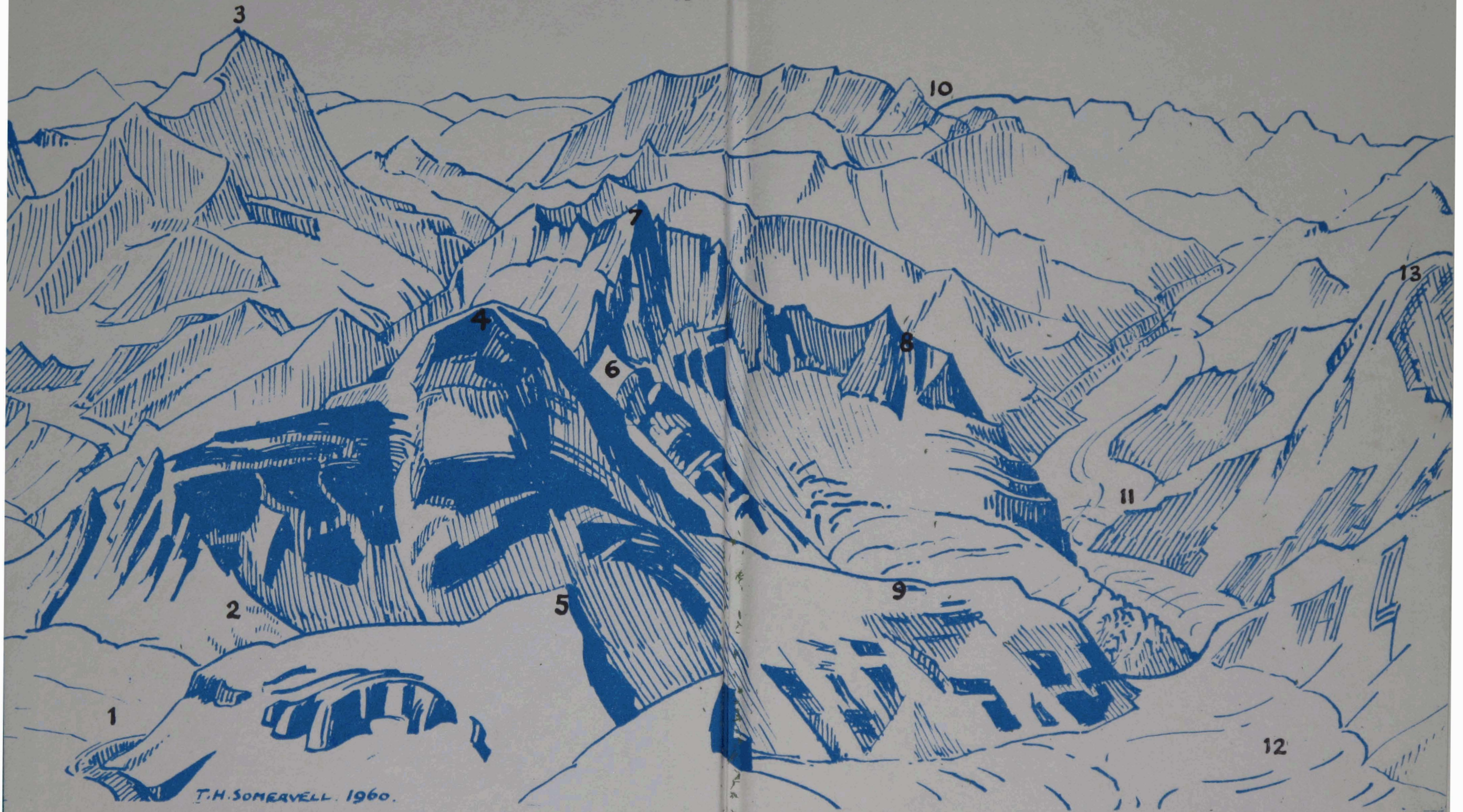


A PANORAMIC IMPRESSION OF EVEREST, LOOKING SOUTH

drawn specially for this book by T.H. Somervell



T.H. SOMERVELL. 1960.

1 East Rongbuk Glacier

2 North Col

3 Makalu

4 Everest

5 Changste

6 South Col

7 Lhotse

8 Nupste

9 W. ridge of Everest

10 Ama Dablam

11 Khumbu Glacier

12 Rongbuk Glacier

13 Pumori

CLIMBING EVEREST

An Anthology

selected and edited by

GEOFFREY BROUGHTON

*from the writings of
the climbers themselves*



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Introduction

The story of attempts to climb Mount Everest is as full of brave deeds as a legend of ancient heroes. Strong men have returned from the mountain weak and crippled: others have never returned at all. Something in the human spirit has seen the world's highest mountain as a challenge—a challenge by an adversary with a powerful defence, an adversary which commanded respect, and one which many hoped would never be defeated.

Mountaineering has been established in Europe as a sport for over a hundred years now, and Everest has been known as the highest place on earth for equally as long. But it was not until 1920 that the Dalai Lama signed the long-sought-for permission to approach the mountain. Even this document has a touch of magic in its words: it begins

‘To the west of the Five Treasuries of Great Snow (within the rule of White Glass Fort, near Rocky Valley Inner Monastery) is the Bird Country of the South . . .’

Since that date brave men have persisted in their attempts to conquer Everest. In 1921 came the path-finders, seeking out the problems and the best ways of attack. Then followed the epic expeditions of 1922 and 1924. The glory of Mallory, Norton, Odell and their comrades was still bright when, in 1933, younger climbers and methods renewed the attack, followed by further unsuccessful expeditions in 1935, 1936 and 1938.

‘How can I help rejoicing in the yet undimmed splendour, the undiminished glory, the unconquered supremacy of Mount Everest?’ exclaimed Mallory in 1923. This view found more supporters as succeeding expeditions retreated, beaten, from the foothills.

For as the years passed, other explorers were pushing further into the unknown spaces under the sea and in the air; the North and South Poles had surrendered their secrets, and year by year higher mountain peaks and the most inaccessible and perilous places on earth were conquered. Everest alone seemed to stand out, challenging, against the arrogance of puny man.

Climbing Everest was never just a matter of mountaineering. For experts, its rocks were not the most difficult, but its great height involved problems and dangers against which the greatest skill and the most modern equipment were sometimes of little use. The terrible Everest winds and the bitter cold; the thin air which sent a man at every step gasping for its precious oxygen and sucked away his determination and will; the knowledge that the summit had beaten the best of climbers and was the sacred home of other men's gods: such conditions were unknown elsewhere.

Why did climbers try to conquer Everest? Perhaps the best answer to this question was given by one of the greatest of them, George Leigh-Mallory. 'Because it is there,' he said simply.

Others after him could not deny the challenge, for a post-war generation of climbers renewed the attack in 1951, 1952 and 1953. Men like those who have contributed to this book could not rest until one of their company had stood on the highest part of the world. So the final success which came in 1953 was—sooner or later—inevitable.

Here was a great adventure, and none of the men who lived it—the scientists and poets—have returned untouched by the majesty and the magic of the highest mountain. Their writing, some of which is presented here, reflects the quiet heroism, the serious determination and the simple, humble reverence for the forces of nature which are among the finest of human qualities.

Captain John Noel first came under the spell of Everest in 1913 when he was a young army officer in India. In disguise he penetrated into Tibet to within forty miles of the mountain, nearer than any other white man had ever been. Later he was one of the most active organizers of climbing expeditions and served as photographer in 1922 and 1924. Here he tells of the earliest days in the story of Mount Everest.

The Highest Mountain

The first scene in the series of dramas which together constitute the story of Everest has for its setting prosaic Indian Government offices, where one day in 1852 the Bengali Chief Computer rushed into the room of the Surveyor-General, Sir Andrew Waugh, breathlessly saying, 'Sir, I have discovered the highest mountain in the world!'

The office of the Trigonometrical Survey had been long engaged on a series of observations of the peaks of Nepal from the plains of India. Native names had been officially adopted where they were known, but many of these mountains, so numerous, massed together and towering one above the other, were nameless. Numbers therefore had to be given to distinguish them. Among these unnamed peaks was one 'Peak XV'. Observations of it were recorded in 1849, but were not worked out for some three years afterwards.

Then, leisurely working over the accumulated data, the Computer made his dramatic discovery and immediately hastened to his chief with the news.

Excited as he was, he could have had no conception of the adventures to which his mathematical calculations were destined to lure men. The sequel was to be a struggle with gods and demons—existing only in the minds of the dwellers in the remote country of the mountain, but none the less real opponents. It was to be a contest with Nature in her cruellest moods, waged where the earth, surging upwards, thrusts herself—stark, bleak and lonely—through her enveloping atmosphere into the great void.

Immediately the officials got busy. Carefully the observations were checked, and the height of 29,002 feet was arrived at. The measurement was in later years carefully rechecked and raised to 29,145. Sir Andrew Waugh named the mountain after Sir George Everest, his predecessor, the Surveyor-General of India, under whose directions the observations had been started, but afterwards the Everest expeditions discovered that the Tibetan name is Chomo Lungma, which means 'The Goddess Mother of the World'.

All sorts of people have from time to time told stories of mountains higher than Everest; but it is definitely known that there is no higher mountain, and it became the dream and goal of explorers and mountaineers. But nobody could reach it, although it was so tantalizingly near. It was computed to be only one hundred and ten miles, as the crow flies, from Darjeeling, and to be situated on the borders of Nepal and Tibet; but the Tibetans refused, as also did the Nepalese, to give permission to approach it.

Access to the giant peak was not to come for many years. The mountain land of the Himalaya that bounds India on the north like a huge wall of rock and stretches beyond to the east and west, might be called the backbone of Asia. There are two thousand miles of giant mountains, one hundred peaks each twenty-four thousand feet in height, higher than any mountains in other parts of the world; twenty giants twenty-six thousand feet in height, six supergiants of twenty-seven thousand feet; and finally the culminating summit of Mount Everest, twenty-nine thousand one hundred and forty-five feet—five and a half miles high. This mountain range is one of the youngest in the world, and is still being pushed up, so geologists tell us, by the pressure of the oceans on the crust of the earth.

There were secrets guarded by these colossal natural ramparts. Now we know the geography, but it is not long since Central Asia, from the Pamirs to Tibet and the Gobi

Desert as far as the steppes of Siberia, were white spaces on the best of maps, except where dotted lines marking the routes taken by rare explorers stretched tenuously.

The position of Lhasa, the mysterious home of Buddhism in the heart of Tibet, was only guessed at. Such data as its latitude and longitude were unknown. Only vague knowledge existed of the Tsampo, the great river of Tibet which becomes the Brahmaputra in India, and of the great Indus which comes down from Tibet, carving its way through a series of terrific gorges in the mountains.

All this geographical knowledge had to be sought. But how?

The Himalayan passes were walled, barricaded, and guarded by hostile Tibetan soldiery. Beyond the passes the lamas in the fortress-monasteries ceaselessly spied the land for foreigners, and captured and tortured any they found. It was hopeless for any white man to attempt to go.

How the prayer wheels and rosaries of the Tibetans, instruments of piety, were turned to use against them, is one of the most fascinating romances of Asiatic exploration.

In 1860 Captain Montgomery, an active officer of the Indian Survey, hit upon the idea of training certain Indians in the use of scientific instruments. They became known as the Pundit Explorers. They were not all Hindus, although styled pundits. Some were Mohammedans, like Ata Mahomed, who explored the gorge of the Indus. Another was a Persian, the intrepid Mirza Shuja, who found his way through North Afghanistan and the Pamirs, but in later years was foully murdered in his sleep at Bokhara. Because of the secrecy of their explorations, the names of these men were not published until later years. They were known by two letters, Kalian Singh becoming A.K.; Hari Ram, who explored toward Mount Everest, M.H.

They were trained in the making of route traverses by

compasses and pacing their steps. They travelled in disguise and were allowed a free hand, earning only a few rupees a month. They were rewarded only when they returned—if they returned.

They would disappear sometimes for years, reappearing unexpectedly with the geographical knowledge so laboriously collected. They counted every step by the revolution of their prayer wheels, or by the beads on their rosaries. At night they would write their notes on a roll of paper hidden inside the prayer wheels. They recorded compass bearings of mountains and rivers passed, by means of little compasses cleverly disguised as amulets worn round their necks. They carried boiling-point thermometers inside hollow walking-sticks for the measurement of altitudes. Some pretended to be pilgrims and others traders, carrying medicines in order to ingratiate themselves with the lamas and officers they met in Tibet.

The physical hardships and nerve-racking effects of such travels told heavily upon them, and not more than two or three journeys could any one explorer accomplish in his lifetime. If he survived these he was withdrawn and employed to teach and train other men to continue the work. Time after time they suffered robbery by bandits, or desertion by companions and caravans to which they had attached themselves; as in the case of A.K., who, after he had been away for four years and had been given up as lost, made his way back through China—destitute except for the knowledge gained of another two thousand miles of the Forbidden Land.

One of the most romantic of all these adventures was that of the pundit, Kintup. He was sent to trace the course of the great Tibetan river, the Tsampo, and find out if it was the same stream as the Brahmaputra which pours into India from the Himalayas through the impenetrable forests of the Abor savages.

For two whole years, every day and night, Captain Harman of the Indian Survey, who sent Kintup on his hazardous mission, had the river watched in India for the special blocks of wood that Kintup was to cut and throw into the river in Tibet. But never a block was seen. Then Captain Harman fell seriously ill, left India, and the watch was abandoned. So also was hope that Kintup would ever return.

Kintup meanwhile had fallen a prisoner in Tibet, and been sold as a slave. Four years later, however, he gained his freedom and then—such was the amazing devotion to duty of the man—instead of making his way home, he set out to accomplish the work for which he had been sent. He followed the course of the Tibetan river into the unknown, within sixty miles of the plains. There he came to forest lands, where he cut logs and threw them into the river. But more than four years of dwindling hope had gone by and there was no longer any one watching for them.

Brave Kintup got back to India at length, and went to report to the survey officers and to ask who had found his logs. The story he gave of his wanderings was so romantic that many disbelieved him, but the Survey Department trusted his account officially; and, indeed, later his discoveries were proved true. Kintup received just reward for his devotion. The Geographical Society honoured him, while the Indian Government gave him the Order of Commander of the Indian Empire and a gift of a prosperous village where he could spend the remainder of his days.

The explorer Hari Ram, M.H., was sent in the direction of Everest. He made his way from India secretly, disguised as a pilgrim, by the Kosi, one of the great rivers of Nepal. He crossed a twenty-thousand-foot pass, west of Everest, and reached Dingri, north of the mountain, in Tibet. He gained valuable knowledge of the surroundings of Everest, particu-

larly to the north, but he found himself so blocked in by enormous peaks that he could not reach or identify his real objective. Vague rumours, however, he heard of the 'Lamasery of the Snows'.

This journey of M.H. and that of Sarat Chandra Das in 1879 were the nearest foreign approaches made to Mount Everest. Sarat Chandra Das made a journey to satisfy a religious ambition, travelling from India to Lhasa. He was not a trained geographer and his account of the country along the eastern approaches to Mount Everest was vague, but interesting as showing the hardships of travel over high mountain lands.

As late therefore as the early years of the present century, the journey of Sarat Chandra Das, who passed by the east, and the journey of the explorer M.H., who passed by the west, comprised the sum-total of our knowledge of the approaches to Mount Everest. It was known that on the east side was a deep gorge, where the Arun river breaks through from the plains of Tibet; while on the west side there appeared to be no river breaking the chain of mountains, and only high and difficult passes lay between Nepal and Tibet, with no practicable pass anywhere near the mountain. No explorer had penetrated to Everest's glacier valleys. Surrounding the great summit, which had been plotted by observation from India, was a blank white space on the map. The mountain stood, stupendous, seen through telescopes; its slopes untrodden by human beings.

From Through Tibet to Everest

In the course of time permission was granted by the government of Tibet and a first expedition was sent to Everest in 1921. Like all subsequent British attempts it was organized jointly by the Alpine Club and the Royal Geographical Society. But since so little was known about the mountain, the 1921 party was regarded as a reconnaissance prior to a summit attempt in the following year.

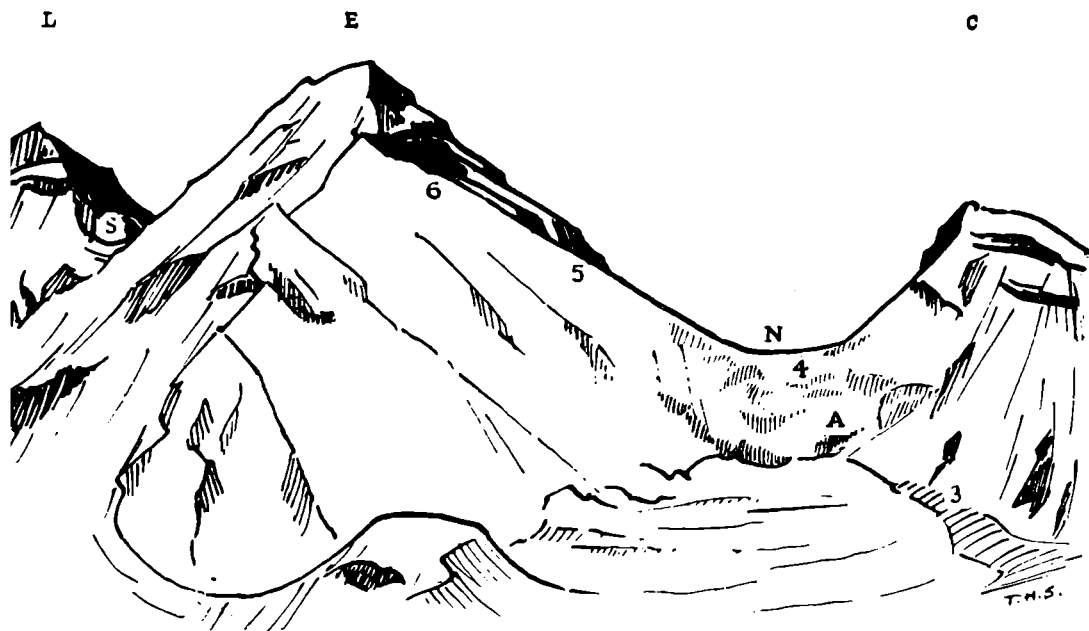
Only the north-east side of the mountain seemed climbable. The key to the ascent appeared to be the North Col, a high snow-saddle leading to the north-east ridge of the summit. Having reached this, George Leigh-Mallory and the rest of the reconnaissance party believed that Everest could be conquered. But the problems proved to be complicated, as Mallory reported in the official account of the expedition.

The Challenge

The route which has been chosen as the only one offering reasonable chances of success remains still very largely a matter of speculation. But the reconnaissance, unless it were actually to reach the summit, was obliged to leave much unproved, and its value must depend upon observations of various sorts and not merely upon the practice of treading the snow and rocks. Speculation in this case is founded upon experience and a study of the mountain's features; and it is by relating what has been seen with known facts that inferences have been drawn.

The eastern wall, about 6,000 feet high, by which the North Col itself must be reached, can never be lightly esteemed. Here reconnaissance has forged a link. But those who reached the Col were not laden with tents and stores; and on another occasion the conditions may be different. There may be the danger of an avalanche or the difficulty of ice. From what we saw this year before the monsoon had brought a heavy snowfall it is by no means improbable that ice will be found at the end of May on the steepest slope below the North Col. In that case much labour will be required to hew and keep in repair a staircase, and perhaps fix a banister, so that the laden coolies, not all of whom will be competent ice-men, may be brought up in safety.

The summit of Mount Everest is about 6,000 feet above the North Col; the distance is something like two and a half miles and the whole of it is unexplored. What grounds have we for thinking that the mountaineering difficulties will not prove insuperable, that in so far as mere climbing



A diagrammatic view of the head of the East Rongbuk Glacier, from the East. 3, 4 and 5 mark the camps of 1922 and 1924. 6—camp of 1924 (300 ft. higher in 1933 and after).

L: Lhotse	N: North Col
S: South Col	A: 1922 Avalanche
E: Everest	C: Changste

is concerned the route is practicable? Two factors, generally speaking, have to be considered: the nature of the ground and the angle of inclination.

Where the climber is confined to a narrow crest and can find no way to circumvent an obstacle, a very small tower or wall, a matter of twenty feet, may bar his progress. There the general angle may be what it likes: the important matter for him is that the angle is too steep in a particular place. But on a mountain's face where his choice is not limited to a strict and narrow way, the general angle is of primary importance: if it is sufficiently gentle, the climber will find that he may wander almost where he will to avoid the steeper places.

Long before we reached the North Col, Mr Bullock and I were fairly well convinced that the slope from here to the north-east shoulder was sufficiently gentle and that the nature of the ridge connecting these two points was not such as to limit the choice of route to a narrow line. Looking up from the North Col, we learnt nothing more about the angles. The view, however, was not without value; it amply confirmed our opinion as to the character of what lay ahead of us. The ridge is not a crest; its section is a wide and rounded angle. It is decorated by pinnacles, it does not rise in steps. It presents a smooth continuous way, and whether the rocks are still covered with powdery snow, or only slightly sprinkled and for the most part bare, the party of 1922 should be able to go up a long way at all events without meeting any serious obstacle.

It may not prove a simple matter actually to reach the north-east ridge above the shoulder at about 28,000 feet. The angle becomes steeper towards this ridge. But even in the last section below it, the choice of a way should not be inconveniently restricted. On the right of the ascending party will be permanent snow on various sloping ledges, an easy alternative to rocks if the snow is found in good condition, and always offering a detour by which to avoid an obstacle.

From the north-east shoulder to the summit of the mountain the way is not so smooth. The rise is only 1,000 feet in a distance of half a mile, but the first part of the crest is distinctly jagged by several towers and the last part is steep. Much will depend upon the possibility of escaping from the crest to avoid obstacles and of regaining it easily.

The south-east side (the left going up) is terribly steep, and it will almost certainly be out of the question to traverse there. But the sloping snow-covered ledges on the north-west may serve very well; the difficulty about them is their tendency to be horizontal in direction and to diverge from the

ridge where it slopes upwards, so that a party which had followed one in preference to the crest might find themselves cut off by a cliff running across the face above them. But one way or another I think it should be possible with the help of such ledges to reach the final obstacle. The summit itself is like the thin end of a wedge thrust up from the mass in which it is embedded. The edge of it, with the highest point at the far end, can only be reached from the north-east by climbing a steep blunt edge of snow. The height of this final obstacle must be fully 200 feet. Mr Bullock and I examined it often through our field-glasses, and though it did not appear insuperable, whatever our point of view, it never looked anything but steep.

To determine whether it is humanly possible to climb to the summit of Mount Everest or what may be the chances of success in such an undertaking, other factors beside the mere mountaineering difficulties have to be considered. It is at least probable that the obstacles presented by this mountain could be overcome by any competent party if they met them in the Alps. But it is a very different matter to be confronted with such obstacles at elevations between 23,000 and 29,000 feet. We do not know that it is physiologically possible at such high altitudes for the human body to make the efforts required to lift itself up even on the simplest ground. The condition of the party of 1921 in September cannot be taken as evidence that the feat is impossible. The long periods spent in high camps and the tax of many exhausting expeditions had undoubtedly reduced their physical efficiency. The party of 1922, on the other hand, will presumably choose for their attempt a time when the climbers are at the top of their form and their powers will depend on the extent of their adaptability to the condition of high altitude.

Nothing perhaps was so astonishing in the party of reconnaissance as the rapidity with which they became

acclimatized and capable of great exertions between 18,000 and 21,000 feet. Where is the limit of this progress? There is evidence enough to show that men may exist comfortably enough, eating, and digesting hearty meals and retaining a feeling of vitality and energy up to 23,000 feet. It may be that, after two or three days quietly spent at this height, the body would sufficiently adjust itself to endure the still greater difference from normal atmospheric pressure 6,000 feet higher.

At all events, a practical test can alone provide the proof in such a case. Experiments carried out in a laboratory by putting a man in a sealed chamber and reducing the pressure, valuable as they may be when related to the experiences of airmen, can establish nothing for mountaineers; for they leave out of account the all-important physiological factor of acclimatization. But in any case it is to be expected that efforts above 23,000 feet will be more exhausting than those at lower elevations; and it may well be that the nature of the ground will turn the scale against the climber. For him it is all-important that he should be able to breathe regularly; the demand upon his lungs along the final ridge cannot fail to be a terrible strain, and anything like a tussle up some steep obstacle which would interfere with the regularity of his breathing might prove to be an ordeal beyond his strength.

As a way out of these difficulties of breathing, the use of oxygen has often been recommended and experiments were made by Dr Kellas, which will be continued in 1922.

Even so there will remain the difficulty of establishing one or perhaps two camps above the North Col (23,000 feet). It is by no means certain that any place exists above this point on which tents could be pitched. Perhaps the party will manage without tents, but no great economy of weight will be effected that way: those who sleep out at an elevation of 25,000 or 26,000 feet will have to be bounti-

fully provided with warm things. Probably about fifteen, or at least twelve loads, will have to be carried up from the North Col. It is not expected that oxygen will be available for this purpose, and the task, whatever organization is provided, will be severe, possibly beyond the limits of human strength.

Further, another sort of difficulty will jeopardize the chances of success. It might be possible for two men to struggle somehow to the summit, disregarding every other consideration. It is a different matter to climb the mountain as mountaineers would have it climbed. Principles, time-honoured in the Alpine Club, must of course be respected in the ascent of Mount Everest. The party must keep a margin of safety. It is not to be a mad enterprise rashly pushed on regardless of danger. The ill-considered acceptance of any and every risk has no part in the essence of persevering courage. A mountaineering enterprise may keep sanity and sound judgement and remain an adventure. And of all principles the first is that of mutual help. What is to be done for a man who is sick or abnormally exhausted at these high altitudes? His companions must see to it that he is taken down at the first opportunity and with an adequate escort; and the obligation is the same whether he be sahib or coolie; if we ask a man to carry our loads up the mountain we must care for his welfare at need. It may be taken for granted that such need will arise and will interfere very seriously with any organization however ingeniously and carefully it may be arranged.

In all it may be said that one factor beyond all other is required for success. Too many chances are against the climbers; too many contingencies may turn against them. Anything like a breakdown of the transport will be fatal. Soft snow on the mountain will be an impregnable defence; a big wind will send back the strongest; even so small a matter as a boot fitting a shade too tight may endanger one

man's foot and involve the whole party in retreat. The climbers must have above all things, if they are to win through, good fortune, and the greatest good fortune of all for mountaineers, some constant spirit of kindness in Mount Everest itself, the forgetfulness for long enough of its more cruel moods. For we must remember that the highest of mountains is capable of severity, a severity so awful and so fatal that the wiser sort of men do well to think and tremble even on the threshold of their high endeavour.

From Mount Everest, the Reconnaissance

The 1922 expedition led by General Charles Bruce followed the route pioneered by the 1921 reconnaissance party and, with the help of Sherpa porters, established a string of camps on the mountain. Somervell, Mallory and Norton pressed a first summit attempt to a height of almost 27,000 feet before exhaustion forced them to retire.

Immediately George Finch, with the young and untried Geoffrey Bruce as his climbing companion, set off on a second assault. They used oxygen equipment and Finch (who later became Professor of Chemistry in the University of London) continued throughout later Everest campaigns as its strongest advocate.

His description of the first penetration to Everest's well-known Yellow Band of rock is one of splendid failure.

First Failure

On May 24th, Captain Noel, Lance-Corporal Tejbir, the most promising of the Ghurkas, Geoffrey Bruce and I, all using oxygen, went up to the North Col (23,000 feet). Bent on a determined attack, we camped there for the night. Morning broke fine and clear though somewhat windy, and at eight o'clock we set off up the long snow-slopes leading towards the north-east shoulder of Mount Everest, twelve porters carrying oxygen cylinders, provisions for one day, and camping gear.

An hour and a half later, Bruce, Tejbir and I followed, and in spite of the fact that each bore a load of over thirty pounds, which was much more than the average weight carried by the porters, we overtook them at a height of about 24,500 feet. They greeted our arrival with their usual cheery, broad grins. But no longer did they regard oxygen as a foolish man's whim; one and all appreciated the advantage of what they chose to call 'English air'.

Leaving them to follow, we went on, hoping to pitch our camp somewhere above 26,000 feet. But shortly after one o'clock the wind freshened up rather offensively, and it began to snow. Our altitude was 25,500 feet, some 500 feet below where we had hoped to camp, but we looked round immediately for a suitable camping site, as the porters had to return to the North Col that day, and persistence in proceeding further would have run them unjustifiably into danger. This I would under no circumstances do, for I felt responsible for these cheerful, smiling, willing men, who

looked up to their leader and placed in him the complete trust of little children.

Our porters arrived at two p.m., and at once all began to level off the little platform where the tent was soon pitched, on the very edge of the tremendous precipices falling away to the East Rongbuk and Main Rongbuk Glaciers, over 4,000 feet below.

Within twenty minutes the porters were scurrying back down the broken rocky ridge towards the North Col, singing, as they went, snatches of their native hillside ditties. What splendid men! Having seen the last safely off, I looked to the security of the guy-ropes holding down the tent, and then joined Bruce and Tejbir inside. It was snowing hard and bitterly cold, so we crawled into our sleeping-bags, and, gathering round us all available clothing, huddled up together as snugly as possible.

After sunset, the storm rose to a gale. Terrific gusts tore at our tent with such ferocity that the ground-sheet with its human burden was frequently lifted up off the ground. On these occasions our combined efforts were needed to keep the tent down and prevent its being blown away. Although we had blocked up the few very small openings in the tent to the best of our powers, long before midnight we were all thickly covered in fine frozen snow that somehow or other was blown in upon us, insinuating its way into sleeping-bags and clothing.

Sleep was out of the question. We dared not relax our vigilance, for our strength was needed to hold the tent down and to keep the flaps of the door, stripped of their fastenings by a gust that had caught us unawares, from being torn open. We fought for our lives, realizing that once the wind got our little shelter into its ruthless grip, it must inevitably be hurled, with us inside it, down on to the East Rongbuk Glacier, thousands of feet below.

To me the situation was more than alarming. Tejbir

placed complete confidence in his companions, and the ready grin never left his face. But it was Bruce's first experience of mountaineering, and how the ordeal would affect him I did not know. I might have spared myself all anxiety. Throughout the whole adventure he bore himself in a manner that would have done credit to the finest of veteran mountaineers, and returned my confidence with a cheerfulness that rang too true to be counterfeit.

By one o'clock on the morning of the 26th the gale reached its maximum. The wild flapping of the canvas made a noise like that of machine-gun fire. It was so deafening that we could scarcely hear each other speak. Later, there came interludes of comparative lull, succeeded by bursts of storm more furious than ever. During such lulls we took it in turns to go outside to tighten up slackened guy-ropes, and also succeeded in tying down the tent more firmly.

It was impossible to work in the open for more than three or four minutes at a stretch, so profound was the exhaustion induced by this brief exposure to the fierce cold wind. But with the rope taking some of the strain, we enjoyed a sense of security which, though probably only illusory, allowed us all a few sorely needed moments of rest.

Dawn broke bleak and chill; the snow had ceased to fall, but the wind continued with unabated violence. Once more we had to take it in turns to venture out and tighten up the guy-ropes, and to try to build on the windward side of the tent a small wall of stones as an additional protection. The extreme exhaustion and the chill produced in the body as a result of each of these little excursions were sufficient to indicate that, until the gale had spent itself, there could be no hope of either advance or retreat. As the weary morning hours dragged on, we believed we could detect a slackening off in the storm. And I was thankful,

for I was beginning quietly to wonder how much longer human beings could stand the strain. We prepared another meal. The dancing flames of the spirit stove caused me anxiety bordering on anguish, lest the tent, a frail shelter between life and death, should catch fire. At noon the storm regained its strength and rose to unsurpassed fury. A great hole was cut by a stone in one side of the tent, and our situation thus unexpectedly became more desperate than ever.

But we carried on, making the best of our predicament until, at one o'clock, the wind dropped suddenly from a blustering gale to nothing more than a stiff breeze. Now was the opportunity for retreat to the safety of the North Col camp. But I wanted to hang on and try our climb on the following day. Very cautiously and tentatively I broached my wish to Bruce, fearful lest the trying experience of the last twenty-four hours had undermined his keenness for further adventure. Once again I might have spared myself all anxiety. He jumped at the idea, and when our new plans were communicated to Tejbir, the only effect upon him was to broaden his already expansive grin.

It was a merry little party that gathered round to a scanty evening meal cooked with the last of our fuel. The meal was meagre for the simple reason that we had catered for only one day's short rations, and we were now very much on starvation diet.

We had hardly settled down for another night when, about six p.m., voices were heard outside. Our unexpected visitors were porters who, anxious as to our safety, had left the North Col that afternoon when the storm subsided. With them they brought thermos flasks of hot beef-tea and tea provided by the thoughtful Noel. Having accepted these most gratefully, we sent the porters back without loss of time.

That night began critically. We were exhausted by our previous experiences and through lack of sufficient food. Tejbir's grin had lost some of its expanse. On the face of Geoffrey Bruce, courageously cheerful as ever, was a strained, drawn expression that I did not like. Provoked, perhaps, by my labours outside the tent, a dead, numbing cold was creeping up my limbs—a thing I had only once before felt. Something had to be done.

Like an inspiration came the thought of trying the effect of oxygen. We hauled apparatus and cylinders into the tent, and, giving it the air of a joke, we took doses all round. Tejbir took his medicine reluctantly, but with relief I saw his face brighten up. The effect on Bruce was visible in his rapid change of expression. A few minutes after the first deep breath, I felt the tingling sensation of returning life and warmth to my limbs.

We connected up the apparatus in such a way that we could breathe a small quantity of oxygen throughout the night. The result was marvellous. We slept well and warmly. Whenever the tube delivering the gas fell out of Bruce's mouth as he slept, I could see him stir uneasily in the greenish light of the moon as it filtered through the canvas. Then half unconsciously replacing the tube, he would fall once more into a peaceful slumber. There is little doubt that it was the use of oxygen which saved our lives during this second night in our high camp.

Before daybreak we were up, and proceeded to make ready for our climb. Putting on our boots was a struggle. Mine I had taken to bed with me, and a quarter of an hour's striving and tugging sufficed to get them on. But Bruce's and Tejbir's were frozen solid, and it took them more than an hour to mould them into shape by holding them over lighted candles.

Shortly after six we assembled outside. Some little delay was incurred in arranging the rope and our loads, but at

length at 6.30 a.m., soon after the first rays of the sun struck the tent, we shouldered our bundles and set off. What with cameras, thermos bottles, and oxygen apparatus, Bruce and I each carried well over forty pounds; Tejbir with two extra cylinders of oxygen shouldered a burden of about fifty pounds.

Our scheme of attack was to take Tejbir with us as far as the north-east shoulder, there to relieve him of his load and send him back. The weather was clear. The only clouds seemed so far off as to presage no evil, and the breeze, though intensely cold, was bearable. But it soon freshened up, and before we had gone more than a few hundred feet the cold began to have its effect on Tejbir's sturdy constitution, and he showed signs of wavering. Bruce's eloquent flow of conversation, however, managed to boost him up to an altitude of 26,000 feet. There he collapsed entirely, sinking face downwards on to the rocks and crushing beneath him the delicate instruments of his oxygen apparatus. Tejbir had done his best. We pulled him off his apparatus and, relieving him of some cylinders, cheered him up sufficiently to start him with enough oxygen on his way back to the high camp, to await our return. We had no compunction about letting him go alone, for the ground was easy and he could not lose his way, the tent being in full view below.

After seeing him safely off and making good progress, we loaded up Tejbir's cylinders, and, in view of the easy nature of the climbing, mutually agreed to dispense with the rope, and thus enable ourselves to proceed more rapidly. Climbing not very steep and quite easy rocks, and passing two almost level places affording ample room for some future high camp, we gained an altitude of 26,500 feet. By this time, however, the wind, which had been steadily rising, had acquired such force that I considered it necessary to leave the ridge and continue our ascent by traversing out

across the great northern face of Mount Everest, hoping to find more shelter from the icy blasts. It was not easy to come to this decision, because I saw that between us and the shoulder the climbing was all plain sailing and presented no outstanding difficulty.



Leaving the ridge, we began to work out into the face. For the first few yards the going was straightforward, but presently the general angle became much steeper, and our trials were accentuated by the fact that the rocks shelved

outward and downward, making footholds difficult. We did not rope, however. I knew that the longer we remained unroped, the more time we should save—a consideration of vital importance. But as I led out over these steeply sloping, evilly smooth slabs, I carefully watched Bruce to see how he would tackle the formidable task with which he was confronted on this his first mountaineering expedition. He did his work splendidly and followed steadily and confidently, as if he were quite an old hand at the game.

Sometimes the slabs gave place to snow—treacherous, powdery stuff, with a thin, hard, deceptive crust that gave the appearance of compactness. Little reliance could be placed upon it, and it had to be treated with great care. And sometimes we found ourselves crossing steep slopes that yielded and shifted downwards with every tread. Very occasionally in the midst of our exacting work we were forced to indulge in a brief rest in order to replace an empty cylinder of oxygen by a full one. The empty ones were thrown away, and as each bumped its way over the precipice and the good steel clanged like a church bell at each impact, we laughed aloud at the thought that ‘There goes another five pounds off our backs’.

Since leaving the ridge we had not made much height although we seemed to be getting so near our goal. Now and then we consulted the barometer, and its reading encouraged us on. 27,000 feet; then we gave up traversing and began to climb diagonally upwards towards a point on the lofty north-east ridge, midway between the shoulder and the summit.

Soon afterwards an accident put Bruce’s oxygen apparatus out of action. He was some twenty feet below me, but struggled gallantly upwards as I went to meet him, and, after connecting him on to my apparatus and so renewing his supply of oxygen, we soon traced the trouble and

effected a satisfactory repair. The barometer here recorded a height of 27,300 feet.

The highest mountain visible was Cho Oyu, which is just short of 27,000 feet. We were well above it and could look across it into the dense clouds beyond. The great West Peak of Everest, one of the most beautiful sights to be seen from down in the Rongbuk Valley, was hidden, but we knew that our standpoint was nearly 2,000 above it. Everest itself was the only mountain top which we could see without turning our gaze downwards. We could look across into clouds which lay at some undefined distance behind the north-east shoulder, a clear indication that we were only a little, if any, below its level. Pumori, an imposing ice-bound pyramid, 23,000 feet high, I sought at first in vain. We were so far above it that it had sunk into an insignificant little ice-hump by the side of the Rongbuk Glacier. Most of the other landmarks were blotted out by masses of ominous, yellow clouds swept from the west in the wake of an angry storm-wind.

The point we reached is unmistakable even from afar. We were standing on a little rocky ledge, just inside an inverted V of snow, immediately below the great belt of reddish-yellow rock which cleaves its way almost horizontally through the otherwise greenish-black slabs of the mountain. Though 1,700 feet below, we were well within half a mile of the summit, so close, indeed, that we could distinguish individual stones lying just underneath the highest point. Ours were truly the tortures of Tantalus; for, weak from hunger and exhausted by that nightmare struggle for life in our high camp, we were in no fit condition to proceed. Indeed, I knew that if we were to persist in climbing on, even if only for another 500 feet, we should not both get back alive.

The decision to retreat once taken, no time was lost, and, fearing lest another accidental interruption in the oxygen

supply might lead to a slip on the part of either of us, we roped together. It was midday.

At first we returned in our tracks, but later found better going by aiming to strike the ridge between the north-east shoulder and the North Col at a point above where we had left it in the morning. Progress was more rapid, though great caution was still necessary. Shortly after two p.m., we struck the ridge and there reduced our burdens to a minimum by dumping four oxygen cylinders. The clear weather was gone. We plunged down the easy, broken rocks through thick mists driven past us from the west by a violent wind. For one small mercy we were thankful—no snow fell. We reached our high camp in barely half an hour, and such are the vagaries of Everest's moods that in this short time the wind had practically dropped.

Tejbir lay snugly wrapped up in all three sleeping-bags, sleeping the deep sleep of exhaustion. Hearing the voices of the porters on their way up to bring down our kit, we woke him up, telling him to await their arrival and to go down with them. Bruce and I then proceeded on our way, met the ascending porters and passed on, greatly cheered by their bright welcomes and encouraging smiles.

But the long descent, coming as it did on top of a hard day's work, soon began to find out our weakness. We were deplorably tired, and soon could no longer move ahead with our accustomed vigour. Knees did not always bend and unbend as required. At times they gave way altogether and forced us, staggering, to sit down. But eventually we reached the broken snows of the North Col, and arrived in camp there at four p.m.

A craving for food was all that animated us. Hot tea and a tin of spaghetti were soon forthcoming, and even this little nourishment refreshed us and renewed our strength to such an extent that three-quarters of an hour later we were ready to set off for Camp III. An invaluable addition

to our little party was Captain Noel, the indefatigable photographer of the Expedition, who had already spent four days and three nights on the North Col. He formed our rearguard and nursed us safely down the steep snow and ice slopes on to the almost level basin of the glacier below. Before five-thirty p.m., only forty minutes after leaving the col, we reached Camp III. Since midday, from our highest point we had descended over 6,000 feet; but we were quite finished.

That evening we dined well. Four whole quails followed by nine sausages left me asking for more. The last I remember of that long day was going to sleep, warm in the depths of my wonderful sleeping-bag, with the remains of a tin of toffee tucked away in the crook of my elbow.

Next morning showed that Bruce's feet were sorely frost-bitten. I had practically escaped; but the cold had penetrated the half-inch-thick soles of my boots and three pairs of heavy woollen socks, and four small patches of frostbite hampered me at first in my efforts to walk. Bruce was piled on to a sledge, and I journeyed with him as his fellow-passenger.

Our attack upon Mount Everest had failed. The great mountain with its formidable array of defensive weapons had won; but if the body had suffered, the spirit was still whole. Reaching a point where we obtained our last close view of the great unconquered mountain, Geoffrey Bruce bade his somewhat irreverent adieu with 'Just you wait, old thing, you'll be for it soon!'—words that are expressive of my own sentiments.

From *The Assault on Mount Everest*

Most of the 1922 climbing party were suffering from strain and frostbite as results of their two unsuccessful attempts on the summit. Now the first signs of an early monsoon appeared. But despite this and a warning message from the Lama of Rongbuk Monastery, Mallory resolved to make a third assault. Here is his own account.

Avalanche

After a second night of unremitting snowfall the weather on the morning of June 5 improved and we decided to go on. Low and heavy clouds were still flowing down the East Rongbuk Glacier, but at an early hour the sky brightened to the west. It was surprising, after all we had seen of the flakes passing our door, that no great amount of snow was lying on the stones about our camp. But the snow had come on a warm current and melted or evaporated, so that after all the depth was no more than 6 inches at this elevation (17,500 feet).

We passed Camp II and were well up towards Camp III before the fresh snow became a serious impediment. It was still snowing up here, though not very heavily; there was nothing to cheer the grey scene; the clinging snow about our feet was so wet that even the best of our boots were soaked through, and the last two hours up to Camp III were tiresome.

Nor was it a cheering camp when we reached it. The tents had not been packed up. But we found them now half-full of snow and ice. The stores were all buried; everything that we wanted had first to be dug up.

The snow up here was so much deeper that we anxiously discussed the possibility of going further. With 15 to 18 inches of snow to contend with, not counting drifts, the labour would be excessive, and until the snow solidified there would be considerable danger at several points. But the next morning broke fine; we had soon a clear sky and glorious sunshine; it was the warmest day that any of us

remembered at Camp III; and as we watched the amazing rapidity with which the snow solidified and the rocks began to appear about our camp, our spirits rose. The side of Everest facing us looked white and cold; but we observed a cloud of snow blown from the North Ridge; it would not be long at this rate before it was fit to climb.

We had already resolved to use oxygen on the third attempt. It was improbable that we should beat our own record without it, for the strain of previous efforts would count against us, and we had not the time to improve on our organization by putting a second camp above the North Col. All those who had used oxygen were convinced that they went up more easily with its help than they could expect to go without it. Somervell and I intended to profit by their experience.

Their camp at 25,000 feet had been too low; we would try to establish one now, as we had intended before, at 26,000 feet. And we hoped for a further advantage in going higher than Finch and Bruce had done before using oxygen; whereas they had started using it at 21,000 feet, we intended to go up to our old camp at 25,000 feet without it, perhaps use a cylinder each up to 26,000 feet, and at all events start from that height for the summit with a full supply of four cylinders.

Our chief anxiety under these new conditions was to provide for the safety of our porters. We hoped that after fixing our fifth camp at 26,000 feet, the porters might be able to go down by themselves to the North Col in easy conditions; to guard against the danger of concealed crevasses there Crawford would meet them at the foot of the North Ridge to conduct them properly roped to Camp IV. As the supply officer at this camp he would also be able to superintend the descent over the first steep slope of certain porters who would go down from Camp IV without sleeping after carrying up their loads.

But the North Col had first to be reached. With so much new snow to contend with we should hardly get there in one day. If we were to make the most of our chance in the interval of fair weather, we should lose no time in carrying up the loads for some part of the distance. It was decided therefore to begin this work on the following day, June 7.

In the ascent to the North Col after the recent snowfall we considered that an avalanche was to be feared only in one place, the steep final slope below the shelf. There we could afford to run no risk; we must test the snow and be certain that it was safe before we could cross this slope. Probably we should be obliged to leave our loads below it, having gained, as a result of our day's work, the great advantage of a track. An avalanche might also come down, we thought, on the first steep slope where the ascent began. Here it could do us no harm, and the behaviour of the snow on this slope would be a test of its condition.

The party, Somervell, Crawford and I, with fourteen porters, set out at 8 a.m. In spite of the hard frost of the previous night, the crust was far from bearing our weight; we sank in up to our knees at almost every step, and two hours were taken in traversing the snowfield.

At 10.15 a.m., Somervell, I, a porter and Crawford, roped up in that order, began to work up the steep ice-slope, now covered with snow. It was clear that the three of us without loads must take the lead in turns stamping out the track for our porters. These men, after their immense efforts on the first and second attempts, had all volunteered to 'go high' as they said once more, and everything must be done to ease the terrible work of carrying the loads over the soft snow.

No trace was found of our previous tracks, and we were soon arguing as to where exactly they might be as we

slanted across the slope. It was remarkable that the snow adhered so well to the ice that we were able to get up without cutting steps. Everything was done to induce the snow to come down if it would; every test gave a satisfactory result. Once this crucial place was passed, we plodded on without hesitation. If the snow would not come down where we had formerly encountered steep bare ice, above on the gentler slopes, we had nothing to fear. The thought of an avalanche was dismissed from our minds.

It was necessarily slow work forging our way through the deep snow, but the party was going extraordinarily well, and the porters were evidently determined to get on. Somervell gave us a long lead, and Crawford next, in spite of the handicap of shorter legs, struggled upwards in some of the worst snow we met until I relieved him. I found the effort at each step so great that no method of breathing I had formerly employed was adequate; it was necessary to pause after each lifting movement for a whole series of breaths, rapid at first, and gradually slower, before the weight was transferred again to the other foot.

At 1.30 p.m. I halted, and the porters, following on three separate ropes, soon came up with the leading party. We should have been glad to stay where we were for a long rest. But the hour was already late, and as Somervell was ready to take the lead again, we decided to push on.

We were now about 400 feet below a conspicuous block of ice and 600 feet below Camp IV, still on the gentle slopes. Somervell had advanced only 100 feet, rather up the slope than across it, and the last party of porters had barely begun to move. The scene was peculiarly bright and windless, and as we rarely spoke, nothing was to be heard but the laboured panting of our lungs.

This stillness was suddenly disturbed. We were startled

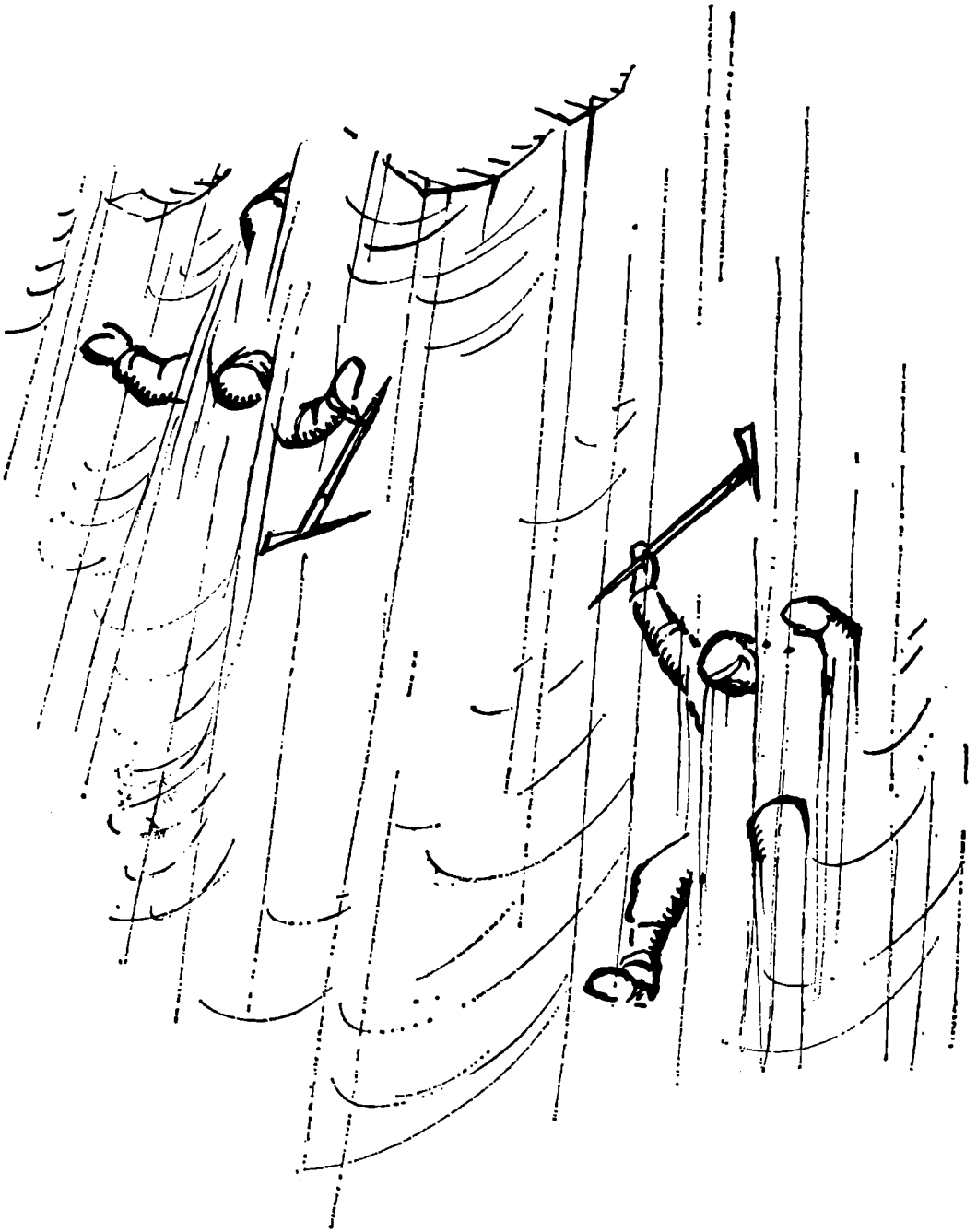
by an ominous sound, sharp, arresting, violent, and yet somehow soft, like an explosion of gunpowder. I had never before on a mountainside heard such a sound; but all of us, I imagine, knew instinctively what it meant, as though we had been accustomed to hear it every day of our lives.

In a moment I observed the surface of the snow broken and puckered where it had been even for a few yards to the right of me. I took two steps convulsively in this direction with some quick thought of getting nearer to the edge of the danger that threatened us. And then I began to move slowly downwards, inevitably carried on the whole moving surface by a force I was utterly powerless to resist.

Somehow I managed to turn out from the slope so as to avoid being pushed headlong and backwards down it. For a second or two I seemed hardly to be in danger as I went quietly sliding down with the snow. Then the rope at my waist tightened and held me back. A wave of snow came over me and I was buried. I supposed that the matter was settled.

However, I called to mind experiences related by other parties; and it had been suggested that the best chance of escape in this situation lay in swimming. I thrust out my arms above my head and actually went through some sort of motions of swimming on my back. Beneath the surface of the snow, with nothing to inform the senses of the world outside it, I had no impression of speed after the first acceleration—I struggled in the tumbling snow, unconscious of everything else—until, perhaps, only a few seconds later, I knew the pace was easing up. I felt an increasing pressure about my body. I wondered how tightly I could be squeezed, and then the avalanche came to rest.

My arms were free; my legs were near the surface. After a brief struggle, I was standing again, surprised and breath-



less, in the motionless snow. But the rope was tight at my waist; the porter tied on next to me, I supposed, must be deeply buried. To my further surprise, he quickly emerged, unharmed as myself. Somervell and Crawford too, though they had been above me by the rope's length, were now quite close, and soon extricated themselves. We subsequently made out that their experiences had been very similar to mine. But where were the rest?

Looking down over the foam of snow, we saw one group of porters some little distance, perhaps 150 feet below us. Presumably the others must be buried somewhere between us and them, and though no sign of these missing men appeared, we at once prepared to find and dig them out. The porters we saw still stood their ground instead of coming up to help. We soon made out that they were the party who had been immediately behind us, and they were pointing below them.

They had travelled further than us in the avalanche, presumably because they were nearer the centre, where it was moving more rapidly. The other two parties, one of four and one of five men roped together, must have been carried even further. We could still hope that they were safe. But as we hurried down we soon saw that beneath the place where the four porters were standing was a formidable drop; it was only too plain that the missing men had been swept over it.

We had no difficulty in finding a way round this obstacle; in a very short time we were standing under its shadow. The ice-cliff was from 40 to 60 feet high in different places; the crevasse at its foot was more or less filled up with avalanche snow.

Our fears were soon confirmed. One man was quickly uncovered and found to be still breathing; before long we were certain that he would live. Another whom we dug out near him had been killed by the fall. He and his party appeared to have struck the hard lower lip of the crevasse, and were lying under the snow on or near the edge of it.

The four porters who had escaped soon pulled themselves together after the first shock of the accident, and now worked here with Crawford and did everything they could to extricate the other bodies, while Somervell and I went down into the crevasse.

A loop of rope which we pulled up convinced us that the other party must be here. It was slow work loosening the snow with the pick or adze of an ice-axe and shovelling it with the hands. But we were able to follow the rope to the bodies. One was dug up lifeless; another was found upside down, and when we uncovered his face Somervell thought he was still breathing. We had the greatest difficulty in extricating this man, so tightly was the snow packed about his limbs; his load, four oxygen cylinders on a steel frame, had to be cut from his back, and eventually he was dragged out. Though buried for about forty minutes, he had survived the fall and the suffocation, and suffered no serious harm.

Of the two others in this party of four, we found only one. We had at length to give up a hopeless search with the certain knowledge that the first of them to be swept over the cliff, and the most deeply buried, must long ago be dead. Of the other five, all the bodies were recovered, but only one was alive. The two who had so marvellously escaped were able to walk down to Camp III, and were almost perfectly well next day. The other seven were killed.

This tragic calamity was naturally the end of the third attempt to climb Mount Everest.

The surviving porters who had lost their friends or brothers behaved with dignity, making no noisy parade of the grief they felt. We asked them whether they wished to go up and bring down the bodies for orderly burial. They preferred to leave them where they were. For my part, I was glad of this decision. What better burial could they have than to lie in the snow where they fell? In their honour a large cairn was built at Camp III.

From *The Assault on Mount Everest*

The 1924 expedition was an epic series of events. Driven down the mountain by blizzards, Norton led his weary porters and climbers to the Rongbuk monastery to recuperate. Then, in better weather, but only ten days before the monsoon was expected, it was planned for parties of two climbers to attack the summit on consecutive days.

The first pair, Mallory and Bruce, were forced to turn back by the exhaustion of their porters.

Meanwhile, Norton and Somervell were working up the mountain one day behind them. Here is Colonel Norton's own memorable description of his near failure.

Norton's Gallant Effort

The morning of June 2 broke fine, and by 6.30 Somervell and I were off with our little party of six porters. The reader will understand that Mallory and Bruce were to have established Camp V overnight; this morning they should have been heading up the North Ridge for Camp VI, carrying with them the tent and sleeping-bags in which they had slept the night before.

Our loads, therefore, were one 10 lb. tent, two sleeping-bags, food and solid methylated spirit for ourselves for a possible three nights and for the porters for one; above the North Col porters' loads were always cut down to a maximum of 20 lb. a man, preferably a little under that weight. I cannot remember the exact details of the loads our men carried, but I know they were laden so near the limit that Somervell and I had to carry (as we had done the day before) a light rucksack apiece, with compass, electric torch, a few spare woollen garments, a change of socks, etc., for our own personal use.

We followed our old route of 1922—the blunt north ridge. For the first 1,500 feet or more the edge of a big snow-bed forms the crest of the ridge, representing the very top of that great mass of hanging ice which clothes the whole of the eastern slopes and cliffs of the North Col. Ascending, we stuck to the rocks just clear of this snow-bed. The rocks are quite easy, but steep enough to be very hard work at those heights.

About half-way up this day's climb was the spot where two years before I had, while taking a short rest, placed

between my feet my rucksack, containing a few woollen comforts for the night. Something starting it off, it slipped from my grasp, and in a second was leaping and bounding like a great football with the evident intention of stopping nowhere short of the main Rongbuk Glacier below. This gives a fair picture of the general angle of the climb.

Somewhere about this same spot we heard something above, and, looking up, were not a little disconcerted to see Dorjay Pasang descending to meet us. He was Mallory's and Bruce's leading porter, their first pick and one of the men on whom our highest hopes centred. We had hardly heard his tale of woe and read a note he brought from Mallory when we saw above Mallory, Bruce and three more porters descending in his tracks.

The wind was too cold for a long conversation, and their story was distressingly simple. On the preceding day they had met a very bitter wind all the way up the ridge on which we now stood—so bitter that it had quite taken the heart out of their porters. They had pitched two tents at Camp V at a little over 25,000 feet, and spent the night, but next morning nothing would induce any of the porters to go higher, and the end of it was they had to return.

Incidentally, Bruce had had to help the last two or three porters into camp the night before, carrying their loads for them for a short distance, and it was quite evident to us that these excessive exertions had affected him in some way, a surmise which was later confirmed by the discovery that he had strained his heart. So he himself was in no fit state to go on, though none who know him will doubt that he would have done so could the porters have been induced to accompany him.

As Camp V had been left all standing with tents and bedding destined to go higher that morning, Somervell and I were able to detach two of the porters who had accom-

panied us so far, to return with the descending party, and we now continued with four men.

We reached Camp V without incident about 1 p.m. We had no difficulty in finding the camp from Mallory's description and from certain strips of coloured cloth which each party carried to serve as signposts and which had been put up at the point where we were to leave the ridge. The two tents were pitched one above the other on crumbling platforms built on the steep slope just over the edge, and on the east or sheltered side of the ridge.

The afternoon was spent as every afternoon must always be spent under these conditions. On arrival one crawls into the tent, so completely exhausted that for perhaps three-quarters of an hour one just lies in a sleeping-bag and rests. Then duty begins to call, one member of the party with groans and pantings and frequent rests crawls out of his bag, out of the tent and a few yards to a neighbouring patch of snow, where he fills two big aluminium pots with snow; his companion with more panting and groans sits up in bed, lights the methylated spirits cooker and opens some tins and bags of food—say a stick of pemmican, some tea, sugar and condensed milk, a tin of sardines or beef and a box of biscuits.

Presently both are again ensconced in their sleeping-bags side by side, with the cooker doing its indifferent best to produce half a pot of warm water from each piled pot of powdery snow. It doesn't sound a very formidable proceeding, and it might appear that I have rather overdrawn the panting and groans; but I have carried out this routine on three or four occasions and I can honestly say that I know nothing—not even the exertion of steep climbing at these heights—which is so utterly exhausting or which calls for more determination than this hateful duty of high altitude cooking.

The process has to be repeated two or three times, as, in

addition to the preparation of the evening meal, a thermos flask or two must be filled with water for tomorrow's breakfast and the cooking pots must be washed up. Perhaps the most hateful part of the process is that some of the resultant mess must be eaten, and this itself is only achieved by will power; there is little desire to eat—sometimes indeed a sense of nausea at the bare idea—though of drink one cannot have enough.

With one look at the panorama of glacier and mountain spread out below—a world composed of three elements only, rock, snow and ice, the mountain-tops now gilded by the declining sun and Camp III just discernible in the cold shadow of the North Peak under our feet—we turned in for the night, with gloomy forebodings for the morrow; for there was nothing in the attitude of our porters tonight to encourage us to hope that we should next day succeed any better than Mallory and Bruce.

My diary records that we spent a 'fair' night; only some 200 feet below we had seen the collapsed forms of two tents in which two years before Mallory, Somervell, Morshead and I had spent a truly miserable night, scarcely any of us getting any sleep. The difference was largely accounted for by improvements in our equipment and in the organization of our camp, and it is by this progressive raising of the standard of comfort high on the mountain that we shall some day reach the top.

On the morning of June 3 we were up at 5 a.m., and while Somervell busied himself with preparations for breakfast I climbed down to the porters' tent with some misgivings as to what their condition would prove to be. My fears were justified, and for some time groans were the only answer to my questions. They seemed incapable of making any sort of a move. I remember I talked for a long time to them pointing out the honour and glory that they would achieve if they would but carry their loads another 2,000

feet—thus passing by 1,500 feet the highest point to which loads had ever been carried.

To make a long story short, I succeeded in inducing three—Narbu Yishe, Llakpa Chede and Semchumbi—to come on, and we actually started from camp at 9 a.m.—four hours after we had got up. It is not easy to make an early start on Mount Everest!

Of our ascent of the ridge there is little to tell; it was a repetition of the climb of the day before and was over ground familiar to Somervell and myself, as we had traversed exactly the same route when making for our highest point two years before. Somervell was feeling his throat very badly and had constantly to stop and cough, so he took on himself the task of shepherding Semchumbi, who was lame—his knee was much swollen—and who performed a very fine feat indeed in climbing for four and a half hours with a twenty-pound load, and, though inevitably slow and a drag on the whole party, he remained cheerful and willing and did his very best. The weather continued fine and the wind was markedly less severe than on the day before.

Some time after midday we recognized and passed the highest point that Mallory, Somervell and I had reached in 1922. One's sensations are dulled at these altitudes, but I remember a momentary uplift at the thought that we were actually going to camp higher than the highest point ever reached without oxygen. With a clear day ahead of us, and given favourable conditions, what might we not achieve!

About 1.30 it became evident that it would be impossible to urge the gallant Semchumbi much farther, so I selected a site for our tent, a narrow cleft in the rocks facing north and affording the suggestion—it was little more—of some shelter from the north-east wind. Here I set the two leading porters to scrape and pile the loose stones forming the floor of the cleft into the usual platform for a tent. I can

safely say that in two excursions up and down the whole length of the north ridge of Mount Everest I have never seen a single spot affording the 6-foot square level area on which a tent could be pitched without having to build a platform. As Somervell helped and encouraged Semchumbi up the last steep pitch, I went off for three-quarters of an hour to reconnoitre the beginning of the next day's climb.

About 2.30 we sent the three porters down. They had nearly 4,000 feet to descend, for we have since estimated the height of Camp VI at about 26,000 feet, and one of them was lame: so there was not too much time for them to reach Camp IV by daylight. I gave the men a note to say that they had done splendidly, and were to be fed on the fat of the land and passed comfortably to the Base Camp and a well-earned rest.

Somervell and I spent the afternoon as on the day before, with the exception that we had now no porters. My diary for the day finished with the surprising entry: 'Spent the best night since I left Camp I'; yet it was true in my case, and Somervell was at least fairly comfortable if he didn't sleep quite so well as I did. As one of our doubts had always been whether it would be possible to sleep, or even rest well, at 27,000 feet, this is an interesting point. Besides my boots I took to bed with me in my eiderdown sleeping-bag two thermos flasks filled with warm tea; towards morning I found that one of these had got rid of its cork, and its contents—no longer warm—had emptied into my bed.

Once more our hopes of an early start were shattered; snow had to be fetched and melted to provide the essential drink for breakfast. If—as I have before described—vitality is low in the early hours at Camp III at 21,000 feet, it can be guessed how near the limit 6 a.m. found us at 27,000. Yet somehow the job was done and we were off at 6.40.

Perhaps an hour beyond camp we encountered the bottom edge of the great 1,000-foot-deep band of yellow

sandstone that crosses the whole north face of Everest from shoulder to shoulder, and is so conspicuous a feature of the mountain as seen from the north. This afforded easy going as we traversed it diagonally, for it was made up of a series of broad ledges running parallel to its general direction and sufficiently broken up to afford easy access, one to the next.

The day was fine and nearly windless—a perfect day for our task—yet it was bitterly cold, and I remember shivering violently as I sat in the sun during one of our numerous halts. At a height of about 27,500 feet I began to experience some trouble with my eyes; I was seeing double, and in a difficult step was sometimes in doubt where to put my feet. I thought that this might be a symptom of snow-blindness, but Somervell assured me that this could not be the case, and he was undoubtedly right, for I have since been told that it was a symptom of lack of control and due to the insufficiency of oxygen in the air I was breathing.

Our pace was wretched. My ambition was to do twenty consecutive paces uphill without a pause to rest and pant, elbow on bent knee; yet I never remember achieving it—thirteen was nearer the mark. The process of breathing in the intensely cold dry air, which caught the back of the larynx, had a disastrous effect on poor Somervell's already very bad sore throat and he had constantly to stop and cough. Every five or ten minutes we had to sit down for a minute or two, and we must have looked a sorry couple.

The view from this great height was disappointing. From 25,000 feet the wild tangle of snowy peaks and winding glaciers was imposing. But we were now high above the highest summit in sight, and everything below us was so flattened out that much of the beauty of outline was lost. To the north, over the great plateau of Tibet, the eye travelled over range upon range of minor hills until all sense of distance was lost, only to be sharply regained on

picking up a row of snowy peaks just appearing over the horizon like tiny teeth. The day was a remarkably clear one in a country of the clearest atmosphere in the world, and the imagination was fired by the sight of these infinitely distant peaks tucked away over the curve of the horizon.

Towards noon we found ourselves just below the top edge of the band of sandstone and nearing the big gully which runs vertically down the mountain and cuts off the base of the final pyramid from the great northern shoulder.

At midday Somervell succumbed to his throat trouble. He declared that he was only delaying me, and urged me to go on alone and reach the top. I left him sitting under a rock just below the topmost edge of the sandstone band and went on. I followed the actual top edge of the band, which led at a very slightly uphill angle into and across the big gully; but to reach the latter I had to turn the ends of two pronounced buttresses which ran down the face of the mountain.

From about the place where I met with these buttresses the going became a great deal worse; the slope was very steep below me, the foothold ledges narrowed to a few inches in width, and as I approached the shelter of the big gully there was a lot of powdery snow which concealed the precarious footholds.

The whole face of the mountain was composed of slabs like the tiles on a roof, and all sloped at much the same angle as tiles. I had twice to retrace my steps and follow a different bank of strata; the gully itself was filled with powdery snow into which I sank to the knee or even to the waist, and which was yet not of a consistency to support me in the event of a slip.

Beyond the gully the going got steadily worse; I found myself stepping from tile to tile, as it were, each tile sloping smoothly and steeply downwards; I began to feel that I was too much dependent on the mere friction of a boot

nail on the slabs. It was not exactly difficult going, but it was a dangerous place for a single unroped climber, as one slip would have sent me in all probability to the bottom of the mountain.

The strain of climbing so carefully was beginning to tell, and I was getting exhausted. In addition my eye trouble was getting worse and was by now a severe handicap. I had perhaps 200 feet more of this nasty going to surmount before I emerged on to the north face of the final pyramid and, I believe, safety and an easy route to the summit. It was now 1 p.m., and a brief calculation showed that I had no chance of climbing the remaining 800 or 900 feet if I was to return in safety.

At a point subsequently fixed at 28,126 feet, I turned back and retraced my steps to rejoin Somervell. In an hour I had gained but little—probably under 100 feet in height and in distance perhaps 300 yards—on the position where we had separated.

I feel that I ought to record the bitter feeling of disappointment which I should have experienced on having to acknowledge defeat with the summit so close; yet I cannot conscientiously say that I felt it much at the time. Twice now I have had thus to turn back on a favourable day when success had appeared possible, yet on neither occasion did I feel the sensations appropriate to the moment. This I think is a psychological effect of great altitudes; the better qualities of ambition and will to conquer seem dulled to nothing and one turns downhill with little feeling other than the relief that the strain and efforts of climbing are finished.

I was near the end of my powers, and had for some time been going too slowly to hope to reach the summit. Whether the height I had reached was nearing the limit of human endurance without the artificial aid of oxygen, or whether my earlier exertions accounted for my exhaustion,

I cannot say. I still believe that there is nothing in the atmospheric conditions even between 28,000 and 29,000 feet to prevent a fresh and fit party from reaching the top of Mount Everest without oxygen.

One small incident will serve to show that I must have been very much below my proper form at this time, and that my nerve had been shaken by the last two hours of climbing alone on steep and slippery going. As I approached Somervell I had to cross a patch of snow lying thinly over some sloping rocks. It was neither steep nor difficult, and not to be compared to the ground I had just left, yet suddenly, I felt that I could not face it without help, and I shouted to Somervell to come to throw me the end of the rope. Here again I remember the difficulty I had in making my voice carry perhaps 100 yards. Somervell gave me the required aid, and I could see the surprise he felt at my needing it in such a place.

Then came the descent. Soon after we started down, at about 2 p.m., Somervell's axe slipped from his numb fingers and went cart-wheeling down the slopes below. This must have been somewhere about the point where an hour or two before he had taken his highest photograph; and it is a proof of the deceptive picture of the true angle of the mountain conveyed by those photographs that it does not give the impression that a dropped axe would go any distance without coming to rest, yet his never looked like stopping, and disappeared from our view still going strong.

We retraced our steps of the morning; we made very poor going, descending at a very much slower pace than we had made two years before when we turned back from our highest point some 1,000 feet lower.

We looked in at our tent at Camp VI, finding it without difficulty, collected one or two of our belongings and a section of tent pole as a substitute for Somervell's axe, collapsed and weighted the tent with stones, and started down.

Sunset found us level with Camp V, which we left below us on the right. We were unroped, for here the going was both safe and easy. Arrived on the big snow-bed I realized that Somervell had stopped behind, and I had to wait quite half an hour for him to catch up. I concluded that he had stopped to sketch or photograph the effect of the sunset glow on the great panorama of peaks surrounding us—a proof that I had by no means realized his condition; actually he had been stopped by a more than usually severe fit of coughing which had ended by nearly choking him. When he rejoined me, coming very slowly down the rocks, it was already dark and I lit my electric torch.

A hundred feet or more above the Col, Mallory and Odell met us, and told us that Irvine was in camp hard at work preparing our dinner, and perhaps another three-quarters of an hour saw us arrive in camp. Mallory and Odell were kindness itself, and they kept congratulating us on having reached what we estimated as a height of 28,000 feet, though we ourselves felt nothing but disappointment at our failure.

As Mallory and I lay in our tent, he explained that he had decided that if we two failed to reach the summit, he was determined to make one more attempt, this time with oxygen, and how he had been down to Camp III with Bruce and collected sufficient porters to enable the attempt to be staged. I entirely agreed with his decision, and was full of admiration for the indomitable spirit of the man, determined, in spite of his already excessive exertions, not to admit defeat while any chance remained, and I must admit that—such was his will power and nervous energy—he still seemed entirely adequate to the task.

Some time after eleven o'clock that night, as I was dozing off to sleep, I was suddenly wakened by sharp pain in my eyes, and found that I had been smitten with a severe attack of snow-blindness. In the morning I found myself com-

pletely blind, and I remained in this condition for the next sixty hours, suffering a good deal of pain.

On June 6 at 7.30 a.m. we said goodbye to Mallory and Irvine, little guessing that we should see them no more. My last impression of my friends was a handshake and a word of blessing, for it was only in my imagination that I could see the little party winding its way amid the snow humps and ice crevasses leading to the Col—the two climbers never to return, accompanied by four or five porters.

About 10.30 a.m. Hingston arrived from Camp III with two porters to see what could be done for my eyes. An examination showed that nothing could be done to restore my sight at the moment, though there was little question that they would recover in a day or two; but I was anxious not to remain a useless encumbrance at Camp IV and, Hingston volunteering to escort me with his two porters, I decided to go down, blind as I was, to Camp III.

Accordingly about 11 a.m. we started the descent. The two porters, Nima Tundrup and Chutin, were both strong and steady climbers, and between them and Hingston—the last doing all the really responsible work—my every footstep was guided and my feet placed for me the whole way down.

To make a long story short we reached the glacier without incident and hence sent one porter on to fetch six men, with the one-man carrier, from Camp III to meet me where our route took to the boulders; for on them I could never have made any progress at all.

These six men took it in turns to carry me, and did so over the most appalling boulders and ice without a single false step until, about 5 p.m., we reached Camp III; there I was welcomed by Bruce and Noel with the extraordinary solicitude and kindness which I have come to recognize as the one great reward that awaits the unsuccessful Everest climber.

Next morning I was beginning to see a little, and in two more days I was completely recovered. Bruce, Noel, Hingston and I decided to remain at Camp III until the fate of Mallory and Irvine's attempt was decided. During the next four days we were to pass through every successive stage of suspense and anxiety from high hope to hopelessness, and the memory of them is such that Camp III must remain to all of us the most hateful place in the world.

From *The Fight for Everest*



On the night of June 5th, Camp IV on the North Col held five climbers. Norton, the blinded leader, was on his way down the mountain; Mallory and Irvine were about to make their determined assault, whilst Odell and Hazard were the support party. The name of Mallory, the schoolmaster of Charterhouse and the finest climber of his day, has become almost a legend. To tell of Mallory's last climb and his own remarkable search, the geologist, Odell, takes up the story.

Tragedy

I think most of the party, with perhaps the exception of the unfortunate Norton, slept well that night, though Irvine admitted his sorely sun-scorched face had caused him distinct discomfort at times. Hazard and I were up early the morning of the 6th and soon had frizzling and crackling over the Primus stove a choice fry of sardines, to be served up in Mallory and Irvine's tent with biscuits and ample hot tea or chocolate. On the announcement of this breakfast they seemed pleased enough, but I must admit that either owing to the excitement or restlessness to be off they hardly did justice to the repast, or flattered the cooks. At 8.40 they were ready to start, and I hurriedly snapped them as they were loading up with the oxygen apparatus.

Eight porters accompanied them from Camp IV. The party moved off in silence as we bid them adieu, and they were soon lost to view amidst the broken ice-masses that concealed from the view the actual saddle of the North Col and the lower part of the north ridge of the mountain.

Though a brilliant morning, my diary records it as very cloudy in the afternoon and even snowing a little in the evening. It was 9.45 that morning that Hingston arrived and conducted Norton in his sightless condition down to Camp III, Hazard going down as far as the rope ladder and then returning to me on the North Col. I occupied myself meanwhile with various camp duties and observations. That evening, soon after five o'clock, four of Mallory's

porters returned from Camp V, where his party was spending the night, and brought me a note saying, 'There is no wind here, and things look hopeful.'

On the 7th Mallory's party was to go on up to Camp VI, and I that same day with Nema, who was the only porter of the two available at the North Col, followed up in support to Camp V. Not long after my arrival Mallory and Irvine's four remaining porters returned from Camp VI, their advent having been heralded by stones falling unpleasantly near the tent, that had been unwittingly displaced by them during their descent of the steep slopes above. Mallory's porters brought me the following message:

Dear Odell,

We're awfully sorry to have left things in such a mess—our cooker rolled down the slope at the last moment. Be sure of getting back to IV tomorrow in time to evacuate before dark, as I hope to. In the tent I must have left a compass—for the Lord's sake rescue it: we are without. To here on 90 atmospheres for the two days—so we'll probably go on two cylinders—but it's a beastly load for climbing. Perfect weather for the job!

Yours ever,
G. Mallory.

Nema, my porter, was obviously much affected by mountain sickness, which made it very unlikely that he would be able to go higher next day, and consequently I decided to send him down that evening with the other four returning men. However, I was not loath to let him go, as I knew by so doing I should be free on the morrow to wander about over the north face and make a more thorough geological examination of it on my way up to Camp VI.

After a short search within the tent I duly found Mallory's missing prismatic compass. That evening as I

looked out from the little rock ledge on which my tent was situated, the weather seemed most promising, and I knew with what hopeful feelings and exultant cheer Mallory and Irvine would take their last look around before closing themselves in their tiny tent at VI that night. My outlook, situated though I was 2,000 feet lower down the mountainside than they, was nevertheless commanding and impressive in the extreme, and the fact that I was quite alone certainly enhanced the impressiveness of the scene.

To the westward was a savagely wild jumble of peaks towering above the upper Rongbuk Glacier, bathed in pinks and yellows of the most exquisite tints. Right opposite were the gaunt cliffs of Everest's north peak, and this massive pyramid of rock, the one near thing on God's earth, seemed only to lend greater distance to the wide horizon which it intercepted. To the eastward, floating in thin air, a hundred miles away, the snowy top of Kanchenjunga appeared, and nearer, the beautifully varied outline of the Gyankar Range, that guards the tortuous passages of the Arun in its head-long plunge towards the lowlands of Nepal. It has been my good fortune to climb many peaks alone and witness sunset from not a few, but this was the crowning experience of them all, an experience that can never fade from memory.

A little jam varied with macaroni and tomatoes completed my supper, and then by dint of two sleeping-bags and the adoption of a position to avoid the larger stones of the floor, I stretched myself diagonally across the tiny tent in an endeavour to obtain what sleep I might pending a visit from the watchdogs of Everest.

None put in an appearance; I kept reasonably warm and consequently had a fair amount of sleep. I was up at six, but the great efforts necessitated and energy absorbed at these altitudes, by the various little obligations of breakfast

and putting on one's boots, prevented my starting off before eight o'clock. Carrying a rucksack with provisions in case of shortage at Camp VI, I made my solitary way up the steep slope of snow and rock behind Camp V, and so reached the crest of the main north ridge.

The earlier morning had been clear and not unduly cold, but now rolling banks of mist commenced to form and sweep from the westward across the great face of the mountain. But it was fortunate that the wind did not increase. There were indications, though, that this mist might be chiefly confined to the lower half of the mountain, as on looking up one could see a certain luminosity that might mean comparatively clear conditions about its upper half. This appearance so impressed me that I had no qualms for Mallory and Irvine's progress upward from Camp VI, and I hoped by this time that they would be well on their way up the final pyramid of the summit. The wind being light, they should have made good progress along the crest of the north-east shoulder.

At about 26,000 feet I climbed a little crag which could possibly have been circumvented, but which I decided to tackle direct, more perhaps as a test of my condition than for any other reason. There was scarcely a hundred feet of it, and as I reached up there was a sudden clearing of the atmosphere above me and I saw the whole summit ridge and final peak of Everest unveiled.

I noticed far away on a snow slope leading up to what seemed to me to be the last step but one from the base of the final pyramid, a tiny object moving and approaching the rock step. A second object followed, and then the first climbed to the top of the step. As I stood intently watching this dramatic appearance, the scene became enveloped in cloud once more, and I could not actually be certain that I saw the second figure join the first. It was of course none other than Mallory and Irvine, and I was surprised above

all to see them so late as this, namely 12.50, at a point, which if the second rock step, they should have reached according to Mallory's schedule by 8 a.m. at latest, and if the first rock step proportionately earlier.

Owing to the small portion of the summit ridge uncovered, I could not be precisely certain at which of these two steps they were, as in profile and from below they are very similar, but at the time I took it for the upper second step. However, I am a little doubtful now whether the latter would not be hidden by the projecting nearer ground from my position below on the face. I could see that they were moving expeditiously as if endeavouring to make up for lost time. True, they were moving one at a time over what was apparently but moderately difficult ground, but one cannot definitely conclude from this that they were roped together—a not unimportant consideration in any estimate of what may have eventually befallen them.

I had seen that there was a considerable quantity of new snow covering some of the upper rocks near the summit ridge, and this may well have caused delay in the ascent. Burdened as they undoubtedly would be with the oxygen apparatus, these snow-covered, debris-sprinkled slabs may have given much trouble. The oxygen apparatus itself may have needed repair or readjustment either before or after they left Camp VI, and so have delayed them. Though rather unlikely, it is just conceivable that the zone of mist and clouds I had experienced below may have extended up to their level and so have somewhat impeded their progress. Any or all of these factors may have hindered them and prevented their getting higher in the time.

I continued my way up to Camp VI, and on arrival there about two o'clock snow commenced to fall and the wind increased. I placed my load of fresh provisions inside the tiny tent and decided to take shelter for a while. Within were a rather mixed assortment of spare clothes, scraps of

food, their two sleeping-bags, oxygen cylinders, and parts of apparatus. It might be supposed that these were undoubted signs of reconstructional work and probable difficulties with the oxygen outfit. But knowing Irvine, I had at the time not the slightest qualms on that score. Nothing would have amused him more than to have spent the previous evening on a job of work of some kind or other in connexion with the oxygen apparatus, or to have invented some problem to be solved even if it never really had turned up. He revelled in pieces of apparatus and a litter of tools, and was never happier than when up against some mechanical difficulty.

And here at 27,000 feet he had been faithful to himself and carried his usual traits, though his workshop for the purpose would be decidedly limited, and could not have run to much more than a spanner and possibly a pair of pliers. But it was wonderful what he could do with these. I found they had left no note, which left me ignorant as to the time they had actually started out, or what might have intervened to cause delay. The snow continued, and after a while I began to wonder whether the weather and conditions higher up would have necessitated the party commencing their return.

Camp VI was in a rather concealed position on a ledge and backed by a small crag, and in the prevailing conditions it seemed likely they would experience considerable difficulty in finding it. So I went out along the mountain-side in the direction of the summit and, having scrambled up about 200 feet, and whistled in case they should happen to be within hearing, I then took shelter for a while behind a rock from the driving sleet. One could not see more than a few yards ahead so thick was the atmosphere, and in an endeavour to forget the cold I examined the rocks around me in case some new point of geological significance could be found. But in the flurry of snow and the biting wind

even my accustomed ardour for this pursuit began to wane, and within an hour I decided to turn back, realizing that even if Mallory and Irvine were returning they could hardly yet be within call, and less so under the existing conditions.

As I reached Camp VI, the squall, which had lasted not more than two hours, blew over, and before long the whole north face became bathed in sunshine, and the freshly fallen snow speedily evaporated. The upper crags became visible, but I could see no signs of the party. I waited for a time, and then remembered that Mallory had particularly requested me in his last note to return to the North Col as he specially wished to reach there, and presumably if possible evacuate it and reach Camp III that same night, in case the monsoon should suddenly break. But besides this the single small tent at Camp VI was only just large enough for two, and if I remained and they returned, one of us would have to sleep outside in the open—a hazardous expedient in such an exposed position.

I placed Mallory's retrieved compass in a conspicuous place in the corner of the tent by the door, and leaving Camp VI about 4.30, I made my way down by the extreme crest of the north ridge, halting now and again to glance up and scan the upper rocks for some signs of the party, who should by now, it seemed to me, be well on their downward tracks. But I looked in vain.

I was abreast of Camp V at 6.15, but there being no reason to turn aside to visit it, situated as it was a hundred yards or so off the main ridge eastwards along the face, I hurried downwards. Hazard welcomed me at Camp IV, and I was glad of his wonderful brew of hot soup. Fortunately I am not habitually cursed with thirst on a mountain, but I was rather surprised to find how little Everest with its excessive dryness affected me in that way. However, whatever necessary moisture had been evaporated from my constitu-

tion during the last two days was now speedily replaced from the amazing quantities of soup and tea put in front of me by Hazard.

The evening was a clear one, and we watched till late that night for some signs of Mallory or Irvine's return, or even an indication by flare of distress. The feeble glow that after sunset pervaded the great dark mountain-face above us was later lost in filtered moonlight reflected from high summits of the West Rongbuk. We hoped that this would aid them if perchance some incident had precluded their return as yet to Camp V or VI.

Next morning we scrutinized through field-glasses the tiny tents of those camps far above us, thinking they must be at one or other, and would not as yet have started down. But no movement at all could be seen, and at noon I decided to go up in search. Before leaving, Hazard and I drew up a code of signals so that we could communicate to some extent in case of necessity: this was by a fixed arrangement of sleeping-bags placed against the snow for day signals, and as far as I was concerned Hazard was to look out for them at stated times at either of the upper camps. Answering signals from him were also arranged. For use after dark we arranged a code of simple flash signals, which included, of course, in case of need, the International Alpine Distress Signal.

We had by this time three porters at the North Col Camp, and two of these I managed after some difficulty to persuade to come with me. We started off at 12.15, and on our way up the north ridge we encountered that bitter cross-wind from the west that almost always prevails, and which had really been the means of rendering abortive Mallory and Bruce's earlier attempt. We reached Camp V, however, where the night was to be spent, in the fairly good time of three and a quarter hours. I hardly expected, I must admit, to find that Mallory and Irvine had returned

here, for if they had, some movement must have been seen from below.

And now one's sole hopes rested on Camp VI, though in the absence of any signal from here earlier in the day, the prospects could not but be black. And time would not allow, even if I could have induced my men to continue in the conditions, of our proceeding on to Camp VI that evening. We made ourselves as comfortable at V as the boisterous wind would permit, but gusts sweeping over the north ridge would now and again threaten to uproot our small tents bodily from the slender security of the ledges on which they rested, and carry them and us down the mountainside. Fleeting glimpses of stormy sunset could at intervals be seen and as the night closed in on us the wind and the cold increased.

The porters in their tent below mine were disinclined for much food, and were soon curled up in their sleeping-bags, and I went down and added a stone or two to the guys for the security of their tent. I did likewise to mine and then repaired inside, and fitted up for use next day the oxygen apparatus that had lain idle here since I brought it from the ridge two days previously. The cold was intense that night and aggravated by the high wind, and one remained chilled and unable to sleep—even inside two sleeping-bags and with all one's clothes on.

By morning the wind was as strong and bitter as ever, and on looking in the porters' tent, I found them both suffering from extreme nausea. I tried to rouse them, but they only made signs of being sick and wishing to descend. I told them, therefore, to return without delay to Camp IV, and seeing them well on their way downwards, I then set off for Camp VI. This time with an oxygen supply available I hoped to make good time on my upward climb. But the boisterous and bitter wind was trying in the extreme, and I could only make slow progress.

Now and then I had to take shelter behind rocks, or crouch low in some recess to restore warmth. Within an hour or so of Camp VI, I came to the conclusion that I was deriving little benefit from the oxygen, which I had been taking only in moderate quantities from the single cylinder that I carried. I gave myself larger quantities and longer inspirations of it, but the effect seemed almost negligible: I wondered at the claims of others regarding its advantages, and could only conclude that I was fortunate in having acclimatized myself more thoroughly to the air of these altitudes and to its small percentage of available oxygen. I switched the oxygen off and experienced none of those feelings of collapse and panting that one has been led to believe ought to result. I decided to proceed with the apparatus on my back, but without the objectionable rubber mouthpiece between my lips, and depend on direct breathing from the atmosphere. I seemed to get on quite well, though I must admit the hard breathing at these altitudes would surprise even a long-distance runner.

On reaching the tent at Camp VI, I found everything as I had left it: the tent had obviously not been touched since I was there two days previously; one pole had, however, given way in the wind, though the anchorages had prevented a complete collapse. I dumped the oxygen apparatus and immediately went off along the probable route Mallory and Irvine had taken to make what search I could in the limited time available.

This upper part of Everest must be indeed the remotest and least hospitable spot on earth, but at no time more emphatically and impressively so than when a darkened atmosphere hides its features and a gale races over its cruel face. And how and when more cruel could it ever seem than when balking one's every step to find one's friends?

After struggling on for nearly a couple of hours looking in vain for some indication or clue, I realized that the

chances of finding the missing ones were indeed small on such a vast expanse of crags and broken slabs, and that for any more extensive search towards the final pyramid a further party would have to be organized. At the same time I considered, and still do consider, that wherever misfortune befell them, some traces of them would be discovered on or near the north-east ridge: I saw them on that ridge on the morning of their ascent, and presumably they would descend by it. But in the time available under the prevailing conditions, I found it impossible to extend my search.

Only too reluctantly I made my way back to Camp VI, and took shelter for a while from the wind, which showed signs of relenting its force. Seizing the opportunity of this lull, with a great effort I dragged the two sleeping-bags from the tent and up the precipitous rocks behind to a steep snow-patch for the purpose of signalling down to Hazard at the North Col Camp. Placed in the form of a T, my signal with the sleeping-bags conveyed the news that no trace of the missing party could be found.

I returned to the tent, and took from within Mallory's compass that I had brought up at his request two days previously. That and the oxygen set of Irvine's design alone seemed worth while to retrieve. Then, closing up the tent and leaving its other contents as my friends had left them, I glanced up at the mighty summit above me. It seemed to look down with cold indifference on me, mere puny man, and howl derision in wind-gusts at my petition to yield up its secret—the mystery of my friends. What right had we to venture thus far into the holy presence of the Supreme Goddess? Had we approached her with due reverence and singleness of heart and purpose? And yet as I gazed again another mood appeared to creep over her haunting features. There seemed to be something alluring in that towering presence. I was almost fascinated. I realized that he who approached close must ever be led on, and oblivious of all

obstacles seek to reach that most sacred and highest place of all.

Alone and in meditation I slowly commenced my long descent. But it was no place for silent contemplation, for, buffeted by storm-blasts that seemed to pierce one through, it needed all one's attention and calculation to negotiate safely the exposed slabs of the ridge and prevent a slip on their debris-sprinkled surfaces. Hazard had seen me coming, and sent his own remaining Sherpa to welcome me at the foot of the ridge. Arrived at the North Col Camp I was pleased to find a note from Norton and to discover that I had anticipated his wishes that I should return and not prolong my search on the mountain, seeing that the monsoon seemed likely to break at any moment.

Next day Hazard, the porter and myself, leaving the tents standing and loading ourselves up with all we could save, evacuated the North Col Camp, and went down in good weather to Camp III, where we found the rest of the party gone, save Hingston and Shebbeare, who were about to evacuate it. After a rest and good meal here, we proceeded on down the glacier to Camp II, where we spent the night, and the following day rejoined the main party at the Base Camp, to revel in the joys of opening spring, so long withheld and now let loose on us in all their glory of flower and insect life.

I have already mentioned the possible reasons why Mallory and Irvine were so late in reaching the point at which they were last seen, and I propose, very briefly, to speculate on the probable causes of their failure to return.

From the second step they had about 800 feet of altitude to surmount, and say 1,600 feet of ground to cover, to reach the top, and if no particularly difficult obstacle presented itself on the final pyramid they should have got to the top at 3 to 3.30. Before, however, he left Camp VI Mallory had sent a note to Noel at Camp III saying he hoped to

reach the foot of the final pyramid (about 28,300 feet) by 8 a.m. So on this schedule they would be perhaps five or six hours late in reaching the top, and hence they would find it almost impossible to get down to Camp VI before nightfall, allowing five or six hours for the return.

But at the same time it must be remembered there was a moon, though it rose rather late, and that evening it was fine and the mountain clear of mist as far as could be seen. In spite of this they may have missed their way and failed to find Camp VI, and in their overwrought condition sought shelter till daylight—a danger that Mallory, experienced mountaineer that he was, would be only too well aware of, but find himself powerless to resist. Sleep at that altitude and in that degree of cold would almost certainly prove fatal.

The other likely possibility is that they met their death by falling. But it is difficult for any who knew the skill and experience of George Mallory on all kinds and conditions of mountain ground to believe that he fell, and where the difficulties to him would be so insignificant. Of Sandy Irvine it can be said that although less experienced than Mallory, he had shown himself to be a natural adept and able to move safely and easily on rock and ice. He could follow, if not lead, anywhere. Such had been my experience of him in Spitzbergen, Norway, and our own home mountains. They were, of course, hampered by the oxygen apparatus—a severe load for climbing with, as Mallory had mentioned in his last note to me. But could such a pair fall, and where technically the climbing appeared so easy? Experts nevertheless have done so, under the stress of circumstances or exhaustion.

Again, it has been suggested that the oxygen apparatus may have failed and thereby rendered them powerless to return. I cannot accept the validity of this argument, for from my own personal experience, to be deprived of oxygen

—at any rate when one has not been using it freely—does not prevent one from continuing and least of all getting down from the mountain. On my second journey up to Camp VI, when I was using oxygen, I switched it off at about 26,000 feet and continued on, and returned, without it. Mallory in his last note to me said they were using little oxygen, and that they hoped to take only two cylinders each, instead of the full load of three each, from Camp VI. But even if later they were using much oxygen, they had both during the previous weeks spent adequate time at extreme altitudes, namely 21,000 feet and over, to become sufficiently acclimatized and not liable to collapse in the event of oxygen failing.

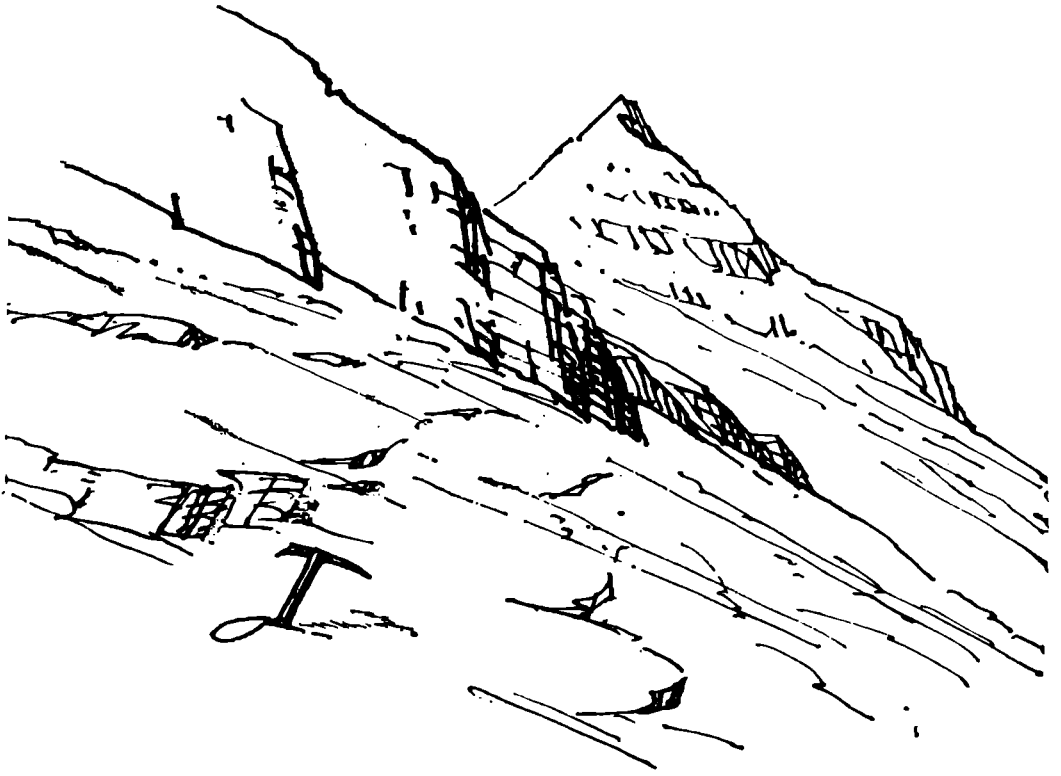
Hence I incline to the view first expressed that they met their death by being benighted. I know that Mallory had stated he would take no risks in any attempt on the final peak; but in action the desire to overcome, the craving for the victory that had become for him, as Norton has put it, an obsession, may have been too strong for him. The knowledge of his own proved powers of endurance, and those of his companion, may have urged him to make a bold bid for the summit. Irvine I know was determined to expend his last ounce of energy in an utmost effort to reach the top. And who of us that has wrestled with some Alpine giant in the teeth of a gale, or in a race with the darkness, could hold back when such a victory, such a triumph of human endeavour, was within our grasp?

The question remains, 'Has Mount Everest been climbed?' It must be left unanswered, for there is no direct evidence. But bearing in mind all the circumstances that I have set out above, and considering their position when last seen, I think myself there is a strong probability that Mallory and Irvine succeeded.

From *The Fight for Everest*

[vii]

Not until 1933 could further permission be obtained for an expedition to enter Tibet. Now Hugh Ruttledge led a new generation of climbers on a large expedition with nearly 200 Sherpas and better equipment than ever before. Camp VI was established at 27,400 feet. From here the first pair of climbers, Wager and Harris, set off to reconnoitre, and possibly climb, the second rock step of the north-east ridge. Behind them came Shipton and Smythe, the second assault pair. Eric Shipton, who has been on more Everest parties than anyone else, tells their story.



Lost on Everest

Camp VI was no luxury establishment. A tiny recess at the head of a gully and some loose stones had enabled the others to build a rough platform, perhaps three feet wide, on which to pitch the tent. The platform sloped downwards, and one side of the tent hung over the edge, forming a pocket. But at least it provided somewhere to lie down. After a rest we set about the task of melting a saucepan of snow. At the other camps we had used Primus stoves, but these do not work above a certain altitude, and at Camp VI we used little tins of solid fuel known as Tommy Cookers. Even these were most inefficient at that height, and it took us an hour to provide two miserable cups of tepid water slightly coloured with tea.

Wager and Wyn Harris arrived about the middle of the

afternoon, showing every evidence of the tremendous effort they had made. They tried to reach the ridge just below the second step, but had met a continuous line of overhanging rock, so they had traversed along but found the rocks on the other side laden with powder snow, which about 12.30 had forced them to abandon the struggle. How far this decision had been induced by sheer exhaustion and how much by the difficulty of the ground, on which the slightest slip must have been fatal to both, it is difficult to determine. Wager has since told me that he has found it impossible to assess the real position in which they found themselves. At that altitude mental processes are so sluggish and inefficient that it is most difficult to retain a clear memory of what has actually occurred. In any case their decision was absolutely right; there was not the slightest chance of their reaching the summit and to have persisted much farther would most probably have involved them in disaster. They would undoubtedly have got farther had it not been their primary task to examine the second step, which had cost them valuable time.

Just below the crest of the north-east ridge they had found an ice-axe. This can only have belonged to Mallory or Irvine and throws some light upon their fate. It seems probable that they fell from the place where the axe was found. It may be that one of them slipped, the other put down his axe to brace himself against the jerk of the rope, but was dragged down. Certainly the axe cannot have fallen, for had that happened there was nothing to prevent it from bounding down at least to the foot of the Yellow Band.

I had gone so badly that day that I offered to change places with one of the others and let him try again with Smythe. In this I was actuated by no unselfish motive. But they had both had more than enough. Wager was gasping for breath in a most alarming manner and Wyn looked

terribly tired. So after a short rest and a cup of our home-brewed nectar they went on down to Camp V.

That night and the one which followed were by far the worst that I spent on the mountain. I had the lower berth, and kept rolling off the ledge into the pocket formed by the tent floor. Smythe spent the time rolling on top of me. From sheer self-preservation, to prevent myself from being suffocated, I had to kick him with my knee or jab him with my elbow. This I did over and over again, hoping vaguely that the action would not reveal the temper that was undoubtedly behind the blows. I did not sleep at all, and I do not think Smythe fared much better. Several hours before dawn we gave up the unequal struggle and started to prepare for the climb.

But before it was properly light snow started to fall, and presently a strong wind was driving the flakes against the side of the tent. It was no use thinking of starting in those conditions, and there was nothing for it but to resign ourselves to spending the day at Camp VI. I think we both realized then that our slender chance of reaching the summit had now vanished. In the first place the snow that was now falling would, at the lowest estimate, increase the difficulties enormously; secondly, our physical deterioration due to lack of oxygen, sleep and appetite must now be very rapid. Indeed we were worried, so far as we were capable of worrying about anything, by the question of how long it was possible to live at 27,400 feet. Would the danger line be apparent? or would one suddenly find oneself incapable of moving? or perhaps just die in one's sleep? Nobody had ever tried the experiment of a prolonged sojourn at such an altitude.

It was a dreary day. The wind dropped in the afternoon. Looking out of the little window at the back of the tent, we could see the summit. Very little of the intervening ground was visible, and it looked ridiculously close. Well, 1,600 feet

was not far; without the powder snow on the rocks and in sea-level conditions one could climb it comfortably in an hour! An ambition of a lifetime and we were too weak to reach out to grasp it! Fortunately our dulled intellects lessened the sting of this thought, but it was sharp enough.

The next night was a repetition of the first, tossing, kicking, panting. At about three o'clock in the morning we started melting some snow, to make a brew of something—I believe it was coffee, though everything tasted much the same. Thawing our boots was the longest job; they were like lumps of rock. We had intended taking them to bed with us to keep them soft, but, like so many good resolutions made below, this had not been done. But by holding them over candle-flames we managed to make the uppers sufficiently pliable, and, with a tremendous effort, to force our feet, already encased in four or five pairs of socks, into them. For the rest we each wore two pairs of long woollen pants, seven sweaters and a loosely-fitting windproof with a hood that went over a balaclava helmet. Our hands were protected by one pair of thick woollen mitts covered with a pair of sheepskin gauntlets. I felt about as suitably equipped for delicate rock-climbing as a fully rigged deep-sea diver for dancing a tango. It was quiet outside and we waited for the dawn.

It must have been about 7.30 when we started. It was a fine morning, though bitterly cold. I had stomach-ache and felt as weak as a kitten. We started climbing diagonally up, taking the lead in turns of about a quarter of an hour each. The ground was not exactly difficult nor particularly steep. But it was rather like being on the tiles of a roof; one had to rely largely on the friction of boot-nails on the shelving ledges. A slip might have been difficult to check. The more exposed parts of the Yellow Band had been swept clear of snow by the wind, but in the little gullies and cracks there

were deep deposits of powder snow which obscured all foothold. We were not climbing quickly, but our progress was steady and fast enough. After about two hours I began to feel sick, and it appeared to me that I was approaching the end of my tether. In such a condition I would certainly have been no use to Smythe in an emergency; also it was a firm rule among us that one simply must not go on until one collapsed altogether, as that would have placed one's companion in a most awkward position. So I decided to stop and let Smythe go on alone.

By now it was fairly warm in the sun. I sat down and watched Smythe making his way slowly along the slabs and wondered if I might follow him at my own pace. But then it occurred to me that, seeing me coming, he might wait for me, so I reluctantly gave up the idea, and after waiting a little longer started back to Camp VI.

It was about 1.30 when Smythe returned. He had found masses of new snow on the rocks and had been compelled to return from much the same place that the previous party had reached. The height at this point was estimated at 28,100 feet. The altitude of all the major features on the north face of Mount Everest had been determined (to within a hundred feet or so) by theodolite observations from below, and it is from these computations that we were able to judge with reasonable accuracy the height of any point on the upper part of the face. The readings of an aneroid barometer at that altitude would be hopelessly inaccurate.

Smythe was so exhausted by his effort that he was reluctant to move further down that day. To give him a chance of a good night's sleep, and also to relieve the anxiety of the unfortunate Birnie, it was decided that I should go down to Camp V and that Smythe should come all the way down to the North Col on the following day. With the tent to himself and two sets of sleeping-bags he would be fairly comfortable.

I left Camp VI at 2.30. By now we were enveloped in cloud. To avoid the difficult pitch below the camp I traversed along towards the north-east shoulder, as the other descending parties had done. For some distance the way was along a sloping terrace that provided fairly easy going, but near the north-east shoulder the terrace petered out into steep rocks that were now laden with powder snow. At one point I nearly came to grief by lowering myself on to a ledge of snow which promptly slipped away and left me hanging by my fingers.

I had scarcely reached the easier rocks below when I was met by a tremendous blast of wind. I have never known anything like the suddenness of those Everest storms. They arrived out of perfect stillness, without any warning, and at the full height of their power. This was the fiercest gale I had encountered on the mountain—at any rate while out of shelter. I found it impossible to stand up against it even for a moment, and all I could do was to cower against a rock with my back to the wind. Luckily this did not maintain its maximum velocity for long, and after a time I was able to proceed in short rushes.

But presently I found that I had lost all sense of direction. The cloud was thick and I could see no more than a few yards ahead of me. It was no use going on down, for if I missed the top of the north-east spur I should get myself into a hopeless mess. I sat down helplessly and waited.

For those who wish to achieve complete philosophical detachment, there is perhaps something to recommend life at high altitudes. The mind appears to be quite incapable of strong emotion of any sort. To be lost on a mountain-side in such circumstances would normally be an unpleasantly exciting experience to the calmest of men. I found it neither unpleasant nor exciting, and was blissfully resigned to whatever the fates chose to do with me. I have no idea

how long I waited, but eventually a sharp spire appeared through the driving mist and snow. I remembered having seen this before and made towards it. Presently a window opened, and far below I saw the summit of the North Peak, a rock in the storm-tossed sea. Soon I reached the little hollow of the 1924 Camp VI, which provided a welcome refuge from the storm.

I almost enjoyed the rest of the descent to Camp V. I felt gloriously careless as I bumped and slithered down from ledge to ledge; the wind provided a mad confusion that matched my state of mind. When I arrived I found that Birnie had made a tremendous brew of hot liquid; I think it was tea, but whatever it was was excellent. He, poor chap, was very weak. He had spent longer above the North Col than any of us, his feet were frost-bitten and the altitude had taken a severe toll of his strength. He had had none of the interest of the attempts on the summit; only a long, lonely vigil and anxiety. But I found his cheerfulness even more warming than his tea. It was nearly dark before I had the strength of mind to go out into the storm again to collect a sleeping-bag from the other tent. I found this to be full of snow, and though I tried for a quarter of an hour, my fingers were so lifeless that I could not undo the fastenings. I tried to tear the canvas open with no more success, and finally I gave it up. Birnie gave me half his sleeping-bag and we spent a miserable night huddled together in a tent half filled with snow, listening to the crazy raving of the storm. This had partly spent itself by morning, and when the sun was up we made our way slowly down to the North Col.

Here we found Longland and McLean. While the former went off up the ridge to meet Smythe, the latter ministered to our needs. The large dome tent in which we were now housed seemed to us the height of luxury and spacious comfort. McLean insisted on our relaxing completely, while

he undid our boots, massaged our limbs and provided endless supplies of food and drink. Smythe came in some hours later.

It took us a very long time to get down from the North Col the next day. Immediately after we had started, McLean became ill. He could hardly walk and had to be nursed carefully down the slopes. When we reached the bottom we found that a party had been sent up from Camp III to meet us with tea. When we had assembled to drink this I suddenly found that I could not articulate words properly. For example if I wished to say, 'Give me a cup of tea', I would say something entirely different—maybe 'tram-car, cat, put'. It was a most aggravating situation and reminded me of the fate of the banker in *The Hunting of the Snark*, though I was spared the more spectacular symptoms of his malady.

As in my normal speech I was still whispering, my peculiar complaint did not attract attention at first. But I could not conceal it for long and I had to suffer the pitying looks of my companions, who were obviously thinking, 'Poor old Eric! Now he's gone bats.' In actual fact I was perfectly clear-headed; I could even visualize the words I wanted to say, but my tongue just refused to perform the required movements. At length, from sheer exasperation, I got up and ran off down the glacier so fast that I arrived at Camp III a long time before any of the others. There, however, my case was even worse, for everyone was naturally eager to hear news of our attempt, while all I could do was to talk drivel.

Poor Ruttledge was most concerned at having a lunatic on his hands. The cause of my complaint was attributed either to sunstroke or to the blizzard. I suffered from a blinding head-ache throughout that night. However, I was well again in the morning.

The whole party retreated down the glacier quickly or

slowly, each according to his physical condition. Birnie had to be carried most of the way, and McLean required the support of a strong arm. The Base Camp was now very different from the bleak, comfortless place we had left seven weeks before. It was still no beauty spot, but there was grass, the soft, warm smell of earth and growing things, blue poppies brought the sky to earth and primulas peeped from behind the rocks.

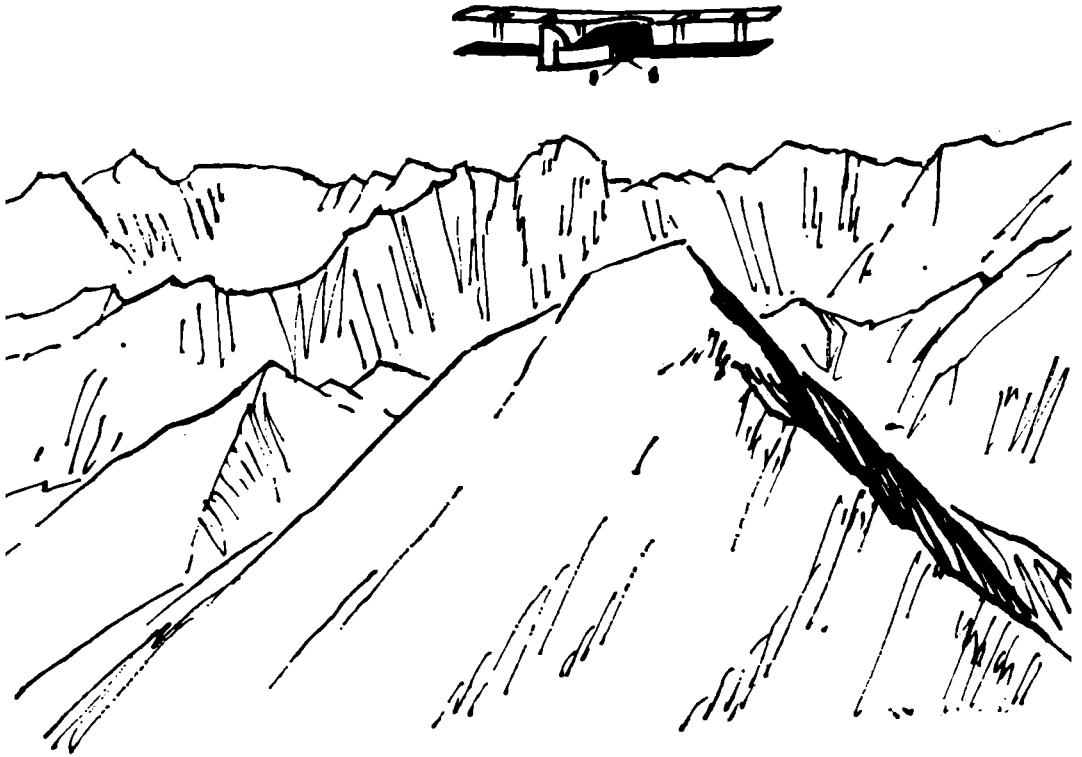
After a week of delicious rest and luxury we returned up the glacier to Camp III, in high expectation of renewing our attempt on the mountain. But it soon became obvious that this was impossible. The monsoon had broken and though it was much warmer and more comfortable than before, the slopes of the North Col were too dangerous, and masses of snow had fallen on the upper part of Everest.

Before retreating again some of us visited the saddle at the foot of the north-east ridge of Everest, and climbed a small peak above it. From the top we had a view that could not be imagined by those who have not seen the fantastic country that lies to the south-east of Mount Everest—the colossal ramparts that join Everest with Lhotse, the delicately fluted ridges of purest ice, a hundred peaks of exquisite form, deep wooded valleys; what a contrast to the bare, unlovely slopes of rubble about the East Rongbuk glacier!

From Upon that Mountain

While the 1933 expedition was approaching the mountain, two British planes flew over its summit. This privately financed venture was one of the first demonstrations of air photography. But it is also an important part of the Everest story, representing a new aspect of man's acceptance of the challenge of the unconquered mountain.

L. V. Stewart Blacker describes his experience as Chief Observer and Photographer to the party.



Over the Top

A few minutes after we left the ground I had to busy myself with my routine duties. At the start of all high-altitude flights, a number of vital checks must be made, and to avoid the chance of omitting any I had compiled a list. No less than forty-six separate jobs were included, and though each one was trifling in itself, none could be omitted without risk to the eventual success of the work.

It was necessary to prepare such a list since we were inhaling oxygen the whole time, and one of its effects on the human mind seems to be to create a tendency to concentrate on the idea or task that is uppermost, to the exclusion of everything else.

As most of the forty-six tasks were small details, it was all the more necessary to have them down in writing, so that each observer could consult his list at any particular

time during the flight, and thus ensure that every piece of work had been done by the appropriate time. The flight might be ruined, for instance, by omission to remove the caps from the lenses of all the cameras, and in this dusty climate they had to be left on till the last moment. The leading aircraftsman photographer was responsible in the programme for removing all these caps, counting them and reporting to the observer the moment before the chocks were removed from the wheels.

Everything passed off without incident as the two great machines soared up through the haze over the brown plains. By the time the initial batch of tests was completed we had been flying for some ten minutes, and for the next half-hour I had nothing to do but to sit recapitulating in my mind my duties.

This part of the journey was the more humdrum because the plains and foothills below were almost lost to view owing to the thick dust-haze which had, unfortunately, on that day chosen to rise to a phenomenal height. Gradually the dull monochrome of the brown ploughed fields of Bihar fused together into a uniform carpet, and every now and then the cluster of tiny rectangular roofs of a village stood out from the scene.

We did not rise clear of the haze until about 19,000 feet, and so the southern ground control, which was the river confluence near Komaltar, was practically invisible to the pilot. He could not find it with sufficient accuracy—a decided misfortune, since it was the point from which the photographic survey was started.

Nevertheless, I was just able to see an infinite tangle of the brown mountains of Nepal, seamed with black forests, and caught occasional glimpses of the swift Arun river in its gradually steepening valley as now and then I opened the hatchway of the floor and looked down through thousands of feet of purple space. We crossed the frontier

of this forbidden kingdom at 13,000 feet. Then suddenly, a little after, our craft sprang clear of the haze into the wonderful translucent air of the upper heights, and away to our right an amazing view of Kangchenjunga in all its gleaming whiteness opened out against the blue. For a few minutes nothing else could be seen against the sky but this.

Fumbling with the catches in my thick gloves, I threw up the cockpit roof, put my head out into the icy slip-stream and there, showing level with us, was the naked majesty of Everest itself. Just a tiny triangle of whiteness, so white as to appear incandescent, and on its right, a hand's breadth, another tiny peak which was Makalu. For some time nothing could be seen above this purple haze but these three incredible white peaks—Everest and Makalu just to the right of the engine, and Kangchenjunga behind the right wing.

I was not long able to remain watching these wonderful sights, for soon the machine soared upwards, unfolding innumerable peaks to right and left and in front, all in their amazing white mantles, but scored and seared by black precipices.

The light on the snow was a wonderful thing in itself. A quality of whiteness, as much more brilliant than the snow to which ordinary eyes are accustomed, as that snow is more vivid than the unclothed landscape.

Somewhat to our dismay there streamed from the crest of Everest away towards its sister peak, Makalu, eastwards, that immense ice-plume which is the manifestation of a mighty wind raging across the summit. Lifting from the prodigious cliff face, countless particles of ice are driven over the summit with blizzard force.

Soon, very slowly it seemed, we approached closer and closer to the big white mountains, and all my time became occupied with work on the cameras.

Now I crouched down over the drift-sight, peering through the great concave lens, and adjusted the wires across it. I rotated them carefully and this gave me the angle of drift of eighteen degrees.

I passed this to the pilot, who needed it for navigation, and then I adjusted the big automatic survey camera, turning it through the same angle in its mounting.

I had to look to the spirit-levels and to adjust the tilt of the camera until the bubbles rested in the middle of their travel. This required delicacy and judgement as the machine swayed every now and then. The adjustment had to be made in each case just at the moment when the machine happened to be level, neither one wing-tip up or down in either direction, nor pitching. I glanced at the big aluminium knob, and saw that after twenty seconds or so it turned by itself as the pilot had switched on the current into its motor. The camera was warm, the current was running through it, and all seemed well.

Now, without getting up from a prone position, I could move myself back a little on my elbows, open the hatchway in the floor, and look vertically down on the amazing mountainscape, bare of trees, seamed with great glaciers, and interspersed with streaks of shale. This was the beginning of the range, insignificant enough to our eyes at the height we were, which rises up to the culminating 24,000 feet peak of Chamlang.

Then shutting the hatchway and, laboriously taking great care to keep the oxygen pipe unentangled and myself clear of all the various electrical wires, I could stand up and look again through the top of the cockpit. I caught a glimpse over the pilot's shoulder of the brilliant red light on his dashboard, which flashed for a moment as the camera shutter operated itself.

Up went our machine into a sky of indescribable blue,

until we came to a level with the great culminating peak itself.

Then, to my astonished eyes, northwards over the shoulder of the mountain, across the vast bare plateau of Tibet, a group of snow-clad peaks uplifted itself. I hesitated to conjecture the distance at which they lay in the heart of that almost trackless country, for by some trick of vision the summits seemed even higher than that of Mount Everest. The astonishing picture of this great mountain itself, whose plume for a moment seemed to diminish in length, and with its tremendous sullen cliffs, set off the whiteness of Makalu, was a sight which must for ever remain in one's mind.

I had been hard at work with the cameras, first exposing plates, uncapping dark slides, winding and setting the shutters to seize a series of splendid views. The scene was superb and beyond description. The visibility was extraordinary and permitted the whole range to be seen on the western horizon. It seemed that the only limit to the view along the mountain was that due to the curvature of the earth's surface. The size of the mountains stunned the senses; the stupendous scale of the scenery and the clear air confounded all estimates of size and distance.

So I went on, now exposing plates, now lifting the heavy cinema camera to run off fifty feet or so of film. I crouched down again, struggling to open the hatchway, to take a photograph through the floor. Everything by now, all the metal parts of the machine, was chilled with the cold. The fastenings were stiff and the metal slides had almost frozen. I struggled with them, the effort making me pant for breath, and I squeezed my mask on to my face to get all the oxygen possible.

I had to pause and, suddenly, with the door half-open I became aware, almost perceptibly, of a sensation of dropping through space. The door of the machine was falling

away below us. I grasped a fuselage strut and peered through my goggles at the altimeter needle. It crept, almost swung, visibly as I looked at it in astonishment, down through a couple of thousand feet. Now I had the hatchway open and the aeroplane swooped downwards over a mighty peak of jagged triangular buttresses, which was the South Peak.

Below us loomed an almost incomprehensible medley of ridges, ranges and spurs of black rocks, with here and there the characteristic yellowy-red of Everest showing through. We had suddenly lost two thousand feet in this great draught of the winds, and it seemed as though we should never clear the crags of the South Peak on the way to Everest, now towering in front of us. However, the alarm was short-lived, for our splendid engine took us through.

Again we climbed; slowly, yet too quickly for one who wants to make use of every moment, our aeroplane came to the curved chisel-like summit of Everest, crossing it, so it seemed to me, just a hair's breadth over its menacing summit. The crest came up to meet me as I crouched peering through the floor, and I almost wondered whether the tail would strike the summit. I laboured incessantly, panting again for breath to expose plates and films, each lift of the camera being a real exertion. Every now and then my eyes swam a little and I looked at the oxygen flow-meter to find it reading its maximum.

Now I had worked my way up again to a standing position, with the cockpit roof fully open and its flaps fastened back. I had my head and shoulders out into the slip-stream, which had become strangely bereft of its accustomed force. I was astonished for a moment till I suddenly remembered that the wind up here only weighed a quarter as much as at sea-level. Now I could take photographs over the top of the machine.

Thus almost, and indeed before I expected it, we swooped over the summit and a savage period of toil began. The pilot swung the machine skilfully again towards the westward into a huge wind force sweeping downwards over the crest; so great was its strength that, as the machine battled with it and struggled to climb upwards against the downfall, we seemed scarcely to make headway in spite of our 120 miles an hour air speed.

I crammed plate-holder after plate-holder into the camera, releasing the shutter as fast as I could, to line it on one wonderful scene after another. We were now for a few moments in the very plume itself, and as we swung round fragments of ice rattled violently into the cockpit.

We made another circuit and then another as I exposed dozens of plates and ran off my spools of film. We could not wait long over the mountain-top, for the oxygen pressure gauge needle in my cockpit was moving downwards, an ominous sign. We had no very exact idea of the length of time our return journey would take with that violent wind blowing, and fuel was needed for emergencies. After a quarter of an hour or so, which seemed perhaps on the one hand like a lifetime from its amazing experiences, and yet was all too short, we turned back.

Soon we saw this wonderful view with serried peaks, row upon row, in fairy beauty, surmounted by Everest and Makalu almost grotesquely outlined by the aluminium-coloured fabric of our rudder. We came back towards the terrific Arun gorges over a bewildering medley of peaks, ranges and spurs, interspersed with broad grimy glaciers littered with shale. These peaks must be a great height and yet they seemed insignificant enough to our eyes.

One hundred and sixty miles home passed surprisingly quickly, the journey marred by the discovery that the second film in the cine-camera had become frozen despite its warm jacket, and was so brittle that I could not reload.

My oxygen mask, too, had become a solid mass of ice.

Steadily we came down, gradually losing height and soon the semi-circle of gleaming peaks faded from our sight as the straight line of purple dust-haze rose to overwhelm it.

From *First over Everest*

Two further small expeditions were defeated by weather before post-war politics closed Tibet to western climbers. In 1950, however, Nepal allowed access to Everest.

Mallory and other experts had maintained that the mountain could not be climbed from the South, but as this was now the only possible approach and with the encouragement of one or two new photographs, a reconnaissance party was sent under Eric Shipton in 1951.

They knew that the Khumbu glacier drops from the Western ridges in a 2,000 feet ice-fall; but no one had ever climbed it. Above the ice-fall, at 26,000 feet, the saddle known as the South Col presented further unknown problems. But they knew that above this the south-east ridge should not be impossible to climb. W. H. Murray summarizes the information his reconnaissance party brought back.

A New Route

Shipton and Hillary had arrived back at Everest five days before us. They had gone straight to the ice-fall and re-established camp at its foot on 20th and 21st October. Next day, with Angtharkay and Utsering, they stamped a safe track up the first thousand feet of the fall. On the 23rd they went up again to complete the route to the top, but just beyond the previous day's limit they found that a very great change had overtaken the glacier. It looked as though an atom bomb had dropped into it. Over a wide area the ice-pinnacles, called seracs, had collapsed in shattered ruins and the very surface structure of the glacier was threatening further collapse into a deepening and opening abyss.

On a hundred feet of rope Hillary made an effort to cut a way through the tumbled blocks. One of the blocks fell with a long roar into the underlying chasm and the area on which they stood trembled as though in an earthquake. The Sherpas threw themselves to the ground in terror. That the two sahibs remained standing, said Shipton afterwards, was due only to their having been brought up in the European convention.

They could see that beyond the devastated area countless new cracks had opened on the ice-cliffs and seracs as though an even worse cataclysm threatened. They withdrew and tried farther to the right, but here found a second and even wider shattered area. They returned to camp.

We heard Shipton's tale without any overwhelming dismay. All this had happened two days ago. If we gave it another few days perhaps the glacier would have changed

in our favour. Such optimism seems hardly accountable, and yet was to prove in some measure justified. On 28th October all six of us, accompanied by Angtharkay, Passang, and Nima, climbed the ice-fall. Just before the sun struck us we reached the danger zone.

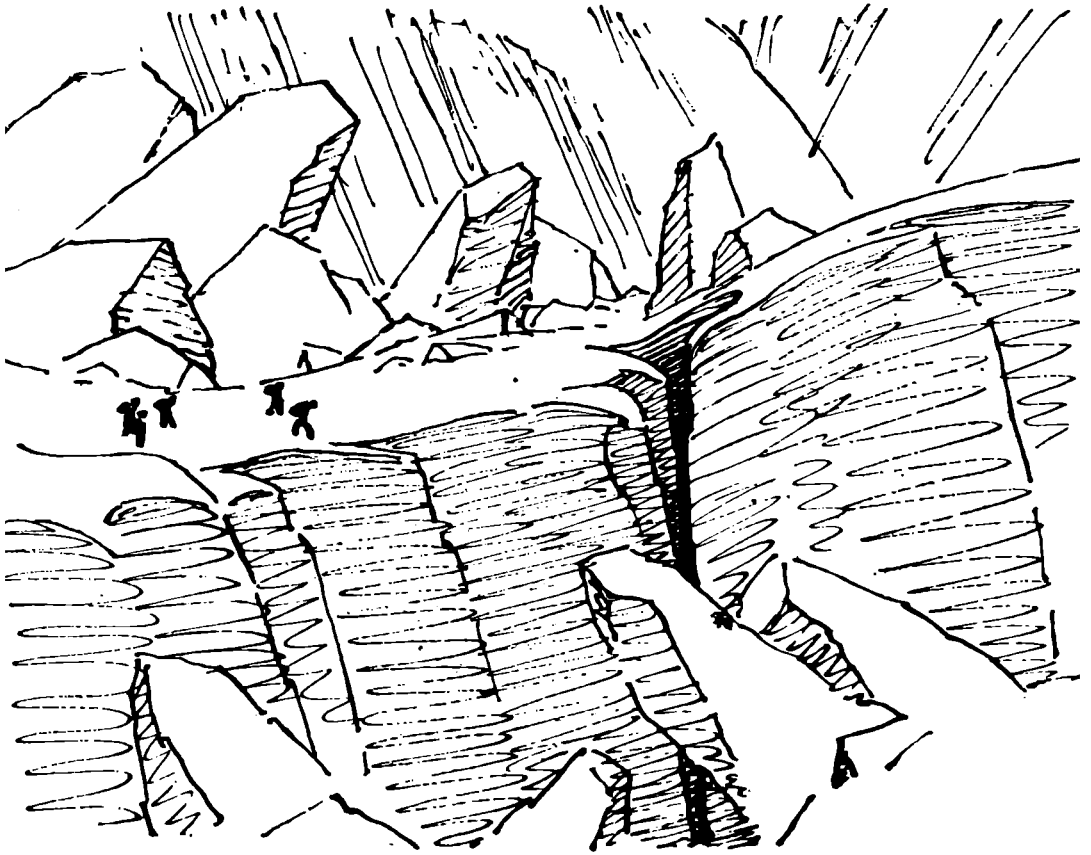
A small change had occurred and it was in our favour. The central collapsed part of the glacier had sunk between six and thirty feet more. The ice-blocks bridging an enormous chasm (the word 'crevasse' would misrepresent its indefinite character) had become more safely wedged. The upper glacier overhung this area. If the upper glacier were to move again the blocks would presumably become wedged still more firmly. But if the lower glacier moved first—disaster. It may be that I am wrong in thinking that the ice-fall moves thus in unco-ordinated jerks, but such was the impression it gave me.

Meantime there was no doubt that with careful ropework the shattered area could be safely crossed. And cross we did without incident. A level stretch followed, but the ice was shot through with innumerable cracks. An ice-axe thrust hard down was only too apt to encounter space. Otherwise all went well. None the less it was already clear to us that the ice-fall in its present state could not be used as a packing route to supply high camps.

Very soon conditions improved. We zigzagged back and forth among the cliffs and seracs, steadily gaining height, until at noon we came under the last big ice-wall. Riddiford, Ward and Passang attacked it direct by the old route, but as they neared the upper section it became evident that although the snow there was sounder than before it was still not trustworthy.

Bourdillon and Nima had meanwhile started on a route to the right, using the near side of the crevasse where its edge flicked up steeply to a high bridge. Since this edge was in fact a massive ice-cornice projecting over the depths, a

better way should if possible be found. Shipton, Hillary and I therefore tried leftwards without avail. In the end we had to choose Bourdillon's route or turn back. He had now spent an hour on his edge, clearing sugary snow and excavating a staircase in the solid layers beneath. At last he was up.



The rest of us followed. When Angtharkay and I were half-way up the whole structure gave a loud report, as if it were about to crack off. However, it held. We were up. The glacier flattened out. The ice-fall was climbed.

And yet we marched but a short way beyond the top to be confronted by the biggest crevasse that we had ever seen. At the widest point I judged it to be nearly a hundred yards across, at the narrowest a hundred feet. It split the glacier almost from side to side. There was no possible way of turning it on the right. On the left a tempting snow-

corridor lay shining in the sun. From this we were at present cut off by impassable crevasses, but the corridor could certainly have been reached from a point a thousand feet lower down. Had we used it all difficulties below and above could have been turned. Unfortunately, it was the corridor made by avalanches falling off the West ridge. We judged that the selection of such a route would be bad mountaineering, for it would give us no reasonable chance of survival.

We were thus defeated. Despite the bad state of the ice-fall I think that we should have been able to carry up one light camp. A brief exploratory journey into the upper basin would have yielded most valuable information about camp sites and chance of access to the South Col slopes, and so helped a second expedition. But any idea of putting a tent on top of the ice-fall had now to be discarded. We had no means of coping with the great crevasse. It was a hundred feet deep. We could have roped into it and crossed the chaos of ice-blocks on the floor, but the farther wall was vertical and unbreached.

We returned to camp. A new question confronted us. Would an expedition next year be justified? We had found the ice-fall in such parlous condition that it could not possibly have been used to supply camps below or above the South Col. On the other hand, ice-falls in the late autumn are notoriously at their worst. It seemed reasonable to suppose that after a winter's snowfall had consolidated on the glacier a good packing route would open up. Further movement of the glacier might change in our favour the uncompromising shape of the great crevasse that stopped us.

The vast size of this crevasse is due to its position. It is sited where the ice-fall pulls away from the almost level glacier above. Being thus a result of difference in rates of flow it will be a permanent feature. But there are bound to be considerable changes in detail as it goes over the lip

and the new one opens behind. Fifty feet of drift snow in the bottom would make the opposite wall climbable. There seemed no good reason to believe that, since it was impossible this year, so it would be next.

Thus a second expedition seemed to us all to be justified. From the west basin to the summit there is every sign of a practicable route. But what would be the better season? We saw the South Col slopes at too long a range to be sure of the snow conditions there, but the glacier on the face of Lhotse was not heavily covered. In spring these slopes will probably bear more snow, and since they are above 23,000 feet such snow is likely to remain powdery. To me autumn seems a better time to climb them, and also to attempt the summit. We saw no storms. Down at our own level the air was still and calm although the west wind had lately been re-establishing itself and the rock walls under the summit were again blowing bare and black. We could often see drift snow blowing around the summit ridges, but hardly with springtime violence. Often the familiar plume was there—but only a little plume—never the vast and appalling ostrich feather of May. In spring one may expect no more than one or two calm days in a month near the summit. Last autumn such days of calm were more frequent, and the cold was not excessive.

None the less, the lower ice-fall had been proved too open and unstable in autumn. We felt obliged in future to favour April and May, when crevasses should be safely bridged by the winter snowfall and so likely to afford a good packing route. The point seemed decisive, because the ice-fall as we found it was not a practicable route. But for that, my own preference would be for the autumn, although on this score I think Shipton may be found to disagree with me.

Before leaving our ice-fall camp, Ward and Bourdillon reconnoitred the right-hand side of the ice-fall from a

ridge. Shipton and Hillary went to the ice-fall itself. Neither party could detect an alternative route.

Despite our disappointment in not reaching the slopes of the South Col, our reconnaissance had been successful in that we had found answers to all the questions we had set out to answer, and that these answers were for the most part favourable beyond expectation. The western route may yet prove to be a better one than the old north route, over which it offers these six advantages, some of which are still to be proven true :

First, the main difficulties occur low down, whereas on the north route they start at 28,000 feet, where the climber commands less energy.

Second, on the last three thousand feet of the south-east ridge the strata dip northward, in favour of the climber, and so should give better support for the snow, more tent platforms, and permit the last camp to be placed much nearer the summit.

Third, the route is protected from violent wind until close to the South Col (about 25,800 feet).

Fourth, the south-east ridge is broad and should give a wider choice of route than the northern line.

Fifth, on the north side the snow above 25,000 feet refuses to consolidate, and by remaining powdery makes climbing impossible until it is cleared by the north-west wind; whereas the fact that snow lies always on the south-east ridge, despite wind, would imply that there it does consolidate and *may* give satisfactory climbing.

Sixth, the slopes above the South Col are in sunshine from dawn, thus allowing climbers to make an earlier and easier start than from camps on the northerly side (where the old Camp VI was in shadow until 9 a.m.).

The disadvantages are (at the time of writing) less numerous.

First, at the narrows of the west basin there appears a

threat of avalanche from the flanking walls not present on the East Rongbuk glacier. The threat, however, had less substance to it in the autumn of 1951 than we had feared. The threat might greatly increase if a party were so unwise as to remain in the upper basin at the break of the monsoon.

Second, the traverse from the face of Lhotse to the South Col, although tactically good (granted good snow), is strategically bad. If the weather deteriorates while men are above the South Col their safe return is unduly compromised; powder snow falling in bulk on slopes so long and steep will create a dangerous situation. We thought it unlikely that the Col could be climbed direct from below, because that line looked unpromising from six miles' range on Pumori, but have since been proved wrong.

Third, an aerial photograph of the summit shows that the south-east ridge may become unpleasantly like a knife-edge along its last three hundred feet.

Prayers for freedom from wind near the top will have to be redoubled.

From *The Story of Everest*

An assault expedition was planned to try the new route, but the Swiss Foundation for Alpine Research was found to have already organized an Everest party. Finally, by a gentleman's agreement, it was decided that the Swiss should go first, in 1952, the British in 1953.

The Swiss expedition of climbers and scientists had the assistance of 175 porters led by the experienced Sherpa Tenzing Bhutia. The ice-fall having successfully been negotiated, Camp V was established at 22,650 feet. Now the summit assault could begin and three climbers set out with seven Sherpas. They were to establish Camp VI on the South Col, Camp VII on the south-east ridge and then to press on as far as possible beyond. On 24 May they were turned back by cold and wind. Lambert describes their renewed battle the following day.



Swiss Attempt

May 25th

Fine weather, a slight wind and 36 degrees of frost. At 8.15 I set out again with Aubert, Flory, Tenzing and the Tigers Pasang Phutar, Phu Tharke, Da Namgyal, Ajiba, Mingma Dorje and Ang Norbu. Once more we made for the South Col where the ice was now breaking through everywhere. The Sherpas laboured behind us with their loads of from twenty-two to twenty-six pounds, but their pace was regular; they kept together and gave a great impression of security. A slip would have been fatal. Ajiba seemed in a bad way; at the end of about an hour, he put down his load and stopped. Despite the cold he was covered with sweat and was shaken from head to foot with convulsive shivers. These sudden attacks of malaria were startling. Luckily we had not gone so far that he could not return alone. We watched him depart while the other Tigers shared out what he had been carrying and we resumed our direct ascent.

The steps we had cut had resisted the hurricane and we gained height quite quickly. The snow that was torn from the ridges made our efforts more difficult and we felt the cold severely as we dragged ourselves along the fixed ropes to the depot of food and oxygen which we had set up on a rock platform at about 24,600 feet. Here everyone loaded up again with what he thought he could carry—oxygen canisters, food and tents. At 12.30 the heavy column moved off and progressed slowly along before engaging on a flank traverse to the right in the old tracks of Chevalley and Asper, which were still visible, though a week old. Small seams of rock followed the sheets of snow. We rose gradually although we were short of breath; our halts were more frequent and they were longer. Time passed rapidly by and the sun drew near to the crests of Nuptse, which were at about our own height. The obligation to surmount the 3,250 feet between the upper glacier and the Col in one stage is still a trial for those who wish to attack Everest from the Nepalese side.

It was 4.00 p.m. We had been on the move for eight hours and the Shoulder still eluded us. The sky was always quite close, at 100 to 150 feet above our heads; but when we had climbed these 100 to 150 feet, the sky was still a little higher up. The cold and the wind were now so unbearable that two more porters, Ang Norbu and Mingma Dorje, fearing frostbite, stopped, refused to go on, and declared that they were going to descend. How could we prevent them? Had we the right to do so? In adventures of this kind, a man should remain free and the sole judge of what he can do and what he wants to do.

We helped them unload and saw them off. Three Sherpas out of seven had gone. For those who continue such an abandonment is always difficult to bear. Here the blow was hard because, in order to succeed, we needed the contents of their sacks at the South Col. After a fashion we moored

what we could not carry where it was; we should have to come back and get it. Our already too heavy sacks were weighted still more. Flory took a tent; I took one too; but during these manoeuvres, which were tricky on so steep a slope, we let Aubert's sleeping-bag slip. The wind seized it and it disappeared.

We resumed the endless climb, hauling ourselves up from one rock to another and from one step to another with great difficulty. We looked grotesquely like smugglers at the North Pole in our wadded jackets, with our fur caps down to our eyes and our Lapland boots. We had twenty-day beards and our lips were covered with cream. But it is only after the event that we see the comic side of things; for the time being it was as much as we could do to endure.

The sun sank, the cold became almost unbearable despite our efforts and our clothing. It was 7.00 p.m. We had been climbing for nearly ten hours. At last the slope eased off a little. It was time. Darkness was falling quickly. We could not reach the South Col that day. Without a word, we worked at improvising a bivouac. We dug two platforms with our axes. Strength was needed to wield the axes; we had not got it and the work was slow. Night had fallen when the two tents were up, two little high altitude tents which are good enough for one man alone, or two if tightly packed together. But we were three and the Sherpas four.

Frozen, with our ropes still tied and our crampons still on our feet, we went into these precarious shelters. Thinking that a particularly fierce gust of wind might take both us and our shelter to the foot of the Col, I had thrust my axe into the snow up to the hilt and to it I had firmly tied the end of the rope. In this fashion Everest would hold us on a leash throughout the night!

We were packed too closely to get into our sleeping-bags; motionless, pressed one against the other, not daring to move for fear of pulling away the badly secured tent

ropes, we listened to the moaning of the wind, to the rustle of the snow, the slapping of the tent-cloth and the chattering of our teeth. Suddenly the flap opened and the indefatigable Tenzing, he who always thinks of others, brought us something to drink. He had succeeded in heating some soup in the neighbouring tent. 'Thank you, Tenzing! Go and sleep.'

The night was endless, like the slope to which we were moored, like all dimensions in this terrible land. We endured, we waited in patience, we breathed deeply in order to control our hearts, and we suffered the cold which at first froze our skins and then penetrated slowly to take up its abode in our flesh. Without speaking of it, we thought that this supplementary and unforeseeable fatigue would rob us a little of the strength we would need above the Col.

But all nights come to an end. 'Fine day, sahibs!' Once again it was Tenzing, bringing us chocolate.

Dawn was breaking, driving the shadows from the summits of Nuptse and Pumori. Everest was still no more than a shapeless mass, dark and as if crouching. On our left was the Lhotse glacier, of an indefinable melancholy tint in the last moments of the night. We had no desire to stay abed. We tried to warm ourselves up by exercise, but at 25,600 feet one does not exercise for very long, even for this purpose. It took us more than an hour to take down the tent—we abandoned one of them—to fold it and reload the sacks. At last the slanting sunlight licked the slopes and with it came the courage and confidence that the night had taken away.

The Sherpas were scarcely in good shape, which was not surprising after the night they had just experienced. Nevertheless, Phu Tharke and Da Namgyal wanted to go down several hundred feet to fetch the rest of the loads abandoned by Ang Norbu and Mingma Dorje. Pasang would wait for them. The things we were forced to leave

we would come and fetch from the Col or the Shoulder, which could not be more than about 600 feet above us.

We resumed the ascent to the South Col, which had put up an eleventh hour defence. Our muscles were frozen and our limbs were stiff; each step cost us dearly. Nevertheless, we gained height. Nuptse, the height of which had terrified us when we looked at it from the lower camps, was now lower than ourselves. We were approaching 26,250 feet; everything about us told us so, even our lungs. We were coming close to Lhotse, where my eyes instinctively sought to discover a way up, as if they were beginning to form new plans for the future. But the present occupied me entirely, more than I desired.

At last, at ten in the morning, we came out on the hump of ice above the South Col. It was a sudden revelation. In two perfect curves, the south ridge rose to the acute angle which it formed with one of the ribs of the west face: this was the south summit. Eagerly we examined this terminal ridge and its means of access. Everest had now ceased to be the shapeless and monstrous mass we had seen until then. It was a new mountain, still massive, but powerful, and pointed at its summit, which pierced the sky. To the left was the black mass which overlooked the Khumbu glacier, striped with channels of ice; to the right were rocky islets and the white ridge disclosed for the first time to the eyes of man who were overtaken by desire, despite their fatigue.

This emotion was intense but brief, for it was no place to dream. The day was not ended. Tenzing gave us his sack to take down to the Col and himself returned to the bivouac site to fetch the equipment and ascend with the other three Sherpas. On the Col the wind was violent. There was not a trace of snow: nothing but stones welded together by the frost; a desert in miniature. One would have to be as hard as rock or ice to resist the gusts passing across the Col and seeming in a rage to prevent us from putting up the two

tents. On all fours, clinging to the earth like insects, we at last succeeded in bringing sense to the refractory cloth. It took us two hours, and then came the waiting. It is difficult to imagine what these hours of waiting mean for an expedition in the Himalaya.

Tenzing returned, escorting our three Sherpas, who were all in bad condition. Pasang declared that he wished to die where he was; Phu Tharke zigzagged like a drunken man; Da Namgyal held his head in his hands. They were out of action. Perhaps they would be usable after a night's rest, but one does not rest above 26,000 feet, where the system deteriorates whether one moves or does nothing. Tenzing himself was in extraordinary condition. Twice more he was to return to the bivouac site and re-ascend with loads.

Aubert and Flory were lying down while I went from one place to another, taking photos. A sea of cloud covered the high plateaux of Tibet. Only the enormous pyramids of Kangchenjunga (28,150 feet) and Makalu (27,790 feet) broke through it. But my eyes ceaselessly returned to the ridge along which we were to go the next day to try our luck in bad conditions for, from all the evidence, the Sherpa party was finished with the exception of Tenzing. Tenzing at last returned and we went together to sleep.

The next day, despite a better night, the altitude continued to wreck the constitution of the Sherpas and they left us.

'That's another trump card gone,' said Flory, watching them depart. Indeed, how would we be able, without using up our last strength in the process, to carry the equipment, foodstuffs and tents necessary for four men to 27,500 feet? Between 23,000 and 26,000 feet the strength of an assault group thins out like the point of a pencil: but our will remained intact. It had been with us for so long, anchored at the bottom of our spirits, which it moved obscurely,

almost unconsciously, despite our fatigue.

At ten in the morning, after the three Sherpas had vanished beyond the hump above the Col, we set out on two ropes of two men each, Aubert and Flory, Tenzing and myself, carrying one tent and food for one day. As soon as we left the zone of ice and stone, we broke into sheets of crusted snow. We made towards the base of the south-east ridge, at the foot of a large rock buttress. The weather was clear, the intensity of the wind had diminished, as if it concentrated its anger upon the Col itself.

Having reached the foot of the buttress, we were disillusioned. It was too steep. The rocks that overlooked us were undoubtedly negotiable at 13,000 feet, but not at 26,000 feet. Flory and Aubert pushed on a further hundred yards to make sure that the eastern face offered no way out, and they ran up against a slope of more than sixty degrees, which vanished into the sky.

So we returned in our steps and moved along the base of the large buttress and attacked the gully which runs down it. The snow was good and the ascent easy. We made steps between the snow and the rock. We constantly relieved each other in the lead; we gained height quickly and the tents on the Col already seemed small. Soon we reached the top of the gully but the dry rocks allowed us to continue by moving over to the right. We waited for Aubert and Flory while taking oxygen like some precious liqueur; then we continued the climb straight up.

Suddenly I emerged on to the ridge above the large buttress and there discovered a new world, the whole eastern face of the mountain, plunging for more than 16,000 feet to the Karta valley and Tibet. And in the mist, on the far horizon, other chains of mountains broke through. Behind us the summit Lhotse had fallen away; it was now no more than three or four hundred feet above us. We were at about 27,500 feet.

It was fine and there was no wind. Both of us were fit. Should we sleep there without a Primus and without sleeping-bags? Perhaps the next day . . . ? Tenzing interrupted my reflections.

‘Sahib, we ought to stay here tonight!’ He indicated the tent he had been carrying since the start. I smiled, for our thoughts had been pursuing the same course.

Flory and Aubert joined us. Like us they were in good shape. They too might stay and try their luck the next day. This is doubtless what they desired. But there was only one tent and very little food. We had only set out to make a reconnaissance and to fix the site of Camp VII. In an undertaking like that, the party matters more than the individual; the individual is nothing without the party. In order that the privileged pair should have not only a chance of success but a possibility of returning, it has to be supported at the last camp by the second pair. Though its task might appear to be less brilliant, it needs men who are just as determined and in equally good physical shape—perhaps in better shape, since they should be capable of going to seek and bring back, whatever the risk, those who have taken their lives in their hands.

Between the four of us there was no argument. Aubert and Flory, reliable, cautious and determined, agreed to leave us. ‘You two stay. We will wait for you at the Col.’

We watched them move off, growing smaller and ever smaller down the slope, until they reached the Col an hour later. Now we were only two! How many men and how much effort had been necessary to bring us to this farthest point of the expedition!

We pitched our tent with great difficulty. The altitude and the wind made our movements awkward. Our legs would not obey us and our brains scarcely functioned. Our hands were more skilful without gloves, but to take them off would cost us dear. The sun had gone down behind

Nuptse and the temperature fell instantly. We took a last look towards Kanchenjunga and Tibet. Tenzing extended an arm westwards, pointing to a disquieting sea of clouds. The horizon reddened.

In this improvised bivouac there were no sleeping-bags, no equipment, no Primus, only a tent which slapped in the wind like a prayer-flag. It was a glacial night. The whole being curled up as if seeking to create a mattress of air between its skin and itself. Our muscles stiffened and those of the face became fixed as if from an injection of anæsthetic. Slowly the cold penetrated the bones themselves. There was no question of sleep: the wind and the growling avalanches kept us awake. Which was just as well.

We were overtaken by a consuming thirst, which we could not appease. There was nothing to drink. An empty tin gave us an idea: a fragment of ice and the candle-flame produced a little lukewarm water. The gusts of wind made our heads whirl; it seemed to us that we took off with them into space, like those houses one thinks one sees moving when watching the clouds in flight. To resist this vertigo, I tried to fix my thoughts on the next day's attack, and I mused on those who at all the stages were thinking of us: Aubert and Flory at the Col, Dittert at Camp V, Wyss at the base camp. In a state of semi-hallucination the entire expedition seemed to me to be a stretched bow and ourselves the arrow. A poor blunted arrow at that. Could it reach its target?

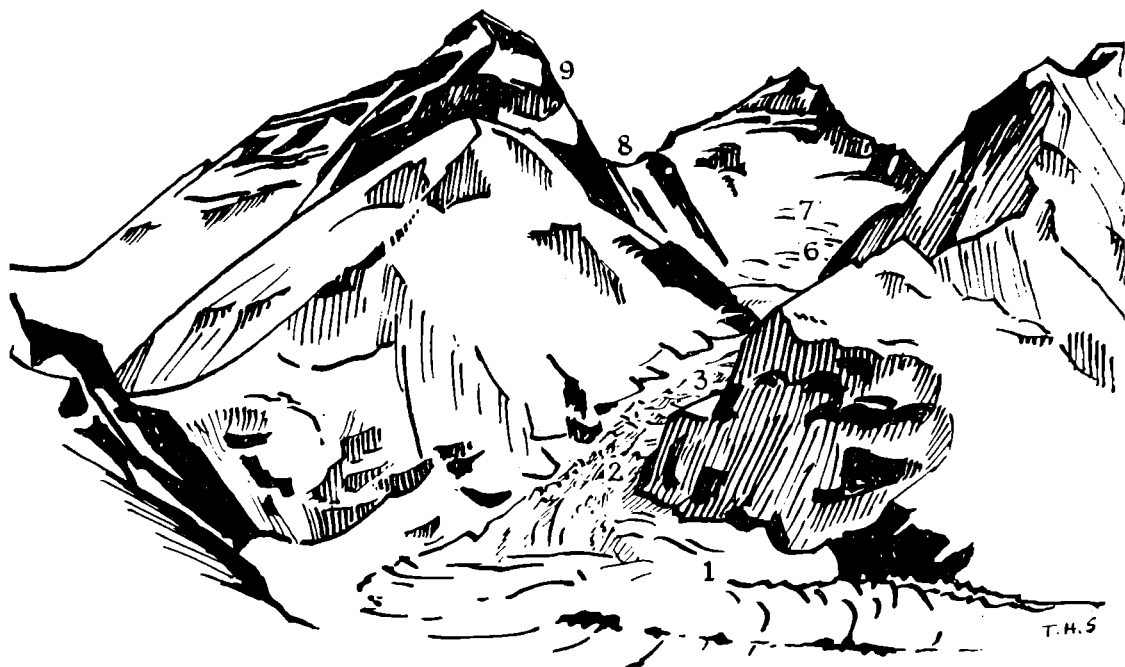
This was the boundary between waking and sleeping. I dared not sleep, must not sleep. Tenzing shook me and I awoke, and I shook him in my turn. Amicably we beat one another and pressed close together throughout the night. In the sky the stars were so brilliant that they filled me with fear.

The shadows became clearer. The shape of Tenzing,

rolled up like a ball, began to stand out from the background of the tent-cloth, which gradually grew lighter. Dawn entered the half-open tent and with it came anxiety. The wind hurled a handful of ice-needles into my face. Nevertheless, we had to open our eyes. The weather was not reassuring, for the sky was clear to the north, but very dark to the west and south. The summits of Lhotse and Nuptse were hidden in a mass of dark clouds, and the valley was drowned in fog.

What should we do? We looked at each other, undecided, but once more we understood each other without speaking. I indicated the ridge with a wink and Tenzing answered by nodding his head. We had gone too far to give up. Our preparations were quickly made, for we had worn everything, except the crampons, from fear of frost-bite. They took long to put on again, for our numbed hands were clumsy and bending over literally took our breath away. Laden with the last three canisters of oxygen, sufficient for six hours, we set off below the ridge on sheets of snow broken by bands of rock. One step, three breaths, one step . . . when we rested for a moment, we slobbered at the inhaler; it could only be used during a halt because the resistance of the valves was too great for our lungs when the effort of moving was added. At about every twenty yards we relieved each other in the lead to economize our strength and in order to inhale while letting the other pass. When the slope steepened we advanced like dogs following a scent, sometimes on all fours.

But the weather grew worse. Waves of mist passed, carried along on the south-west wind. Showers lashed at us in passing, leaping over the crest. Then the sun reappeared and reassured us. We rose slowly, terribly slowly. Nevertheless, we still rose. In the clear intervals Lhotse emerged from the storm clouds and it was already below us. The whole landscape and all the summits fell away. The peaks



Everest from the lower slopes of Pumori. Showing the camp sites in 1953. Camps 4 and 5 are invisible, and camp 9 is behind the ridge at that level.

NC: North Col

L: Lhotse

E: Everest

N: Nuptse

SC: South Col

which had seemed monstrous from the lower camps had lost their splendour. But the clear intervals did not last; the dense fog, filled with a drift of frozen snow, enveloped us again. All our vital functions were slowed down. There was a confused impression of being on some other planet. Asphyxia destroyed our cells and our whole beings deteriorated.

At about eleven o'clock we came out again on to the ridge, sinking deeply into the wind-crusted snow. There were no technical difficulties; the slope was rather easy and not too steep. We were rather fearful of the cornices to our right and we instinctively kept our distance.

Our pace became still slower. Three steps, a halt, oxygen. Three steps, a halt. Then came a clearing and we saw that the south summit was at least 650 feet above us. Three steps, oxygen. I watched Tenzing. He seemed well but at

moments he swayed a little, trying to find his balance. I tried to keep a watch on myself and asked myself: 'How do you feel? All right, quite all right.' This was the worst of all dangers. How did Mallory and Irvine feel when they dissolved into the rarefied air of the north ridge? Was this not the reason why they did not return?

Granulated snow struck our left cheeks increasingly hard. The wind became more evil. The south summit was so close: just this bank of rock where we were now engaged, the last; just that snow crest. But no; it was impossible to go on. This was the end. We had taken five hours to gain 650 feet.

Once more the decision was taken without words. One long look and then the descent. Was it an altitude record? No. Failure. That is what we thought. But did we think? Our bodies were of lead, almost without spirit. Pick up your left foot and put it in front; now the other. Our tracks had almost entirely vanished. We stopped as often as on the ascent.

We passed the tent. The wind had begun to do its work; it was torn in two places. Would it last till the others could occupy it?

'Leave it there. Perhaps they will have better luck than us.'

And we went on, kept in motion only by the will to resist the lethargy that was invading us. We crouched as we dragged along, descending the slope towards the Col.

From the Col to the tents there were a dozen yards uphill, an insignificant hummock of snow. We could do no more. Flory and Aubert dragged us into our tents, inert, at the limit of exhaustion. Tenzing sank into a deep sleep and did not move until the hour of departure. For us the adventure was ended. The next day we were to take the road for Europe.

Just as the Swiss in 1952 were helped by the knowledge gained by the 1951 Reconnaissance party, so Lambert and his colleagues passed on their latest information to the 1953 British expedition, led by Brigadier Sir John Hunt.

Few expeditions can have been worked out beforehand in such minute detail and here Hunt light-heartedly describes how some of the problems were faced during the planning stage in London.

Plans and Proposals

We now entered upon a period of intense and exciting activity. A carefully co-ordinated timetable had been drawn up, designed to ensure that no item of preparatory work should be overlooked and that each event should be dovetailed into its neighbours; everything led up to the great moment when our baggage would be stowed aboard a ship at the beginning of our journey to India.

Apart from the more familiar gear—thousands of feet of rope and line, pitons, snap links, ice-hammers and axes, the mountaineering equipment included certain unusual items which it seemed wise to add after studying the difficulties encountered by the Swiss on the Icefall and on the Lhotse Face. We knew that, apart from crevasses, there were likely to be a few vast chasms that were apt to occur at the sudden change of gradient. The Swiss had bridged one immense gap with ropes, for no logs long enough could be obtained from the valley. They had used one set of ropes for the climbers and porters to cross, and another to hoist the loads. To deal with similar obstacles, we took a light metal 30-foot sectional ladder, composed of five 6-foot lengths. It would be simple to carry and fit together and could be moved, if need be, from one crevasse to another. By doing so we would be employing methods used in the earliest days of Alpine mountaineering. We were also presented by the Yorkshire Ramblers with a 30-foot rope ladder to deal with any vertical ice pitches.

When discussing the problem of gaps with friends in London, it was suggested that we might contrive some sort

of catapult, carrying a rope and armed with a grapnel which would become firmly embedded in the ice on the far bank of the obstacle. This proposal formed the subject of an interesting demonstration in the somewhat confined space of the garden at the Royal Geographical Society.

The gadget produced was extremely simple—two hand grips, at either end of a length of rubber rope, consisting of multiple strands of elastic. The grapnel was a wicked-looking affair, a kind of large wooden bullet armed with a number of hooked barbs. To this was attached a long nylon line. While watching the expert laying out yard upon yard of this line, I expressed concern regarding the range of this weapon, for he had paid out some 150 yards, in contrast to the 80 yards' length of the garden. Reassured on this point, Charles Wylie and I took station at about a 6-foot interval, each holding a grip, while the demonstrator stretched the elastic behind us and attached to it the war head. Just when Charles and I were about to be pulled backwards off our feet, the missile was released. It shot high into the air with the nylon cord in its wake and was going very strongly over the wall into Exhibition Road, where it would most probably have speared a taxi or some unsuspecting pedestrian. Most fortunately, we were spared such a calamity by a tree, which intervened to arrest its flight some fifty feet up. On the whole, we thought, it was unlikely that the famous Icefall would reserve for us any surprises meriting this kind of treatment.

We did, however, allow ourselves to be carried away by the prospect of dangerous snow, notably on the Face of Lhotse, into taking with us a 2-inch mortar, borrowed from the Army in the guise of an avalanche gun. This little weapon is great fun to fire and produces a bang out of all proportion to its size; the explosion would be sufficient, we considered, to dislodge any lurking avalanche for miles around. It is possible that Charlie Wylie and I were biased

in this matter by our own professional allegiance, but we knew that a similar technique is used in the Alps for the purpose. However it may be, the stir which our proposal caused in political circles when permission was sought almost decided us to leave the mortar out of the inventory. When, at a later stage, two .22 rifles were added in order to provide fresh game for our larder, we were under grave suspicion as to our real motives in visiting Nepal.

Other aids to getting up the mountain were carefully considered and eventually rejected. Realizing the critical nature of the Lhotse Face and the difficulty of carrying to the South Col the quantities of stores which we estimated at that time would be required, we were much attracted by the idea of taking with us a light sledge and winch, by which loads could be hoisted at least some way up the great slope. The difficulties of feeding and operating a suitable engine to work the winch, the alternative labour of winching by hand and the uncertainty of finding suitable terrain up which to run the sledge, caused us to drop this idea.

Another original but less practical suggestion was turned down with some regret. This would-be inventor envisaged the construction of a spring-loaded harpoon, which would combine this primary function with that of an ice-axe; it would fire a grapnel from the South Col of Everest to the summit, over 3,000 feet up, invisible and perhaps a mile distant. Not only would we thus have a stout handline by which we could easily haul ourselves to the top, but the cord was to be painted with luminous paint so that we could continue our way if overtaken by darkness. Carrying this fertile line of thought still further, our correspondent pointed out that we should have ample warning of the dangerous gusts of wind, which would cause the cord to vibrate, thus giving us time to brace ourselves against the risk of being swept off the summit ridge.

Clothing, tents and bedding were objects of our very

particular concern. The effects of cold, enhanced as they are by wind and altitude, are not confined to the physical injury of frostbite, serious as this is. Cold and wind exhaust the climber and make inroads on his morale; as such they are dangerous and subtle enemies. The design of clothing to combat this danger had made great strides since those early days when our Everest climbers even succeeded in climbing on the upper reaches of the North Face clad in tweeds, felt hats and ordinary Alpine boots, but there was plenty of evidence to show that subsequent parties, even in recent times, have been unduly handicapped as well as injured by insufficiently specialized clothing. The problem is the more difficult of solution because it is imperative to reduce weights to a minimum. We paid a visit to the Polar Research Institute at Cambridge, where we received many ideas and much good advice; we enlisted the services of many British and foreign firms.

In the end, our garments conformed to a familiar pattern; the real improvements were in design and material. Our outer suits were of cotton-nylon windproof material, and both smock and trousers were lined with nylon. The combined weight of an average-sized suit of this type was little over $3\frac{3}{4}$ lb. The smock had a hood with a visor to provide protection against wind and snow. To wear inside the windproofs at high altitude, the climbers would have a two-piece suit of down, the jacket with a hood, like the outer blouse. This down clothing reduces the number of woollen garments needed, but each of us was provided with two feather-weight jerseys and one heavy pullover.

One of the main clothing difficulties in the Himalaya had been that of footwear. The conventionally constructed mountaineering boot is apt to allow the cold to strike through both soles and uppers, and because of the tendency of snow to melt, even at great heights, moisture is absorbed either from the feet, or the snow or both, and then freezes

the boot to the hardness of rock. I decided that we must be equipped with two types of boot, both specially constructed to give exceptional protection against cold. The one must be sufficiently light and close-fitting to enable difficult climbing to be done lower on the mountain, including the Icefall, and it must be durable; the other must give real insulation against extreme cold during the Assault, but would be required only for the upper part of the mountain.

The first type of boot, weighing on an average about 3 lb. 12 oz., was essentially similar in design to the normal mountaineering boot, but had a double leather upper with a fur lining between the layers. The leather was specially treated to prevent freezing. The more specialized boot for high-altitude climbing had uppers insulated with almost one inch of kapok fibres contained between a very thin layer of kid and an inner waterproof lining. The sole, instead of being made of the normal heavy treaded rubber, was made from a micro-cellular rubber much lighter in addition to having better insulating properties. The weight of an average pair of these boots was about 4 lb. 4 oz.

There was no less need to protect the hands. Here the problem was increased by the need to do intricate manual jobs, such as loading and operating a camera, fixing crampons and, to a less extent, wielding an ice-axe. After careful thought, an outer gauntlet of windproof cotton was chosen, enclosing either a down or a woollen mitt; both were provided. Next to the skin would be a loose-fitting silk glove; apart from its value in providing additional warmth to the hands inside the mitts, it had been found that, provided the silk glove is retained, these outer layers can be safely discarded for brief spells when it is necessary to perform some intricate task with the hands.

Apart from finding a material which would be truly wind-resistant, and if possible warm as well as light, we considered carefully the design of our tents. In general, it

would be convenient to camp on a two-man basis at high altitude, each tent unit being thus light and mobile, as well as capable of being pitched on a restricted space. There would be occasions, however, when a larger tent would be more economical as well as being warmer and more congenial; we knew, too, that our Sherpas were gregarious and found no discomfort in sleeping on the sardine-tin principle.

Our standard tents were the conventional two-man ridge design with a sleeve entrance at both ends, enabling each one to be joined to its neighbour so as to provide internal communication between tents. Apart from minor improvements in the matter of fittings, the only novelty about these tents was the cloth used. This, a cotton-nylon weave, had been shown both by laboratory and field tests to be exceptionally tough and wind-resistant, as well as light. These standard tents weighed about 15 lb.

In addition, it was decided to take two large dome-shaped tents, each capable of holding twelve men, to ensure extra comfort at the main camps. Although they were comparatively heavy—one weighed 110 lb. and the other 85 lb.—we hoped to erect one of them at our Advance Base. At the opposite end of the scale, we decided on three small Assault tents, one of which was intended for a final camp high up on the south-east ridge. One of the three was a smaller version of the conventional two-man tent; the second, of a new design, was ordered from the United States; the third was blister-shaped. The weights of these miniature tents averaged 8 lb. Unless we were to increase very materially the cost and weight of our baggage, tents would always be in short supply on the mountain, and a complicated scheme for their movement at each phase was worked out in London as part of our planning.

Our sleeping-bags were manufactured variously in Canada, New Zealand and in this country to designs decided on as a result of trials carried out in the Alps. Each

climber would have an inner and an outer bag of down, the fabric of which was nylon. The total weight was about 9 lb. Our air mattresses were expected to be an improvement on earlier models. In order to solve the problem of preventing the cold striking up between the air-filled inner tubes, and also to ensure greater comfort, two layers of tubes were superimposed one above the other, the upper tubes lying in the grooves between the lower ones. By inflating the lower tubes fully, but leaving the upper layer only partly air-filled, a very comfortable surface resulted.

Wireless sets were taken for two purposes: inter-communication between camps on the mountain and reception of weather bulletins. A number of very small and light sets were presented to the expedition to fill the former need.

Cooking-stoves were another item to which we attached special importance. One most significant physiological need at high altitude is to drink considerable quantities of liquid. For a number of reasons, this is very difficult to achieve in a high camp. The snow has first to be melted. The process is a very long one, partly because the heat generated by the average cooker is reduced and so much of it is wasted. A special aluminium shield was attached to our gas stoves, with the object of retaining the heat in a jacket around the cooking vessels.

The question of diet was a most controversial one. I will only mention briefly here that we were guided in our provisioning by Service experience. We accepted as our basic diet two types of composite ration, one of them in current use by the Army—made up in fourteen-man-day packs, for use at periods other than the Assault. Its contents were adapted specially to meet the diet scale recommended by the Medical Research Council. The Assault ration, a small 3-lb. one-man-day pack, was made up to suit our particular needs at high altitude, for use at and above Advance Base.

Oxygen equipment should be light and should have a good endurance. Despite all efforts to limit it, the weight of our oxygen equipment was a matter of the greatest concern. This was in no way the fault of our advisers, or the producing and assembling firms. The simple truth is that the task was taken in hand far too late to enable any radically modified design to be studied and constructed. Nothing could have been more splendid than the devotion with which all concerned worked against time to meet our requirements. Our worries about this were evidently understood by others, less directly concerned but no less anxious to find a solution. A number of suggestions poured in, unfortunately many of them long after we had perforce decided on the oxygen policy and details of design.

A most attractive, if impracticable idea was put forward to arm ourselves with a bigger and better mortar, and with it to fire oxygen bottles like bombs up to the South Col. As we were to discover later, the surface of the Col makes hard landing and it seems likely that, however constructed, the bottles would not merely have bounced but burst, quite aside from the fun of indulging in a high-level game of hunt-the-bottle over a wide area. We were also alarmed by the unhappy prospect of seeing our early efforts falling short and rolling, with gathering momentum, down thousands of feet back to the firing-point. It was also tempting to follow another suggestion, that of laying a pipeline all the way up the Lhotse Face and onwards along the south-east ridge, through which a supply of oxygen would be passed. The pipe would be furnished with taps at which the weary climbers could pause at intervals on their journey. On consideration, we decided that it would be preferable to carry the bottles, ungainly and heavy though they were.

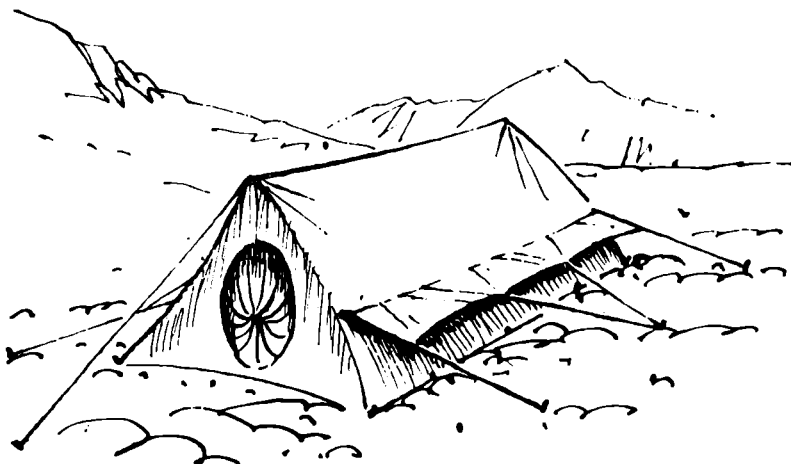
Again we were adjured to lessen the burden of our apparatus by attaching to ourselves a hydrogen balloon,

nicely charged so as just not to lay us open to the accusation of cheating by making an aerial ascent of the mountain. This vision of the summit pair tiptoeing upwards, their feet barely brushing the snow, was only dispelled when we learnt the monstrous dimensions of the balloon required to provide the 'lift'.

If yet another notion had been adopted, we might have put ourselves into pressurized suits and, operating the pressurizing machinery by an attachment to the foot or allowing the wind to turn a small propeller worn elegantly on our fronts, have tackled the manifest climbing difficulties of the Lhotse Face looking like advertisements for tyres. This again had to be turned down.

In more serious vein was the project for dropping the bulk of our gear, including oxygen, by air; the question of an air lift to the South Col was even mooted. A study of this suggestion was made by the Air Ministry and it was shown that the technical problems would be very great. So uncertain, in fact, would a successful drop be that it would, in any case, be necessary to duplicate all the stores with which this experiment was to be made, unless we were either to accept the risks of having them landed in Tibet or of diverting our energies to rescue and salvage work on the wreckage of the aircraft.

From *The Ascent of Everest*



Sir John Hunt established an Advance Base and series of camps on the mountain. He planned for two separate pairs of climbers to attack the summit, working from the South Col, which lies at the top of the Lhotse Face.

But before porters carrying stores could reach the Col, Camp VII on the Lhotse Face had to be established from equipment already dumped there, and further reconnaissances made.

This dual task was given to George Lowe and Wilfred Noyce. Noyce, an English public schoolmaster, tells his own story.

Establishing Camp VII

Now some are unaffected by sleeping-pills. Greg, indeed, never missed a night above 20,000 feet. We had various brands, red, yellow and the vicious-looking greeny-blue object that I now swallowed. This, I remembered, had had so little effect on Greg at III that he woke at eleven and had to take one of his own brand. In our case it was otherwise. I slept soundly, lulled off in a drift of wind and snow that was all the outside world, while I was all warmth within. I woke at six to a morning of cloudless beauty. The wind had dropped; outside, the tent flaps creaked and crackled frostily as I prodded a head through the entrance. We had heated extra snow last night, and the Primus rested at George's end of the tent. I gave a push at the sleeping-bagged legs.

'George!'

No answer. 'George!' again, two or three times, and a very sleepy figure heaved upright, at least into the kneeling position. I looked out. A perfect day. By the time I had pulled my head back, nose and ears numb, George was fast asleep again, still in the kneeling position. I must pass rapidly over the next three hours. I pleaded, pummelled, abused. Only much later did I discover that George, utterly drugged with sleep, had heard everything I said, although his active half was dead. He was very kind about it, later (for I said a good deal). At the time, he could do or answer nothing, only feel an agony of helplessness and a deep longing for the one thing—sleep.

Each time I looked out the sun was higher, the sky bluer,

the situation more absurd. Down there, they would be getting out the binoculars to watch Camp VII being established. And on the upper slopes the snow would be stickier, softer, more promising of labour every minute. My anxiety reached fever pitch. By nine I had had my own breakfast: sardine, tea, biscuit and jam. We *must* go. At last, at last George was heaving into consciousness. Perhaps all was well. His eyes, creased with sleep and closing continuously, he rubbed and rubbed. Slowly the rucksacks filled up. He took a little tea, almost nothing else. By the time we roped at 10.30 and had shut the tent, the sun was at last on us over the protecting serac.

George led at first. He knew the way, and he could set the pace most suited to his own somnambulatory needs. Though Ed's party had taken up tent and stores, we were heavily laden with personal kit, wireless apparatus and food oddments. The route wound upward to the left, over wind-driven snow crusted at the top. Into it the foot sometimes sank, on the rippled surface it sometimes stayed. It was obvious that George was still grinding by sheer will against the sleep oppressing him. I took over the lead, for there were tracks to break. One steep little slope had a rope fixed and shallow-cut steps, into which the feet fitted clumsily. We were moving very slowly, and twice George said: 'Wait a minute. I must stop.' The first time he took off his boots, and we both rubbed the cold feet grown sluggish, I suspected with the dope. At 11.30, the second halt, he relapsed upon his rucksack—and slept. Another huge, half moon-shaped wall reared over us. We wound under it to the right. By the time we had reached the steep fixed rope, in a snow-slope swinging you back leftwards towards its top, we were ready to sit down again. 'Perhaps I'll have something to eat,' George said. 'That'll make me feel better.' He was seated in the snow, propped once more against

the rucksack. I pulled out a tin of sardines and opened it. But things were looking black indeed when George actually went to sleep with one of these delectable fishes in his mouth! An unforgettable picture. I felt in my heart then a horrible weight of apprehension, no doubt exaggerated by the altitude: we would not see Camp VII today.

A little further, up the fixed rope and on to the levelled snow above the two-hundred-foot wall, and we had plumped down again. George was asleep. I shook him and shouted, or seemed in that stillness to shout:

‘Shall we go on a bit and see?’

‘I don’t know if I can.’

‘Well, let’s go on a little bit.’

But this time it was no more than a few yards, and we were sitting down once more. It was madness, and really my fault in the first instance, a comic fault if you like, the offering of a centimetre of green pill; but it might wreck the expedition. Suppose the weather turned, and we a day behind? Why had I ever had the idea of taking one, or offering one, when neither of us knew his reaction to these artificial aids, only that George had disliked the red pill he once tried before? Pumori, flat and dull and yellow in the noon-day, seemed to be mocking us, defying us to get higher than herself. The snow edge of Nuptse, riven by the wind, heaved its immense length still far above our heads. There was a dead stillness. Round every mountain pedestal the mist crept up. And here was I alone, feeling utterly alone, with a sick man. Suppose that we could not reach VII, and that George had not the strength to get down? Fears crept and played round the back of my dulled brain.

‘How far is it to VII?’

‘We’re about half-way.’

It proved in the event that we were rather less than half,

perhaps a third, but that was enough. We could not risk arriving late in the afternoon under VII, failing to reach it. There was still the tent to erect and arrange, a job for two whole men. We got up, turned by silent consent and started down the slope, myself acutely conscious that every eye at Advance Base must now be watching us, wondering what those two so-and-so's were doing. I have never admired George more. He summoned all his remaining strength to manœuvre the awkward, now doubly awkward boots into the holds. Even so I felt that I was playing a sleep-walker down almost unknown ground; for in places, over the wind-blown snow, the tracks were hard to follow. In comparison with our ascent, however, this journey seemed absurdly quick. Before 2 p.m. we were in camp, by 2.5 George was fast asleep.

The wireless conversation with John at III that evening was prolonged beyond the customary. Our method at VI was to lie on the elbows, with head protruding but body and lower extremities back in the warmth. John told of his anxiety at our plight, but relief that it was no worse. He urged that we establish VII if it were humanly possible. After this conversation there was Ed at IV, unable owing to one of the many idiosyncrasies of the wireless, to communicate directly with III. Both could communicate with me, and I, therefore, miles away from either, spent a quarter of an hour passing messages between the two.

Then I wriggled back and set to work on the Primus. What for supper? There was sausage-meat, welcome as meat, but now unpalatable. I decided to stew it up in the soup. When it was half-cooked, a not unusual event occurred. The Primus ran out of fuel. I gave many groans, pulled myself upright, unfastened the flap (putting the ribbon somewhere I hoped to remember), wriggled out on all fours and started in with the axe, chopping off

windrift that had buried the kerosene. Suddenly I stopped.

It was a miracle, after the tedious care of stove-lighting. Little Pumori, darkened with sun shadow, had decked her shoulders with cloud fleece, but she could not this time wipe out her larger background. The long, irregular ridges of Cho Oyu and Gyanchung Kang sparkled, shifted, beckoned against a paling, silver-blue sky. The sun shone whitely still into my face, still whitened the dazzling line of the valley at my feet. What matter kerosene, stoves, sleeping-bags, even the ascent on which our every thought had been concentrated? Something here beyond me, outside me, 'far more deeply interfused' than my muddled brain could care to know, lent a magic to the air that made human effort meaningless. I was, for a moment, again near to Nirvana.

Heartened, yet not knowing why, I went back to cook sausage-meat in soup.

May 17th dawned kindly. George had managed to swallow some supper the night before; he awoke at six bright as the healthiest new pin. This time we simply must erect Camp VII. We breakfasted meagrely. Against all expectation I preferred cheese to jam above 21,000 feet. It had more taste.

There followed the wretched routine of 'getting away': packing up sleeping-bags, mattresses and the rest, making pretence to wash up the cups and spoons with cold fingers in still colder water, drying on a continually vanishing piece of rag; leaving a note, scribbled in a kneeling position, for Mike Ward, whose Sherpas we hoped would carry on to VII the bulk of our gear that afternoon; finally, the more than ice-cold job of putting on crampons that had been sitting in the snow all night. Fingers stuck and tore upon the biting metal. We were away at 8.30, George's best time,

he said, leaving the little tent still in the grip of frost shadows.

This time it was a very different affair. I carried the sack, George again started leading, at a fine speed, as if his sleep had done him all the good in the world. The wind-crust of the first, straightforward section now held, the fixed rope slithered free on the surface. In forty-three minutes we reached the point which yesterday morning had demanded two and a half hours of leaden toil. We rested. Above this our path wound back again towards the right, along a narrow rib of hard snow. Overhanging the rib and separated by a gulf was a great wall of pure ice, perhaps 150 feet high, fashioned like the sun half risen from the sea; so close that I could see the veins writhing down into its hard, impenetrable greenness.

I was now higher than I had ever been before, and this had the psychological effect of making me feel more breathless than I probably was. George had been up before. Wretched man, he seemed to go on and on, a machine, an automatic hill-climber. The sack weighed heavier at each step. Thirty of them at a time, fitting breath to the rhythm of the feet. One, two, three, four. . . . Let's halt, as I have a little rope in hand. I watch it run out through my fingers, coil by jerky coil, until—with a sigh and a shrug—I must step on again to prevent it pulling George up. Pride would be sadly wounded if that happened. But there are legitimate ways. . . .

'Whoa! I want to take a photo.'

George stops, obligingly poised. I take out and adjust camera, focusing very carefully, while breath floods back. I am strong again, wondering what was wrong before. Then we go on, and I soon realize.

Some way along the rib, to my inexpressible delight, George stopped for good. He was sadly watching his camera filter gavotting down the slopes below. It came to rest near

a just visible zigzag of our track. 'I'd better get it,' George said. I smiled my secret pleasure, and after most careful consideration suggested that there was no point in our both going down those two hundred feet. He could indulge a noble enthusiasm for descending which I did not share,



while I went on slowly, carrying the rucksack, ice-pitons and rope. The way was plain enough for the single traveller, if he advanced with caution.

I waited a little, breathing deeply and luxuriously over my axe, while he started down. What an admirable sacrifice to the cause of photography! Then I went on, slowly. A short steep section led back left and up to the top of the wall. An awkward fumbling to have a hand free for the fixed rope, the ice-pitons giving a metallic clank at each hitch. Then a slow lifting of one foot into the step, balance,

breathe, higher hand-grip, manœuvre left hand slung with pitons and rope-end into place, a curse at their clumsiness. Then up again, to repeat the whole motion. The slope eased, gradually, and landed me in a little hollow frowned upon by seracs. Up and to the right a huge mass overhung, rather like a battleship bow. I did not know at the time that this was the serac protecting the site of VII.

My pace had now slowed greatly. Earlier in the day we had been going virtually without pause. Now, at perhaps 23,800 feet, it was twenty steps and a breath, while I leaned, gasping on my axe. Twenty steps was too much. Ten and a breath, then six. At each pause the picture, which had been swaying and shifting with my heart-throbs, my lung-pants, clicked back into focus. I could appreciate the blazing white wall upon which we were, the Swiss ropes still in position out to the left, the heat of the sun that sent little chunks of snow slithering off to tinkle down crevasses. And away in the distance that mocked all human effort, the clouds danced and played their sun-play over Pumori and other reefs high enough to defy them.

George was behind me now. We went on. Climbing up the join between serac mass and parent mountain. I found soft, sticky snow and sank in to my knees. Four steps and a gasp. At last, at last we were making a long traverse out to the right, across the serac's very face. A length of line was there to be used as a hand-rail, but it was not necessary. We seemed to be leaving earth altogether, traversing on and on into a blue heaven. A halt, abruptly; the traverse had turned, back again towards a shallow gully of the join on the left. An awkward step round a corner, round a steep buttress of the serac. Then a straight leg, with the expectation nagging every minute that the next step we would see over the plateau upon which our site must be. It seemed never to come, our horizon never to sink. Then there it was at last, a little jumble of very ordinary-

looking packages, on that strangest of all things—level ground.

The time was no more than 10.45, but there remained a job to do. Here was the tent, but before we could lie in its welcome shade, a platform must be stamped and the thing pitched. In the frothy top-snow, nearly a foot of it, the stamping took a long time. Then the tent, very slowly, must be hauled across and set up. At 24,000 feet it was a tedious, business, punctuated by many pauses, and nearly an hour before we lay gasping like fish under a canopy that seemed fit for princes. Frozen sardines, biscuits and Kendal Mint Cake. We did not feel that we wanted much, only the lemon, far sweeter than wine, in our flasks. Foolishly we did not light the Primus to brew more, and later in the day I for one regretted it, for we dehydrated ourselves completely. But for the present it seemed far more agreeable to lie simply and doze, to wake and think and doze again.

At 1.15 George opened an eye and said: 'Well.' I said: 'Well,' too, and we dozed off for a few more minutes. This went on for some time. Soon after 1.30 two very sleepy figures had pushed out of the tent rubbing their eyes at the fierce blaze around, weighed by that dream heaviness which makes of every movement a Titan battle with natural sloth. We still had a job—to reconnoitre the route ahead for tomorrow, and particularly the first crevasse. For the situation of Camp VII must now be explained.

Perched half-way up the great Face it was surmounted by wall and terrace of the type we had been meeting lower down. Itself it rested on the broad, flat back of the monster serac on which we had climbed. On the mountain side it was protected by a deep crevasse, perhaps eight feet wide, a gaping mouth into which anything falling from above must fall. But although a protection, this crevasse was also an obstacle. We had no bridges here. A day late already,

we must start at once finding a way on to the upper slopes. It was now the 17th; Mike Ward would be coming up this very afternoon in the hope that he and George could finish the work on the Face by the 20th, by which time I would be up again, in charge of the first Sherpa lift to the Col.

As we staggered out there was no sound of Mike from the slopes below. Slowly we went through the tiresome drill of fastening unwilling crampons, then set off with one accord horizontally to the right along the crevasse. After fifty yards we stopped. At this point it was most luckily choked with snow, fallen down a little gully which slanted up leftward from a point just round the corner to the right. George cautiously fashioned big steps over the bridge, one upon the other, and finally disappeared round the corner. I followed, driving my axe as soon as possible into the firm bank beyond, hoping that each prod would not reveal a nothingness below. I found George safely ensconced in the gully and led on, that being the easiest thing to do. The snow was steep but firm. The ice-axe, plunged in up to the head, held me, as I trampled clumsily at the snow. One step and a half, to wriggle the foot in to comfort. Here, in the shadow, I had woken up and was beginning at last to appreciate Browning's 'sheer joy of living' which had been noticeably absent below. What fools poets had seemed! Just to the right of our gully a giant's nose was dripping noisy dew-drops into our crevasse. Camp VII had disappeared to the left. Going on, I found myself on ice. I chipped weakly, but this ice was fortunately not hard. After fifty feet we stood at last on the slope to which we had looked up from our tent. The crevasse was behind us.

The slope itself proved tiresome. It was snow-covered, but at some steps you could feel the ice beneath. Sometimes the wind had blown this snow into little ribs and mounds, leaving bare ice to be cut between, and the awkward alterna-

tive, on the mounds themselves, of laying a clumsy boot on their surface and risking a slip, or stopping to chip a step. I led on, making ever up and to the left, past our tent which we could now see below. At last we had crossed out of sight of it over the slope's top. A little crevasse stopped us, we trod its crest to the left again, then on up and across our now gentler gradient.

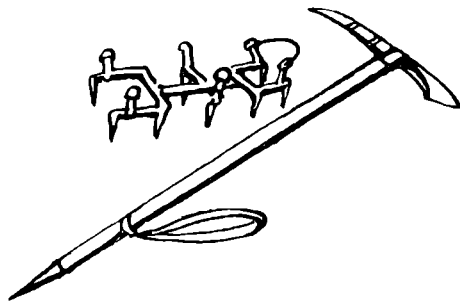
I write as if all this were a continuous ascent; but the pauses were very frequent and long. A few minutes and a pause; on again, and another pause. At 3 p.m. we halted finally, perhaps 500 feet above VII. For today we had done quite enough, and we could see no further immediate difficulties. At the time we thought that we had reached 25,000 feet, but we put our height later at no more than 24,500 feet. Never mind, sufficient to the moment its joy. I think that we both felt far better than below VII. Perhaps it was the zest of new ground, the benefit of sleep, the perfect proportions of the scene westward.

We had been stopping no more than every few minutes. Now we sat basking in shirtsleeves, wondering whether anybody had ever so enjoyed a view so high. The black pyramid of Everest foreshortened above us looked for all the world like Snowdon or any other mountain. Directly over our heads the ridge of Lhotse. Then, far more wonderful than either, the ridge swung from Lhotse to Nuptse, until it became a magic, magnified razor-edge, with all the cuts and whips of the wind perpetuated; and each nick further blazoned by the swoop down from it of a rib of ice, delicately moulded in inverted V's, down to the hump of some monstrous glacier mass that perched all ready to tumble into fragments. Beyond, the bulk of Cho Oyu and Gyachung Kang tilted with the clouds. It was very still. Only little puffs occasionally from Everest, and a faint hum over the South Col, reminded us that there was such a thing as wind.

We descended. As we passed above VII we could already see Mike with four Sherpas. We found him very tired after his quick ascent from Base Camp, and, like us, dehydrated. In view of the great work still ahead before the South Col could be reached, I wanted to stay on with them. Also influencing me, I must confess, was a passion to drink several oceans of liquid before I took another step. But the other two and my better self agreed that I ought to go down, since John had seemed most anxious for me to bring up the first lift of stores and there was only just time. But before all else, drink. Every drop had gone from us, we could not even sweat. Da Tenzing would stay with the others, using my sleeping-bag, but two Sherpas could go down straight away. Ang Namgyal must wait for me while the water boiled for lemon.

It was 4.30 before he and I stepped out into the entrancing sundown, every peak clear-cut in greeting. We went down slowly, partly from lack of food, partly because the high altitude crampons on broad-soled boots seemed more difficult to fit into the holds on a descent. Just before six we were tramping across the level snow to V, looking forward at the friendly faces of Tom Bourdillon and Gompu. It had been a day of happy mountaineering.

From South Col



The first assault pair returned exhausted to the South Col, having reached the South Summit at an unprecedented height of 28,700 feet.

The second team consisting of Tenzing and the New Zealander Hillary were forced by impossible weather conditions to hold back for a whole day. Then, in company with three others carrying heavy loads, they struggled to a height of 27,900 feet on the south-east ridge. Equipment was unloaded, their three companions started back for the South Col and Tenzing and Hillary were left to their attempt.

Sir Edmund Hillary's personal account of the conquest of Everest is an apt reminder of the accumulated debt to his colleagues and all earlier climbers and their supporters.

Gifts for the Gods

It was with a certain feeling of loneliness that we watched our cheerful companions slowly descending the ridge, but we had much to do. We removed our oxygen sets in order to conserve our supplies and set to work with our ice-axes to clear the tiny platform. We scratched off all the snow to reveal a rock slope at an angle of some 30 degrees. The rocks were well frozen in, but by the end of a couple of hours' solid work we had managed to prise loose sufficient stones to level out two strips of ground a yard wide and six feet long, but almost a foot different in levels. Even though not breathing oxygen, we could still work quite hard, but rested every ten minutes or so in order to regain breath and energy.

We pitched our tent on this double level and tied it down as best we could. There were no suitable rocks around which to hitch our tent guys, and the snow was far too soft to hold aluminium tent pegs. We sank several of our oxygen bottles in the soft snow and attached the guys to these as a somewhat unreliable anchor. Then, while Tenzing began heating some soup, I made a tally of our limited oxygen supplies. They were much less than we had hoped. For the Assault we had only one and two-thirds bottles each. It was obvious that if we were to have sufficient endurance we would be unable to use the 4 litres per minute that we had originally planned, but I estimated that if we reduced our supplies to 3 litres per minute we might still have a chance. I prepared the sets and made the necessary adjustments. One thing in our favour was that Evans and Bourdillon had

left two bottles of oxygen, still one-third full, some hundreds of feet above our camp. We were relying on this oxygen to get us back to the South Col.

As the sun set we crawled finally into our tent, put on all our warm clothing and wriggled into our sleeping-bags. We drank vast quantities of liquid and had a satisfying meal out of our store of delicacies: sardines on biscuits, tinned apricots, dates and biscuits and jam and honey. The tinned apricots were a great treat, but it was necessary first to thaw them out of their frozen state over our roaring Primus. In spite of the great height, our breathing was almost normal until a sudden exertion would cause us to pant a little. Tenzing laid his air mattress on the lower shelf half-overhanging the steep slope below and calmly settled down to sleep. I made myself as comfortable as possible half-sitting and half-reclining on the upper shelf with my feet braced on the lower shelf. This position, while not particularly comfortable, had decided advantages. We had been experiencing extremely strong gusts of wind every ten minutes, and whenever I received warning of the approach of such a gust by a shrilling whine high on the ridge above, I could brace my feet and shoulders and assist our meagre anchors to hold the tent steady while it temporarily shook and flapped in a most alarming manner.

We had sufficient oxygen for only four hours' sleep at one litre per minute. I decided to use this in two periods of two hours, from 9 to 11 p.m. and from 1 to 3 a.m. While wearing the oxygen we dozed and were reasonably comfortable, but as soon as the supply ran out we began to feel cold and miserable. During the night the thermometer read -27° Centigrade, but fortunately the wind had dropped almost entirely.

At 4 a.m it was very still. I opened the tent door and looked far out across the dark and sleeping valleys of Nepal. The icy peaks below us were glowing clearly in the early

morning light and Tenzing pointed out the Monastery of Thyangboche, faintly visible on its dominant spur 16,000 feet below us. It was an encouraging thought to realize that even at this early hour the Lamas of Thyangboche would be offering up devotions to their Buddhist Gods for our safety and well-being.

We started up our cooker and in a determined effort to prevent the weaknesses arising from dehydration we drank large quantities of lemon juice and sugar, and followed this with our last tin of sardines on biscuits. I dragged our oxygen sets into the tent, cleaned the ice off them and then completely re-checked and tested them. I had removed my boots, which had become a little wet the day before, so I cooked them over the fierce flame of the Primus and despite the very strong smell of burning leather managed to soften them up. Over our down clothing we donned our wind-proofs and on to our hands we pulled three pairs of gloves—silk, woollen and windproof.

At 6.30 a.m. we crawled out of our tent into the snow, hoisted our 30 lb. of oxygen gear on to our backs, connected up our masks and turned on the valves to bring life-giving oxygen into our lungs. A few good deep breaths and we were ready to go. Still a little worried about my cold feet, I asked Tenzing to move off and he kicked a deep line of steps away from the rock bluff which protected our tent out on to the steep powder slope to the left of the main ridge. The ridge was now all bathed in sunlight and we could see our first objective, the South summit, far above us. Tenzing, moving purposefully, kicked steps in a long traverse back towards the ridge and we reached its crest just where it forms a great distinctive snow bump at about 28,000 feet. From here the ridge narrowed to a knife-edge and as my feet were now warm I took over the lead.

We were moving slowly but steadily and had no need to stop in order to regain our breath, and I felt that we had

plenty in reserve. The soft unstable snow made a route on top of the ridge both difficult and dangerous, so I moved a little down on the steep left side where the wind had produced a thin crust which sometimes held my weight but more than not gave way with a sudden knock that was disastrous to both balance and morale.

After several hundred feet of this rather trying ridge, we came to a tiny hollow and found there the two oxygen bottles left on the earlier attempt by Evans and Bourdillon. I scraped the ice off the gauges and was greatly relieved to find that they still contained several hundred litres of oxygen—sufficient to get us down to the South Col if used very sparingly. With the comforting thought of these oxygen bottles behind us, I continued making the trail on up the ridge, which soon steepened and broadened into the very formidable snow face leading up for the last 400 feet to the southern summit. The snow conditions on this face were, we felt, distinctly dangerous, but as no alternative route seemed available, we persisted in our strenuous and uncomfortable efforts to beat a trail up it. We made frequent changes of lead on this very trying section and on one occasion as I was stamping a trail in the deep snow a section around me gave way and I slipped back through three or four of my steps. I discussed with Tenzing the advisability of going on and he, although admitting that he felt very unhappy about the snow conditions, finished with his familiar phrase 'Just as you wish'. I decided to go on.

It was with some relief that we finally reached some firmer snow higher up and then chipped steps up the last steep slopes and cramponed on to the South Peak. It was now 9 a.m. We looked with some interest at the virgin ridge ahead. Both Bourdillon and Evans had been depressingly definite about its problems and difficulties and we realized that it could form an almost insuperable barrier. At first

glance it was certainly impressive and even rather frightening. On the right, great contorted cornices, overhanging masses of snow and ice, stuck out like twisted fingers over the 10,000-foot drop of the Kangshung Face. Any move on to these cornices could only bring disaster. From the cornices the ridge dropped steeply to the left until the snow merged with the great rock face. Only one encouraging feature was apparent. The steep snow slope between the cornices and the rock precipices seemed to be composed of firm, hard snow. If the snow proved soft and unstable, our chances of getting along the ridge were few indeed. If we could cut a trail of steps along this slope, we could make some progress at least.

We cut a seat for ourselves just below the southern summit and removed our oxygen. Once again I worked out the mental arithmetic that was one of my main preoccupations on the way up and down the mountain. As our first partly full bottle of oxygen was now exhausted, we had only one full bottle left. Eight hundred litres of oxygen at three litres per minute? How long could we last? I estimated that this should give us $4\frac{1}{2}$ hours of going. Our apparatus was now much lighter, weighing just over 20 lb., and as I cut steps down off the southern summit I felt a distinct sense of freedom and well-being quite contrary to what I had expected at this great altitude.

As my ice-axe bit into the first steep slope of the ridge, my highest hopes were realized. The snow was crystalline and firm. Two or three rhythmical blows of the ice-axe produced a step large enough even for our oversized High Altitude boots and, the most encouraging feature of all, a firm thrust of the ice-axe would sink it half-way up the shaft. We moved one at a time. I realized that our margin of safety at this altitude was not great and that we must take every care and precaution. I would cut a forty-foot line of steps, Tenzing holding me while I worked. Then in

turn I would sink my shaft and put a few loops of the rope around it and Tenzing, protected against a breaking step, would move up to me. Then once again I would go on cutting. In a number of places the overhanging ice cornices were very large indeed, and in order to escape them I cut a line of steps down to where the snow met the rocks on the west. It was a great thrill to look straight down this enormous rock face and to see, 8,000 feet below us, the tiny tents of Camp IV. Scrambling on the rocks and cutting hand-holds in the snow, we were able to shuffle past these difficult portions.

On one of these occasions I noted that Tenzing, who had been going quite well, had suddenly slowed up considerably and seemed to be breathing with difficulty. The Sherpas had little idea of the working of an oxygen set and from past experience I immediately suspected his oxygen supply. I noticed that hanging from the exhaust tube of his oxygen mask were icicles, and on closer examination found that this tube, some two inches in diameter, was completely blocked with ice. I was able to clear it out and gave him much needed relief. On checking my own set I found that the same thing was occurring, though it had not reached the stage to have caused me any discomfort. From then on I kept much closer check on this problem.

The weather for Everest seemed practically perfect. Insulated as we were in all our down clothing and wind-proofs, we suffered no discomfort from cold or wind. However, on one occasion I removed my sunglasses to examine more closely a difficult section of the ridge, but was very soon blinded by the fine snow driven by the bitter wind, and hastily replaced them. I went on cutting steps. To my surprise I was enjoying the climb as much as I had ever enjoyed a fine ridge in my own New Zealand Alps.

After an hour's steady going we reached the foot of the most formidable-looking problem on the ridge—a rock step

some forty feet high. We had known of the existence of this step from aerial photographs and had also seen it through our binoculars from Thyangboche. We realized that at this altitude it might well spell the difference between success and failure. The rock itself, smooth and almost holdless, might have been an interesting Sunday afternoon problem to a group of expert climbers in the Lake District, but here it was a barrier beyond our feeble strength to overcome. I could see no way of turning it on the steep rock bluff on the west, but fortunately another possibility of tackling it still remained.

On its east side was another great cornice, and running up the full forty feet of the step was a narrow crack between the cornice and the rock. Leaving Tenzing to hold me as best he could, I jammed my way into this crack, then kicking backwards with my crampons I sank their spikes deep into the frozen snow behind me and levered myself off the ground. Taking advantage of every little rock-hold and all the force of knee, shoulder and arms I could muster, I literally cramponed backwards up the crack, with a fervent prayer that the cornices would remain attached to the rock. Despite the considerable effort involved, my progress although slow was steady, and as Tenzing paid out the rope I inched my way upwards until I could finally reach over the top of the rock and drag myself out of the crack on to a wide ledge. For a few moments I lay regaining my breath and for the first time really felt the fierce determination that nothing now could stop us reaching the top. I took a firm stance on the ledge and signalled to Tenzing to come on up. As I heaved hard on the rope Tenzing wriggled his way up the crack and finally collapsed exhausted at the top like a giant fish when it has just been hauled from the sea after a terrible struggle.

I checked both our oxygen sets and roughly calculated our flow rates. Everything seemed to be going well. Prob-

ably owing to the strain imposed on him by the trouble with his oxygen set, Tenzing had been moving rather slowly but he was climbing safely, and this was the major consideration. His only comment on my inquiring of his condition was to smile and wave along the ridge. We were going so well at 3 litres per minute that I was determined now if necessary to cut down our flow rate to 2 litres per minute if the extra endurance was required.

The ridge continued as before. Giant cornices on the right, steep rock slopes on the left. I went on cutting steps on the narrow strip of snow. The ridge curved away to the right and we had no idea where the top was. As I cut around the back of one hump, another higher one would swing into view. Time was passing and the ridge seemed never-ending. In one place, where the angle of the ridge had eased off, I tried cramponing without cutting steps, hoping this would save time, but I quickly realized that our margin of safety on these steep slopes at this altitude was too small, so I went on step-cutting. I was beginning to tire a little now. I had been cutting steps continuously for two hours, and Tenzing, too, was moving very slowly. As I chipped steps around still another corner, I wondered rather dully just how long we could keep it up. Our original zest had now quite gone and it was turning more into a grim struggle. I then realized that the ridge ahead, instead of still monotonously rising, now dropped sharply away, and far below I could see the North Col and the Rongbuk glacier. I looked upwards to see a narrow snow ridge running up to a snowy summit. A few more whacks of the ice-axe in the firm snow and we stood on top.

My initial feelings were of relief—relief that there were no more steps to cut—no more ridges to traverse and no more bumps to tantalize us with hopes of success. I looked at Tenzing and in spite of the goggles and oxygen mask all encrusted with long icicles that concealed his face, there

was no disguising his infectious grin of pure delight as he looked all around him. We shook hands and then Tenzing threw his arm around my shoulders and we thumped each other on the back until we were almost breathless. It was 11.30 a.m. The ridge had taken us two and a half hours, but it seemed like a lifetime. I turned off the oxygen and removed my set. I had carried my camera, loaded with colour film, inside my shirt to keep it warm, so I now produced it and got Tenzing to pose on top for me, waving his axe, on which was a string of flags—United Nations, British, Nepalese and Indian. Then I turned my attention to the great stretch of country lying below us in every direction.

To the east was our giant neighbour Makalu, unexplored and unclimbed, and even on top of Everest the mountaineering instinct was sufficiently strong to cause me to spend some moments conjecturing as to whether a route up that mountain might not exist. Far away across the clouds the great bulk of Kangchenjunga loomed on the horizon. To the west, Cho Oyu, our old adversary from 1952, dominated the scene and we could see the great unexplored ranges of Nepal stretching off into the distance. The most important photograph, I felt, was a shot down the North ridge, showing the North Col and the old route which had been made famous by the struggles of those great climbers of the 1920s and 1930s. I had little hope of the results being particularly successful, as I had a lot of difficulty in holding the camera steady in my clumsy gloves, but I felt that they would at least serve as a record.

After some ten minutes of this, I realized that I was becoming rather clumsy-fingered and slow-moving, so I quickly replaced my oxygen set and experienced once more the stimulating effect of even a few litres of oxygen. Meanwhile, Tenzing had made a little hole in the snow and in it he placed various small articles of food—a bar of chocolate,

a packet of biscuits and a handful of lollies. Small offerings, indeed, but at least a token gift to the Gods that all devout Buddhists believe have their home on this lofty summit. While we were together on the South Col two days before, Hunt had given me a small crucifix which he had asked me to take to the top. I, too, made a hole in the snow and placed the crucifix beside Tenzing's gifts.

I checked our oxygen once again and worked out our endurance. We would have to move fast in order to reach our life-saving reserve below the South Peak. After fifteen minutes we turned to go. We had looked briefly for any signs of Mallory and Irvine, but had seen nothing. We both felt a little tired, for reaction was setting in and we must get off the mountain quickly. I moved down off the summit on to our steps. Wasting no time, we cramponed along our tracks, spurred by the urgency of diminishing oxygen. Bump followed bump in rapid succession. In what seemed almost miraculous time, we reached the top of the rock step. Now, with the almost casual indifference of familiarity, we kicked and jammed our way down it again. We were tired, but not too tired to be careful. We scrambled cautiously over the rock traverse, moved one at a time over shaky snow sections and finally cramponed up our steps and back on to the South Peak.

Only one hour from the top! A drink of sweetened lemonade refreshed us and we turned down again. Throughout the climb we had a constant nagging fear of our return down the great snow slope, and as I led down I packed each step with as much care as if our lives depended on it, as well they might. The terrific impression of exposure as we looked below us, made us move with the greatest caution, and every step down seemed a step nearer safety. When we finally moved off the slope on to the ridge below, we looked at each other and without speaking we both almost visibly shrugged off the sense of fear that had been with us all day.

We were now very tired but moved automatically down to the two reserve cylinders on the ridge. As we were only a short distance from camp and had a few litres of oxygen left in our own bottles, we carried the extra cylinders down our tracks and reached our tent on its crazy platform at 2 p.m. Already the moderate winds of the afternoon had wrenched the tent loose from some of its fastenings and it presented a forlorn sight. We had still to reach the South Col. While Tenzing lit the paraffin stove and began to make a lemonade drink heavily sweetened with sugar, I changed our oxygen sets on to the last partly filled bottles and cut down our flow rates to 2 litres per minute. In contrast to the previous day, when we were working vigorously without oxygen at this camp, we now felt very weak and exhausted. Far below on the South Col we could see minute figures moving and knew that Lowe and Noyce would be waiting for our descent. We had no extra sleeping-bags and air mattresses on the South Col, so reluctantly tied our own on to our oxygen frames. Then with a last look at the camp that had served us so well we turned downwards.

Our faculties seemed numbed and the time passed as in a dream, but finally we reached the site of the Swiss Ridge Camp and branched off on our last stage down. There an unpleasant surprise greeted us. The strong wind which had been blowing in the latter part of our climb had completely wiped out all our steps and only a hard, steep, frozen slope lay before us. There was no alternative but to start cutting again. With a grunt of disgust I chipped steps laboriously down for 200 feet. Gusts of driving wind whirling down off the ridge tried to pluck us from our steps. Tenzing took over the lead and cut down another hundred feet, then moved into softer snow and kicked a track. We cramponed wearily down the long slopes above the South Col.

A figure came towards us and met us a couple of hundred

feet above the camp. It was George Lowe, laden with hot soup and emergency oxygen.

We were too tired to make any response to Lowe's enthusiastic acceptance of our news. We stumped down to the Col and slowly ground our way up the short rise to the camp. Just short of the tents my oxygen ran out. We had had enough to do the job, but by no means too much. We crawled into the tent and with a sigh of sheer delight collapsed into our sleeping-bags, while the tents flapped and shook under the perpetual South Col gale. That night, our last on the South Col, was a restless one indeed. The bitter cold once again made any deep and restful sleep impossible and the stimulating effects of our success made us so mentally active that we lay there for half the night re-living all the exciting incidents and murmuring to each other between chattering teeth. Early the following morning we were all very weak and made slow but determined preparations for our departure.

The 200-foot slope above the South Col was a great trial, and even when we commenced the long traverse down towards Camp VII our main wish was to rest. We were only thirty yards from the camp when a cheerful shout attracted our attention, and there to greet us was Charles Wylie and several of the Sherpas, all looking fresh and strong and with the same question trembling on their lips. The hot drinks they pressed into our hands and their joyful acceptance of our news were a great stimulant in themselves, and we continued on down the Lhotse glacier mentally if not physically refreshed.

As we approached Camp IV, tiny figures appeared from the tents and slowly drifted up the track. We made no signal to them but wearily moved down the track towards them. When only fifty yards away, Lowe with characteristic enthusiasm gave the 'thumbs up' signal and waved his ice-axe in the direction of the summit. Immediately the

scene was galvanized into activity and our approaching companions, forgetting their weakness, ran up the snow towards us. As we greeted them all, perhaps a little emotionally, I felt more than ever before that very strong feeling of friendship and co-operation that had been the decisive factor throughout the expedition.

What a thrill it was to be able to tell them that all their efforts amongst the tottering chaos of the Icefall, the difficult technical ice work on the Lhotse Face and the grim and nerve-racking toil above the South Col had been fully rewarded and that we had reached the top.

To see the unashamed joy spread over the tired, strained face of our gallant and determined leader was to me reward enough in itself.

From *The Ascent of Everest*



Glossary

Page

- 6 *traverse*, a diagonal climb across a slope.
- 21 *rang too true to be counterfeit*, sounded so genuine that it could not be false.
- 22 *beef-tea*, a stimulating drink made from the strained juice of boiled beef.
- 26 *We did not rope*, We did not rope ourselves together.
- 27 *Tantalus*, a god who, in classical mythology, was punished by great torments: he had to stand in water which ebbed when he wanted to drink, and under grapes which drew away from him when he was hungry.
- 29 *you'll be for it soon!*, you will be beaten soon.
- 41 *taken the heart out of their porters*, disheartened their porters.
- 42 *ensconced*, comfortably settled.
- 44 *what might we not achieve!*, we might achieve anything.
- 45 *the fat of the land*, the best available.
- 49 *cart-wheeling*, turning over and over.
still going strong, still keeping its speed.
- 50 *were kindness itself*, personified kindness.
- 54 *snapped*, photographed.
- 55 *90 atmospheres*, a measure of the amount of oxygen.
- 62 *trying in the extreme*, extremely trying.
- 64 *Supreme Goddess*, Everest herself: the Tibetan name means Goddess Mother of the World.
- 71 *our home-brewed nectar*, a humorous way of describing the sweet drink they made.
- 72 *balaclava*, a warm woollen helmet.
mitts, mittens.

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- 73 *theodolite*, a measuring instrument used by surveyors.
aneroid barometer, one 'in which the pressure of air is measured not by the height of a column of mercury or other fluid which it sustains, but by its action on the elastic lid of a box exhausted of air'. N.E.D.
- 76 '*The Hunting of the Snark*', a long comic poem by Lewis Carroll in which the fate of the Banker was as follows:
 'To the horror of all who were present that day,
 He uprose in full evening dress,
 And with senseless grimaces endeavoured to say
 What his tongue could no longer express.
 Down he sank in a chair—ran his hands through his
 hair—
 And chanted in mimsiest tones
 Words whose utter inanity proved his insanity
 While he rattled a couple of bones.'
- bats* (slang), crazy.
- 77 *primula*, a small flower of the primrose family.
- 80 *monochrome*, one colour.
- 81 *slip-stream*, the strong current of air round a plane.
- 82 *spirit level*, a glass tube almost filled with alcohol, which indicates with an air bubble whether a surface is level or not.
- 89 *ice-cornice*, a horizontal, sometimes overhanging, ridge of ice.
- 91 *parlous*, perilous.
- 98 *crampons*, a spiked metal frame, fitting the sole of the boot for use on ice.
- 101 *trump card*, the one that wins the game.
- 109 *piton*, metal spike used by climbers.
snap link, large metal clip which can fasten a rope to a piton.
- 110 *nylon*, a very strong and light artificial fibre.
- 111 *professional allegiance*, loyalty. (Both were soldiers.)
- 112 *tweeds*, clothes made of a cloth for everyday wear.
- 114 *on the sardine-tin principle*, packed as closely as sardines in a tin.

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- 123 '*Far more deeply interfused*', quoted from Wordsworth's 'Lines Composed a Few Miles Above Tintern Abbey'.
Nirvana, In Buddhist philosophy, the highest state attainable.
- 124 *Whoa!*, a call to stop.
gavotting, dancing.
- 127 *Kendal Mint Cake*, A nourishing mint-flavoured sweet made at Kendal in Westmorland.
Titan, giant.
- 132 *tally*, a list or count.
- 143 *thumbs up*, a signal of success made by holding up the thumbs, fists closed.

A PANORAMIC IMPRESSION OF EVEREST, LOOKING SOUTH

drawn specially for this book by T.H. Somervell



1 East Rongbuk Glacier

2 North Col

3 Makalu

4 Everest

5 Changste

6 South Col

7 Lhotse

8 Nupste

9 W. ridge of Everest

10 Ama Dablam

11 Khumbu Glacier

12 Rongbuk Glacier

13 Pumori