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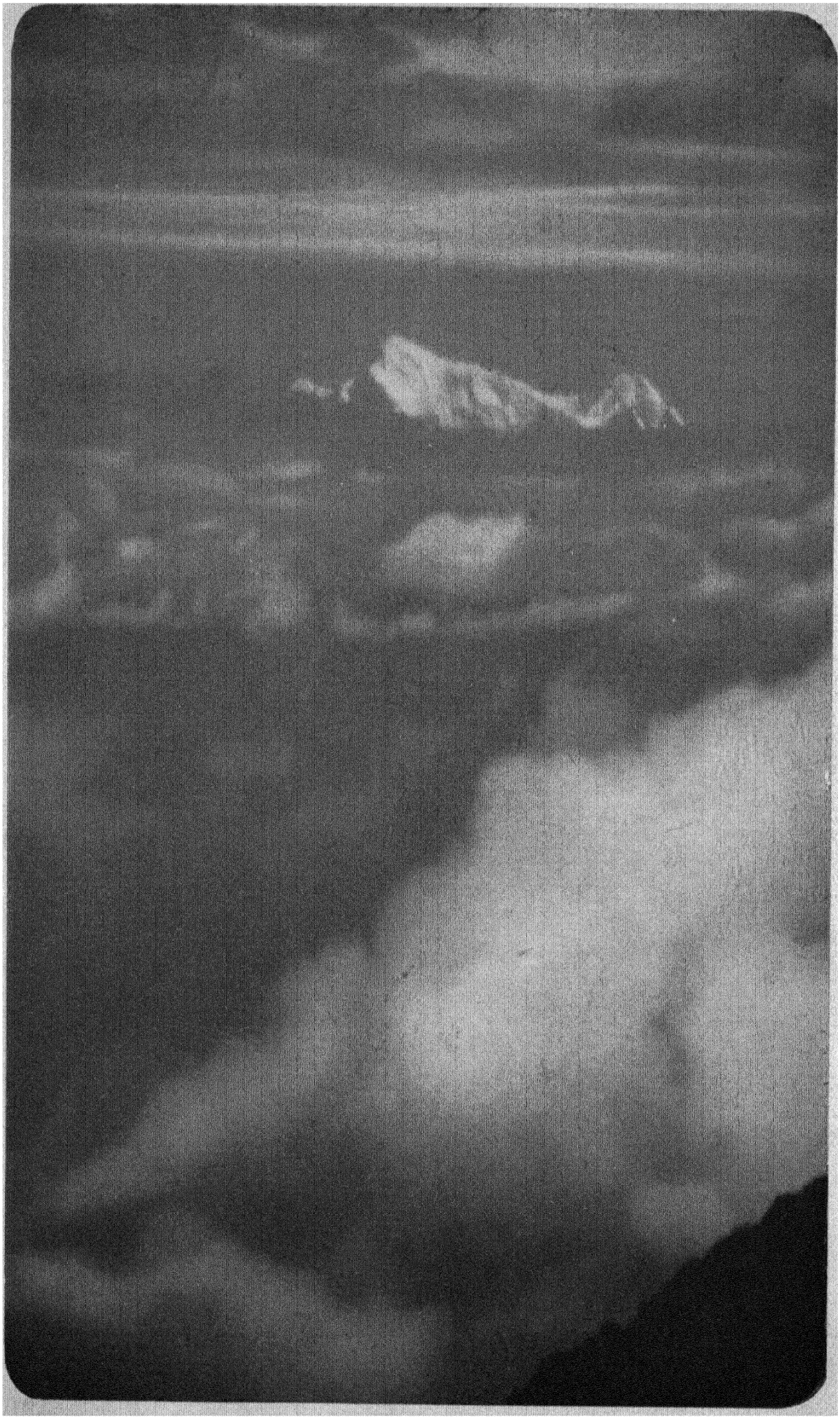
LURE OF EVEREST



Everest towering above the clouds

LURE OF EVEREST

Story of the First Indian Expedition

By

BRIGADIER GYAN SINGH

Foreword by

JAWAHARLAL NEHRU

THE PUBLICATIONS DIVISION
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FOREWORD

The *Lure of Everest*, the call of the high mountains, the quest of the almost unattainable, what is it that draws, generation after generation, all mountaineers to this brave and dangerous adventure? Great mountaineers have sought an answer to this question and found no adequate one. All they could say was that they felt this call and tried to answer it. Is it some part of the eternal quest of man, some overflow of that vital energy which has kept humanity going from age to age in its attempt always to reach some higher peak of human endeavour? If, unfortunately, that vital spark became dim and the call was not heeded, perhaps the journey henceforth would be downhill.

I have often wondered how far the tremendous advances in science and technology, resulting in the human element being progressively replaced by mechanical devices, might not weaken the spirit of man and make him too much of a slave to the mechanical devices he himself has created. Probably not, as there is something unconquerable in that spirit which has survived innumerable follies in the past. Even if the conquest of Everest becomes a normal adventure, there will always be higher Everests to climb; even if, at some distant date, this earth of ours becomes rather commonplace and without mystery, there will always be other peaks to climb, other worlds to reach.

There will be no lack of adventures of the mind and body for those who are prepared to venture into uncharted seas and climb unknown peaks of human endeavour.

There are many books on mountain climbing with all their accounts of risk and danger and success and failure. As we go up higher, our picture of the world changes and we live in a different world. Sometimes we lose even the clarity of our minds in the strange conditions that we experience. But the call continues to come and the spirit of man is ready to respond to it.

Here is another book about the Himalayas with their crowning peak and a very gallant attempt, bravely carried out. To talk of success or failure in reaching the peak has no doubt some

significance, and yet it has no great meaning. The story worth telling and worth listening to is the story of the effort, of dangers faced and overcome, of the camaraderie of those who jointly undertook this great task and of the close communion with these high peaks and mountain regions, where silence ever dwells and human beings come out of their little shells and have glimpses of some of the deeper mysteries of nature.

As I followed, through the frequent reports that we used to get, the course of Brigadier Gyan Singh's team, I shared with them, though of course in a much smaller degree, the excitements of the journey and I felt a little envious of these fortunate persons who were trying to climb up Everest. How I would have liked to be with them if only I had been younger and other obstructions had not come in my way!

This story is not a tale of defeat but rather of daily triumph over the difficulties encountered. I am sure that each one of this team is much the better for the unique experience and will treasure this memory always. It may be that the call to go up again will come to them; if so I am sure they will be eager to respond to it.

These Himalayan mountains have attracted people from afar, and indeed it is people from other countries who have braved them before an Indian team went up. Even so, the Himalayas are not only near to us, but very dear also for they have always been a part of our history and tradition, our thinking and our poetry, our worship and our devotion; they are in our blood and are a part of our make-up. Though trained mountaineers did not organise expeditions in the past from India, innumerable pilgrims have wandered about their peaks and valleys and often spent years in deep thought there. For, according to our mythology, they are the abode of the Gods.

We approach them therefore as old friends who have guarded us and directed our gaze upwards. We do not go out to "conquer" them, but rather to visit an old friend, about whom we have thought for long, and to pay our homage to them.

Trained mountaineering has not been popular in India in the past but among the many new things that are coming to the mind of India in the present age, this lure of the mountains is one. I have welcomed it and I have taken much pleasure in my association with the Himalayan Mountaineering Institute which itself was the outcome of the climb to the Everest peak by Hillary and

Tenzing. The spirit and the lure of the Himalayas is spreading now all over India among our young people, and that is a sign and a symbol of the new life and the new spirit that is coursing through India's veins.

Bombay,
January 1, 1961

PREFACE

This is the story of the first Indian expedition to Everest. It is difficult to say what exactly draws men to the mountains, but those of us who were privileged to be associated with the Expedition will never be able to forget the rugged grandeur and beauty of the Himalayas as we journeyed towards Everest. It is true that our failure to reach the summit was a disappointment to us, and perhaps to many others who followed our fortunes with keen interest. Nevertheless, if I may say so in all humility, it was a moving experience, a great adventure, and a great expedition. Everest is no longer inviolable. It has been climbed more than once, and many more attempts will be made by mountaineers all over the world to reach the top. It is possible that other mountaineers will succeed in their attempt. I am certain, however, that despite the success of future expeditions, the lure of Everest will ever beckon mountaineers to attempt what for long seemed the impossible.

Ours was the first attempt by an all-Indian expedition to reach the top of the world's highest peak; and, for the first time, the bulk of the equipment used was of Indian manufacture. On this and other accounts the story of the Expedition is worth telling.

It is, however, one thing to climb a mountain and quite another to write about it, specially for me as most of my life I have been a soldier and have done hardly any writing. There is no doubt that left to myself I would not, and could not, have written this book. The idea originated with some members of the Sponsoring Committee of the Expedition, and in its writing I have received the most generous help and encouragement from the Committee and from numerous other friends.

During a short span of five or six years nearly a dozen Indian expeditions have gone to the Himalayas. Our Expedition had perhaps a larger number of members than any other known expedition. Also, it cost nearly as much as all other Indian expeditions put together.

Among the expeditions which made attempts on Everest, ours was the thirteenth. I am not superstitious, and so I had no hesitation in having a team of thirteen climbing members. With a physiologist, a doctor, a meteorologist and other technical and administrative personnel, there were 23 members in all and 55 Sherpas. Nearly 19 tons of baggage was transported for which more than 700 porters were required from Jaynagar. A team of three climbers reached a height of 28,300 ft. Seven Sherpas reached Camp VII at a height of 27,600 ft. and four more climbers and 33 Sherpas reached the South Col (26,000 ft.).

The fury of elemental forces thwarted the attempt of our summit teams and deprived us of the glory of success; but it has given us invaluable experience. The Expedition has returned rich in knowledge, not only of mountaineering techniques, but useful scientific data on high-altitude physiology, meteorology, wireless communication and a number of other subjects connected with mountaineering.

As young mountaineers we would be failing in our duty were we not to acknowledge the fact that if our team reached a height of 28,300 ft., it was, as Sir John Hunt has aptly put it, "on the shoulders of previous Everesters". I have valued very much the advice and guidance I have received from Sir John Hunt and Mr. Albert Eggler, both of whom were in touch with me, not only during the planning phase, but even when we were on the mountain. Their letters gave us inspiration when we needed it most.

The weather forecasts of the Meteorological Department broadcast to us through the courtesy of All India Radio were invaluable.

The members of the Expedition were fortunate to have received encouragement and assistance from Mr. Humayun Kabir, Minister for Scientific Research and Cultural Affairs; Mr. V. K. Krishna Menon, Minister for Defence; Dr. B. C. Roy, Chief Minister of West Bengal; General K. S. Thimayya, D.S.O., Chief of Army Staff; and Vice-Admiral R. D. Katari, Chief of Naval Staff. The late Air Marshal S. Mukerjee took keen personal interest in our work and he was a source of great encouragement to us all. To them and to the Chairman and Members of the Sponsoring Committee we owe a deep debt of gratitude.

The expenses connected with the Expedition were largely met by a grant from the Ministry of Scientific Research and Cultural Affairs.

We are grateful to the Director General of Ordnance Factories for supplying many of the items of equipment and stores for the Expedition—some of which were specially manufactured for us in record time; to Lt. Gen. B. M. Rao for guidance and assistance with regard to medical cover; to Lt. Gen. B. M. Kaul and Maj. Gen. W. T. Wilson for several items of equipment. To Maj. Gen. A. C. Iyeppa, Director of Signals, we are thankful for his keen interest and help with regard to communications equipment and facilities for the Expedition.

I am deeply conscious of the support I received from my friend and colleague, Tenzing, who was not only a great help in actual organization work and training of the team but was a source of inspiration to us all. I would also like to acknowledge our gratitude to the Swiss Foundation for Alpine Research. Having taken a keen interest in starting the Himalayan Mountaineering Institute, this organization considered the Indian Mount Everest Expedition as their expedition and spared no effort to make it possible. No less was the assistance given by the French Mountaineering Federation of Paris, which helped us in the procurement of equipment from France.

It is my pleasant duty to express my sincere thanks to my friend George Patterson for his constant help and advice in the writing of this book. Mr. H. C. Sarin, a member of the Sponsoring Committee, read the entire book in manuscript more than once and I am most grateful to him for his many suggestions which have resulted in a noticeable improvement in language and presentation.

I would also like to tell the boys who formed the team how much I enjoyed being in the mountains with them. I shall always remember their hard work, friendship and loyalty.

I owe much to my mother for her blessings and to my wife for her support at all times.

Above all we are most grateful to our Prime Minister, Mr. Jawaharlal Nehru, for his most generous interest and encouragement; it has meant so much to us.

New Delhi, GYAN SINGH
December 20, 1960

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प्राशुलभ्ये फले लोभाद्बुद्बाहुरिव वामनः

Like a dwarf with upraised hands desirous of fruit fit for a giant.

KALIDASA

I

THE BIRTH OF THE IDEA

On the 30th June, 1959, at 10 A.M., I landed at Santa Cruz Airport in Bombay on my way to attend an International Mountaineers meet at Chamonix in France and a similar meet at the Swiss School of Mountaineering at Rosenlaui. I was going to these meets on behalf of the Himalayan Mountaineering Institute to acquaint myself with the latest mountaineering techniques. As I was going abroad I expected to meet a few friends. I was not surprised to see some enthusiasts who were planning to run local rock climbing courses the following winter. There were some dozen people including Keki Bunshah and Navnit Parekh waiting for me. After the usual handshakes and welcome smiles, Keki Bunshah took me by the arm and hustled me into his car. Someone asked for my baggage ticket which I handed over. They all seemed to be in such a hurry that I almost felt I was being kidnapped. Only after Keki's old Austin had been speeding away towards Bombay for some time did he tell me that Mr. S. S. Khera was leaving from Bombay Central Railway Station in about half an hour and that he wanted to see me. It all seemed so mysterious to me, but Keki would not satisfy my curiosity. He just said that I would know everything by and by.

I had met Mr. Khera in Delhi in January 1959 for the first time in connection with the remnants of some equipment, left over from the Cho-Oyu expedition, which was to go to the Himalayan Mountaineering Institute. I had occasion to meet Mr. Khera a number of times since then. Mr. Khera is greatly interested in mountaineering, and he was an important member of the Sponsoring Committee of the proposed expedition to Mount Everest. But I did not know what was coming.

In between keeping his attention on the traffic and trying to talk to me, Keki asked me if I would help in carrying out certain investigations in Europe regarding equipment for an Indian Everest expedition. While promising all help, I warned him that I had very little money for my stay on the Continent. Navnit Parekh, who was sitting in the back seat of the car, hastened to tell me that they had already budgeted for it, and that I would be helped with the necessary foreign exchange. Every few minutes Keki would look at his watch and then furtively look round to make sure there were no traffic policemen about. He would then step on the accelerator. We came across a few traffic hold-ups and had to make some detours, which delayed us further.

After a bone-shaking and anxious ride in the car we reached Bombay Central Railway Station just five minutes before the train was due to leave. We jumped out of the car and sprinted to the platform. With difficulty we found Mr. Khera, who was very happy to see us. There were now only two or three minutes left for the train to pull out.

"What are the possibilities of everything going through?", asked Mr. Khera. I did not quite understand what he meant but had just time enough to assure him that I would do my best for the expedition in Europe. As he entered the compartment, Mr. Khera wished me *bon voyage*, smiled and said, "That is fine. Now get on with it. I want to see results." The train pulled out and Keki gave a big sigh of relief! I started to breathe again.

After the successful Cho-Oyu expedition which was led by Keki Bunshah, he had kept in touch with the Sponsoring Committee regarding the Indian Mount Everest expedition. Not much had been done in 1958. In early 1959, however, Keki started prodding the Sponsoring Committee. Mr. Khera was the key member of the Sponsoring Committee of the Cho-Oyu expedition, but for many reasons he was not able to say anything definite regarding the Indian Expedition to Mount Everest.

At this stage Keki had no official status either on the Sponsoring Committee or on the expedition. But he was a keen and determined man. When Keki is interested in a project he makes sure that no one connected with it is ever likely to forget about it. The members of the Sponsoring Committee, who were senior officers in the Government and very busy people, saw a lot of Keki. Keki had already started making enquiries in Europe

and India about equipment. He was looking ahead. I now knew why he had kidnapped me from Santa Cruz.

Keki and Navnit were also beginning to breathe normally. I had grasped the general idea of what was required of me but on the way to my residence Keki outlined his proposals. Even at this stage it was evident to me that I would be kept very busy in Europe. But Keki had not yet finished with me. Putting his hand into his pocket he drew out several sheets of paper. While looking at these papers he suddenly woke up to the fact that he was going straight into a cyclist. He swerved violently. As I proceeded to place the papers in my pocket, Keki insisted that I read them right away. Without further protest I opened out the closely typewritten notes under the heading "Notes for Colonel Gyan Singh (prepared by Keki Bunshah)". There were over a hundred points in all, with numerous sub-headings.

Point No. 1 read: 'In Paris try and see as many of the firms hereinafter mentioned (Keki is a solicitor) whose names are marked with blue pencil, in connection with various problems, and get from them three copies of all catalogues, price lists, circulars and other literature in connection with the manufacture, specifications, results on expeditions, etc. etc.'. This was followed by a formidable list of numerous firms not only in Paris but all over Europe, and nearly all of them were marked in blue pencil. In quite a number of cases only the names of the firms were given but Keki had not omitted to advise: 'The addresses of the various firms marked with blue pencil, in cases where they are not mentioned herein, can be obtained from the *Federation Francaise de la Montagne* in Paris or from a trade directory at the Indian Embassy'.

The list of mountaineering equipment was exhaustive. For each item I was required 'to see as many firms as possible and discuss particulars like design, specifications, obtain sample material and find out the specifications of individual components', and so on. There was a complete thesis on each item and invariably there was a definite request like 'obtain the formula of glacier creams from the laboratories'.

'Snow goggles: What is special about the glass? Mode of manufacture?'

'Butane Burners: All different types of cylinders and burners available, their weights, sizes, both when filled and empty.'

'Stoves: What is the material used in Primus stoves? Specifications and design of burners. Material for burners of different sizes.'

'Fruit juice and lemon and orange powder: See different firms and try and get the formulas.'

There were dozens of such items which needed investigation.

I was still going through these papers in the car when we reached my brother's house where I was going to stay for the next two days. We were greeted by my sister-in-law and two nieces. The two little girls had barely five minutes to welcome their uncle when Keki interrupted to ask if he could have a few minutes with me, but it was some hours before they saw me again.

Keki left, promising to return at 5.30 in the evening when he hoped I would be able to talk to him in peace. I could hear muffled protests from my nieces because they had other plans for me. But I explained to them that I ought to attend to work and promised to take them out the next day.

Keki returned punctually and again we talked for a few hours. He had brought with him some more sheets of paper—copies of numerous letters he had written to many people in Europe. I was required to see these people and ask them to write back to Keki. While going through the papers later I discovered that practically every point was very important or urgent or must be given top priority. We had two sessions the next day. By this time he was really unpopular with my nieces and I was shocked to hear Usha, the younger girl, shout out to Keki as he was leaving, "Mr. Bunshah, we don't like you. You talk too much. Our uncle has no time to talk to us. Please don't come again." My sister-in-law admonished the girl and apologised to Keki.

Next morning the door bell rang at about six. "I bet it is Mr. Bunshah again", shouted Usha to her sister Asha as she ran to open the door. "Oh, there you are again. But uncle has already left for somewhere," she said, and closed the door. I was shaving at that time in the next room and I had to run down to the road in my pyjamas to bring Keki back. Poor Keki, he had a guilty look on his face. As he sat down he smiled sheepishly at the two frowning girls.

On my way to Europe I again went through the papers Keki had given me and made out a priority list of my own. This

was necessary because if I had tried to attend to all the problems it would have taken me at least three months, and Keki had promised to send me a lot more work when I arrived in Europe!

On reaching Paris I called at the *Federation Francaise de la Montagne*, which advises mountaineering institutions throughout France and coordinates their activities. This organisation, as well as the French Alpine Club, were very helpful in making arrangements for me to see many of the firms Keki had listed.

I also met Maurice Herzog, the valiant mountaineer who climbed Annapurna I in 1950. He held an important post in the French Government in the *Haute Commissariate de la Jeunesse et aux Sports* and controlled the training of mountain and ski guides in addition to helping all organisations connected with the youth movement and sports. We had interesting discussions on the value of sports, particularly those with an element of danger, in building up character and bringing out the best in man. Later, Maurice Herzog invited me to the inaugural ceremony of a mountain-hut near Chamonix, which cost the French Government the equivalent of approximately eight hundred thousand rupees. This hut is fully furnished and can house one hundred and twenty mountaineers. I was told that this was perhaps the most well appointed mountain-hut in the world. It took more than a year to build, and nearly 400 helicopter sorties were flown to transport heavy material to the site.

In Paris I was also glad to meet Dr. Jean Revolier who is a well-known physiologist in the *Expedition de Polaires Francaise.* This organisation undertakes exploratory and scientific expeditions to the Arctic and Antarctic regions. In addition to being an expert on physiological problems in the Polar regions, Dr. Revolier is also an authority on high-altitude physiology. He gave me some very useful literature on the subject. My discussions with Dr. Revolier were of particular interest to me because the Himalayan Mountaineering Institute had also taken up high-altitude physiological research work.

At the international meet held under the auspices of the French School of Skiing and Mountaineering I had the opportunity of meeting some of the best Alpinists in the world. I studied the training programme of the school for professional guides and attended their practical technique lessons. There were a number of group discussions, lectures and film shows by some of the world's

most renowned guides like Gaston Rebuffat and Lionel Terray. My talk on 'Mountaineering in India', and a film show of 'Call of the Mountains', a documentary on the work of our Institute, was attended by more than 200 people. So interested was the audience about our progress in mountaineering that questions at the end of the lecture lasted more than an hour.

Later, I went to Rosenlaui in Switzerland and met Arnold Glatthard, Principal of the Swiss Mountaineering School and some other international mountaineers. Glatthard had come to Darjeeling in 1954 on behalf of the Swiss Foundation for Alpine Research to select the training area for our Mountaineering Institute, not far from the Kanchenjunga massif. He had also trained at his school in Switzerland the late Major N. D. Jayal, my predecessor and the first Principal of the Institute. Tenzing and six Sherpa instructors had also gone to him before starting the Institute at Darjeeling. Glatthard was genuinely happy to know about the work which was being done at the Institute.

In Zurich, I called on Mr. Ernst Feuz of the Swiss Foundation for Alpine Research. He has done so much for mountaineering in India that I was keenly looking forward to seeing him. As I expected, he and the staff of the Foundation went out of their way to help me in my work.

At Berne I met Albert Eggler, the Leader of the Swiss Expedition to Everest in 1956. When Eggler drove me to his house we were greeted by two fluffy little dogs which were barking their heads off and jumping with excitement on seeing their master. Eggler had brought these dogs from Nepal and was very proud of them. We spent an enjoyable evening together talking about Tenzing, the Himalayas and many other matters. Although a quiet and undemonstrative man, Eggler was visibly moved as he talked nostalgically about the Sherpas and his stay in our mountains. He spent the whole of the following day showing me round the Alpine Club, the Alpine Museum and the Zoological Park in which most of the animals are kept in their natural habitat.

I left for Vienna in the first week of August and exchanged views with Austrian climbers, including Fritz Moravec who led the Austrian expedition to Dhaulagiri in 1959. Moravec gave me some useful hints on the latest mountaineering equipment.

Except during the mountaineering meets at Chamonix and Rosenlaui most of my time was spent on work for the Indian

Mount Everest expedition. Although I was a little rushed I was able to cover a lot of ground. My work was made easy by all mountaineers I met and the firms I visited. There was goodwill abounding and I often noticed that the eyes of the young European climbers sparkled with excitement to meet a man from the land of Gandhi, Nehru and the great Himalayas.

In Germany I went to Munich where Paul Bauer, a famous mountaineer and writer, and his friends showed me the latest rescue equipment for the mountains. Later, after a hurried visit to Bonn and Brussels, I left for England.

During my stay in Europe Keki wrote me many letters. I could not reply to all of them, but I wrote to him once or twice a week and kept him fully informed of what I was doing.

I was keen to meet Sir John Hunt when I went to London, and hear from him a first-hand account of his ascent of Everest. As the Secretary of the 'Duke of Edinburgh's Award', he coordinated various youth activities in the U.K. I reached London in the third week of August and got in touch with Sir John who had just returned from a holiday. He invited me to his Club for lunch and talked about Tenzing, mountaineering in India, his Sherpa friends and numerous other subjects. Sir John was pleased to hear about our progress in the field of mountaineering. He said he was sorry he could not see more of me because he had been away from London, but wanted me to stay with him at his home at Henley-on-Thames. I had to give a lecture at India House the next morning which prevented me from accepting his kind invitation.

While talking about mountains Sir John told me of his visit to Russia in 1958 when he climbed in the Caucasus with some Russian climbers. He mentioned that he had heard that a combined Russian-Chinese team was planning to climb Everest from

the north in 1960. He said that he had also heard some talk of an Indian expedition going to Everest and asked me if I had any information. I told him that it was under consideration but, to my knowledge, no definite plans had been made.

Before I left, Sir John asked me if he could attend my lecture the next day, and I said to him it would be a great honour and that I would talk to the organisers of the lecture. On leaving him I rushed to the office of our Military Adviser. When I entered his office I heard him say on the telephone: "Certainly, Sir John. We should have informed you much earlier. It is our fault". After ringing off he turned towards me and said, "Do you know, your audience tomorrow is going to include Sir John Hunt?"

At India House I collected my mail. Most of the letters were from Keki. I also received a letter from the Secretary of the Sponsoring Committee which said that, at a meeting held earlier in the month, the Committee had chosen me to lead the Everest Expedition. Keki was to be the Deputy Leader. Little did I know while talking to Sir John that the letter inviting me to lead the first Indian Expedition to Everest was already waiting for me. I had met some members of the Sponsoring Committee from time to time, but no one had given me any indication about my name being considered for the signal honour.

The letter from the Sponsoring Committee produced a strange excitement within me. I could not think what I should do. I was in London, several thousand miles away from home, and there was no one to whom I could talk about this. I had planned to go to a film show that evening, but I could not bring myself to go out. I sat in my room pondering over all kinds of things. Several thoughts came to my mind which, while not important in themselves, assumed a new significance.

After the return of the Cho-Oyu expedition I had met Capt. Dias in August 1958 in Calcutta. He was a member of this expedition. I knew Dias well. He had worked with me as an Instructor in the Army Ski School in Gulmarg in 1950. We talked about the Cho-Oyu expedition and he later told me that the Sponsoring Committee was planning to send an expedition to Everest in 1960. He suggested that I might lead this expedition. I laughed the suggestion away because, at that time, I had just joined the Himalayan Mountaineering Institute and had a lot

to learn. Leadership of an expedition to the highest peak in the world—surely there were other people in the country who had better claims for leading such an expedition!

Then I recalled that during my first visit to Mr. Khera in January 1959, while discussing the Cho-Oyu equipment, he had mentioned that the Sponsoring Committee was planning an expedition to Everest in 1960. Keki had prepared an estimate of two hundred thousand rupees and Mr. Khera wanted my advice and comments. This was the first time I had heard about the expedition from any official source. My immediate reaction was that 1960 was too early because a major expedition required a considerable period for preparation. I suggested that 1961 or even 1962 might be better. Without time to consider the details the estimate of two hundred thousand rupees also appeared low. Mr. Khera discussed various aspects of planning and I mentioned that the Himalayan Mountaineering Institute was examining the question of the manufacture of mountaineering equipment within the country. The Ordnance factories had already been asked to produce prototypes which were to be tried during the Institute Courses. I suggested that there was thus a clear possibility of using indigenous equipment.

On my next visit to Delhi I met Mr. Khera again. By this time he had some specific problems connected with the proposed expedition and also talked about leadership. The Sponsoring Committee had prepared a panel of names and was still undecided. Mr. Khera also consulted me about the team, but I could only promise to give him the names of those students of my Institute who had done well on Courses and those of other good climbers whom I knew personally. We also spoke about the equipment. By this time the Ordnance factories had produced a few items which were not quite up to the standard because the factories were not able to get the right raw material. I was, however, satisfied with the workmanship and felt that, given the material, the Ordnance factories could produce suitable equipment for the expedition. Mr. Khera appeared very enthusiastic about the expedition using Indian equipment. He, however, told me that the Sponsoring Committee could not impose its ideas on the Leader who must be given considerable latitude in such matters.

Even during my visit to Europe I was only establishing contacts, obtaining quotations and samples of equipment, and generally collecting information for Keki. All that I was able to gather I sent to him. I did not look at the various problems as a Leader. In any case I had not accepted the invitation of the Sponsoring Committee yet.

I could not help thinking of all these matters, but I could not make up my mind. I had to consider the many repercussions of my absence from the Himalayan Mountaineering Institute. It was a question of being away for more than four months. I had visited many institutions in Europe and learnt about the latest methods and techniques. I had met some of the best mountaineers in the world who had given me good advice. I had come at the expense of the Institute. It was my duty to get back to the Institute and pass on what I had learnt during my trip. I also felt that there was very little time to organise such a big venture. If I did accept, I would not only be physically away from my primary work for more than four months, but would have to devote many months on my return both before and after the expedition on its work. Above all, I had to consult my wife and my friend, Tenzing.

The invitation to lead the expedition had come from the Sponsoring Committee and I still had to obtain the permission of the Executive Council of the Institute. However, I had a feeling that before writing to me the approval of the Institute authorities must have been obtained. I wrote a letter to Mr. H. C. Sarin who, in addition to being a member of the Sponsoring Committee, is also Secretary of the Executive Council of the Institute. In my letter I gave him the reasons for my hesitation in accepting this great honour. I wrote to him that I was not quite sure if I had the necessary experience to undertake the task. Having written the letter I felt a bit relieved and left my hotel room for a short walk.

On the 25th August Sir John Hunt duly came to my lecture. During the talk I could see that he was genuinely interested in what I had to say about mountaineering activities in our country. After the lecture he congratulated me on the work we were doing and the ideals for which we were striving. He said he was very impressed with the progress which mountaineering as a sport had made in India. He was also good enough to

promise that if any of our boys or girls in the U.K. were interested, he would include them in some of his schemes.

I left London for Paris on my way back home the same afternoon. In Paris I discovered that, true to his promise, Keki had sent several more letters, including a cable. He wanted me to delay my departure by two or three days so that I might meet Navnit Parekh in Zurich. He suggested that I could brief Navnit on the progress of the work done by me so that he could attend to what I had not been able to do. Unfortunately, it was not possible for me to alter the date of my departure. After a couple of days in Paris I flew to Zurich for a final visit to the Swiss Foundation, and left for Bombay on the 31st August.

My plane was more than eight hours late in reaching Bombay and I landed at 2 a.m. on the 2nd September. At the Customs counter I identified my baggage and asked for a clearance. The Customs officer asked me to open my suitcase. Just then I overheard a lady on my left plead to another officer: "I am afraid I have lost my keys". As I fumbled through my pockets the realisation gradually dawned on me that I too had lost my keys and was about to be terribly embarrassed by giving the same excuse. The Customs officer looked up and saw my embarrassment and asked me if I had anything to declare. The only things I had brought from Europe were some items of mountaineering equipment which I had used in the Alps, and some souvenirs of not more than two hundred rupees in value. I showed him the nylon rope and ice-axes I was carrying; he appeared to be quite interested in the equipment and after a few brief questions about mountaineering he let me go.

Keki came to see me early next morning. He apologised for disturbing me so early but when I told him that my two nieces had gone back to their school, he looked visibly relieved. Practically the whole

of that day I spent with Keki who cross-examined me thoroughly, extracting every bit of information. As I was on my way back to Delhi, Keki wanted to know if I had heard from the Sponsoring Committee about the leadership of the Expedition. I told him about the letter from the Secretary of the Sponsoring Committee and said I had not quite made up my mind about it.

In Delhi, Mr. Sarin gave me the general background of the planning done by the Sponsoring Committee. There was a panel of three or four names including that of my friend and colleague, Tenzing, who has been Director of Field Training at the Himalayan Mountaineering Institute since 1954. Mr. Sarin explained why the Sponsoring Committee was not able to select anyone else from the panel to lead the expedition. I was interested in Tenzing. He said that Tenzing was not chosen because it was felt that it would not be right to take him away from the Institute for such a long time. The Institute having been built round his achievement, he was indispensable. He not only imparted practical training, but was also a source of inspiration to the young men who came to the Institute for training.

In his usual calm and unemotional manner Mr. Sarin convinced me, without any hint of persuasion, that it would be in the interest of the expedition as well as of the Institute if I accepted. He said that Tenzing would look after the Institute in my absence. Mr. Sarin promised that he would assist him over any administrative problems which might arise. I discussed all aspects of the matter with Mr. Sarin, but I withheld my decision until I had consulted my wife and Tenzing.

Mr. Sarin asked me to see Mr. Khera before leaving for Darjeeling. Mr. Khera, who had taken an active part in the initial planning, was happy to see me and wanted to know my reaction to the proposal. He was a little disappointed when I told him that I could give my final decision only after I had reached Darjeeling. I promised to send a telegram about it within three days. I could understand his anxiety; time was running out, and it was already late to start the main work of organising the expedition. Before I left his office, he reminded me that I must send a telegram as soon as I could. As we shook hands he said: "I am not expecting a No."

Tenzing had not returned when I reached Darjeeling; but he was expected any day. In the meantime I broached the subject

to my wife. She thought it was a great honour to be asked to lead a venture of this nature. I was quite encouraged by her reaction. At the same time, I could not help noticing that she looked a little anxious. I knew she was thinking about my personal safety. She had heard about the hazards in the mountains and had not forgotten that 'Nandu' Jayal, my predecessor, had gone on the Cho-Oyu expedition in 1958 never to come back. I told her that the anxiety of mothers and wives in such matters was understandable but this must not be allowed to be a deterrent to men. At the end of our discussion my wife finally agreed that I should go.

I had been two days in Darjeeling but Tenzing had not yet returned from Kathmandu. When he arrived the next day I spoke to him about the expedition. Normally Tenzing is very quick with his answers and decisions, but this was the first time I heard him say that he would like to think it over. He promised to speak to me the next day. I did not wish to rush him into giving his advice. I had given him the background information and planning of the expedition. I had not forgotten my promise to Mr. Khera. I, therefore, sent him a telegram asking for two more days. Tenzing came to the office the next day, but he did not say anything about the expedition. The following morning he came to the Institute earlier than usual and walked straight into my office with his arms stretched in front of him for a handshake in his characteristic manner. He caught my right hand in both his and with an affectionate handshake and his usual broad grin said: "Bhayya (brother), you accept it. I shall do my best to help you."

I wanted to send a telegram to Mr. Khera immediately, but Tenzing sat down in a chair in front of me and started discussing various aspects of the expedition. He looked very happy and was impatient to tell me what he knew about the mountain. He pulled out some paper and drew a sketch of the Everest area and started explaining the ascent plan straightway. Normally Tenzing is a restless man and it is difficult to make him sit down for any length of time. On this occasion, however, he talked to me for more than two hours, going into every detail—how to tackle the ice-fall and Lhotse Face, the employment of Sherpas and porters, procurement of equipment, do's and don'ts on the march and on the mountain, and hundreds of other details. I hurriedly scribbled notes as Tenzing poured out his thoughts to

TENZING'S SKETCH OF
EVEREST ROUTE

Legend:

B : Base Camp, which was Camp I of the British Everest Expedition (1953).
P : Pumor. E : Everest. N : Nuptse. L : Lhotse. →: Avalanche Hazard.
2-9 : The Camps set up by the British Everest Expedition (1953).

me. I was to know later how useful and wise his counsel had been. Tenzing looked almost obsessed with the thought of an Indian expedition going to Chomolungma (the name by which Everest is known to Sherpas). He stopped talking, got up and shook hands with me again. Before leaving the office he said, "I know you can do it, Bhayya. Best of luck." I was happy. Tenzing's talk had given me confidence. His enthusiasm was infectious and I felt inspired. Such opportunities do not come one's way often. Tenzing—the man of the mountains—had said I could do it. I sat in my chair lost in thought for many minutes, looking at the door where I had seen Tenzing cheerfully wave his good-bye with the words "Best of luck, Bhayya". I suddenly woke up from my reverie and remembered the promise to Mr. Sarin and Mr. Khera. I sent them telegrams immediately. I was now willing to face the great task.

A few days later Tenzing received a letter from the Sponsoring Committee requesting him to be the Chief Adviser to the Expedition, which made me very happy.

न विद्यया केवलया तपसा वापि पात्रता।
यत्र वृत्तमिमे चोभे तद्धि पात्रं प्रचक्षते॥

Knowledge or exertion (austerity), each by itself is not enough; it is the combination of both that really makes the right man.

BHARTRIHARI

II

PREPARING FOR THE EXPEDITION

THE first lesson one learns from the mountains is that of humility. How many times has man to try to climb a difficult peak before he succeeds! Many are the hazards he has to face and each time, in fact each moment, the mountains present a new hazard. When man does reach the peak, is he really a victor? Is it a conquest? After the 'conquest' can he go to the peak at will? Can he occupy it and remain there? No. Arrogance in the context of the mountains is not justified. It was with a feeling of humility blended with the spirit of challenge that I began to plan for the expedition. In the short time left the task appeared overwhelming.

I was reminded of the Instructor at the Staff College who, while teaching 'Appreciation of a Situation', mentioned that the process of methodical thinking could be applied to planning of any kind. I, therefore, started examining my problem on the lines of a military operation.

Tenzing had given me many ideas which I had jotted down in my notebook. I spent an hour or so thinking of numerous other aspects of planning and after analysing them I listed them under appropriate heads. I became conscious of two major problems ahead of me: firstly, the selection of the team, and secondly, procurement of equipment.

Time was a major factor in my planning. It was a critical factor in our case because the Sponsoring Committee had stressed that, as far as possible, we should use equipment of Indian manufacture. Indian industry had hardly any experience in making mountaineering equipment.

I had already prepared a provisional list of items of equipment to be manufactured in India and those that had to be imported. However, the detailed work could only be carried out when the team was finalised. It was, therefore, essential that the selection and training of the team should be taken in hand without any delay. It had been decided that the selected young men should be given advanced training and a final selection should be made only on the completion of their training.

As the time was short, I decided that planning for the expedition should be done by the members during the training period. Apart from saving time it would give our young climbers confidence and experience if they had a share in the various processes of planning. It would also lighten my burden.

In October and November 1959, the Himalayan Mountaineering Institute was organising an Advanced Course on the Kabru glacier in Western Sikkim. All twelve vacancies on this Course had already been filled before I returned from Europe. At the request of the Sponsoring Committee it had also been agreed that the Institute would give pre-Everest training along with the Advanced Course. Thus, the Institute had twelve more students on this Course, and together with two students sent by the Army Mountaineering Association for the joint British-Nepalese-Indian Expedition to Annapurna II, the Advanced-cum-Pre-Everest Course had twenty-six students. This was a very large number and imposed a heavy strain on the resources and administrative machinery of the Institute. We, therefore, had to work out a carefully planned schedule by overlapping the Advanced-cum-

Pre-Everest Course between the two Basic Courses. It was arranged to transfer the necessary equipment from one Course to the other near the Base Camp. Work connected with the Pre-Everest Course was handled by the students as part of their training in organisation and administration.

As time went on, the tempo of work increased. I had been away from Darjeeling for nearly three months and work at the Institute had piled up in my absence. Many of these cases required immediate attention. The Executive Council of the Institute expected a full report on my European tour. The strain of travelling by air, visiting new places, meeting people, giving lectures and attending meetings and conferences during my sojourn in Europe, coupled with the pressure of work soon after my return, began to tell. I had been in Darjeeling about a week when I suddenly became conscious of a feeling of depression and lethargy. To my horror I discovered that I could not concentrate on my work and was generally restless and labouring under tension. I went to a doctor, who told me that there was nothing organically wrong with me. It was a case of a minor nervous breakdown brought about by over-work, and, he suggested that I should not worry about it. It was difficult not to accept his advice, even though there was such a lot to be done and time was running out fast. He prescribed some medicines and ordered a few days' rest. I was now under the doctor's order. I spent the next three or four days relaxing and going on long walks with the family. My wife and children, who were by then beginning to feel neglected, welcomed this change. The rest-cure worked like magic. My restlessness and state of tension disappeared and I got back to work within a few days.

The Course assembled on the 5th October. Most of the students had already done Basic or Advanced Courses at the Institute. On the Pre-Everest Course there were a number of students who had experience of expeditions and, therefore, could be trusted to shoulder heavier responsibilities. Keki Bunshah was unable to join the Pre-Everest Course due to his professional work, but he and the Secretary of the Sponsoring Committee, Sohan Singh, came to the initial conference which was held when the students attending the Course arrived. At this conference the students were briefed on the various processes of planning which was one of the subjects of training.

The students were divided into six 'syndicates' (teams) of four or five each. The syndicates were given tasks concerning various detailed aspects of planning for the expedition. They had to work out elaborate lists of clothing and technical equipment, food, porterage, movement plan, communications, etc. The plan was to consider these problems in detail during the training period on the mountain, and to draw up a coordinated scheme after group-discussions when we returned to Darjeeling.

It was clear that after course the students would disperse to their homes or places of work. The team would be spread out. Therefore, distribution of work among team members had to be clear-cut. It would be impossible for me to give personal attention to the working out and implementation of every problem and every detail. I, therefore, issued my first Planning Note, in which responsibility for work by the Secretary of the Sponsoring Committee, the Leader, the Deputy Leader and individual members was indicated. Priorities for work were laid down with strict instructions that these must be adhered to. The policy with regard to procurement of equipment from Europe, manufacture by Ordnance factories, and purchase from the trade and Ordnance depots was laid down.

The students were encouraged to study accounts of major expeditions to Himalayan peaks. They were, however, to stay at Darjeeling only for four or five days. We, therefore, decided to take our books to the mountains and a portable library of over three dozen books was included in the baggage. This included three copies each of Sir John Hunt's 'Ascent of Everest' and Eggler's 'Lhotse Everest Adventure'. These two excellent books on the attempts on Everest by the British and Swiss teams were to prove invaluable.

The students left Darjeeling for field training in Western Sikkim on the 11th October 1959. Considerable planning work was done by them during the approach march. Every day during the treks they discussed their plans, and were often seen pulling out reference books from their rucksacks and taking down notes during short halts on the march. After the day's trek, those responsible for handling technical equipment, like oxygen apparatus and wireless sets, discussed their equipment and gave demonstrations. I was very happy to see everyone so keen and enthusiastic. In spite of the fatigue of long treks, practice on technical equipment

and syndicate discussions continued till quite late in the evenings. After four days' march through very beautiful country we reached the village of Yoksom beyond which there was no habitation along our route. Here we took over some high-altitude equipment and clothing from the Basic Course which was on its way back to Darjeeling after completing its technical training in the mountains.

We reached our Base Camp in seven days without making extra halts for rest or acclimatisation. During the last two days of the march we had climbed over eight thousand feet. Some of the less experienced students were already beginning to feel the effects of altitude. The next day we left for the Advance Base Camp and the students, for the first time, stepped on ice. Most of that morning's journey was on a glacier.

After finishing the field training of the preceding Basic Course, Tenzing had moved up with the instructors and some high-altitude Sherpas for the Pre-Everest Course. They had sited the advance camp at a height of nearly 16,000 feet at the junction of the Ratong and Kabru glaciers. We found Tenzing waiting for us outside his tent. He greeted each one of us with a warm hand-shake and a cheery smile. Mugs of hot tea were brought out. The Instructors and Sherpas recognised some old friends among the trainees. After a tiring journey we found the welcome most heart-warming.

Tenzing and the instructors showed the students the tent sites where the ground had already been levelled. The general lay-out of the camp was excellent. Temporary kitchens had been put up with stones and tarpaulins; the track connecting the tents, cook houses and store rooms had been lined with stones. Water points and latrine areas were appropriately marked with flags. It was evident that quite a lot of effort had gone into these details.

By doing a thorough reconnaissance of the training area Tenzing had chosen an ideal spot for camping. Nothing could have shown more clearly what a good Base Camp should look like. As the porters poured into the camp, equipment was checked, tents were erected, air mattresses inflated and kit bags unpacked. Within about an hour of our arrival in the camp the place looked like having been lived in for weeks.

The rest of the afternoon was spent by the students in identifying various features like Koktang, Ratong and Kabru on

the map and on the ground. Some arguments could be heard on the pros and cons of different approaches to the peaks that surrounded us.

Although the students were very keen to get to grips with the mountain straightway, we decided that the next day should be spent in camp for rest and acclimatisation. We had been on the march for over a week without proper rest. So we stayed in camp carrying out a detailed check of the oxygen apparatus, wireless sets, and numerous other items like stoves, pressure cookers and aluminium ladders. To test the fuel gas stoves some members tried their hand at cooking. Lieut. Kohli of the Navy offered to cook a sweet dish and the sticky looking paste which he tried to pass off as a sweet was not really too bad.

That afternoon we held our first briefing conference. I gave out the detailed programme for the next ten days' training. Students had to work in different parties on the mountain and were required to organise the higher camps and themselves ferry the loads. Tenzing then talked at length about the problems they were likely to face. He said that the Kabru ice-fall was technically as difficult as the Khumbu ice-fall on Everest. He described the route giving the characteristics of different obstacles. There were numerous crevasses; some could be jumped across while others had to be bridged with logs of wood or aluminium ladders. At many places rock and ice-faces had to be encountered entailing interesting 'scrambles' and quite strenuous work. There were steep traverses on which fixed rope lines had to be laid. Tenzing advised the students to make the best of their training because their first major obstacle on Everest would be the ice-fall, which would tax both their energy and their patience. He finally explained to them that the route marked by him was not necessarily the best. It had been chosen to illustrate a number of points.

After the conference, Tenzing spent two or three hours advising the syndicates on planning for the Everest expedition. That evening, when he came to my tent, he appeared to be satisfied with the enthusiasm and tenacity of the students and was optimistic about finding a good team for the Everest expedition.

With the exception of one or two days when the weather was bad, the next ten days were spent in hectic activity on the Kabru glacier. For many of the students it was their first experience

of an ice-fall. In the beginning they appeared to be somewhat awed by the dangers and hazards, but very soon, as they gained confidence, they moved up and down the ice-fall as if they had been living on it for months.

On the second day of the training I accompanied some load-carrying parties from the Advance Base Camp to Camp I. We had gone half-way when we heard a dull, heavy noise from the upper reaches of the glacier. We looked up and saw a huge mass of ice and snow break off the Kabru shoulder and rush down the slope in an avalanche, which appeared to be moving steadily towards a party of climbers which was on its way from Camp I to Camp II. Instead of making any effort to move out of the way, the climbers seemed to be standing still. We stood petrified watching the impending calamity. Barely ten seconds later the climbers disappeared from view in a cloud of fine, powdered snow. We were still wondering about the fate of our comrades when the white cloud thinned out. What a relief it was to see the figures of the climbers still standing in the same place! Next moment they were seen plodding up-hill again.

We resumed our climb and soon passed the site of the big avalanche. Tenzing had warned all students to be careful on this stretch. Having seen a huge avalanche only a little while earlier we were extra careful when we passed this place.

Camp I was situated on a narrow rock ledge off the glacier at a height of over 17,000 feet. There was hardly room for two tents and the climbers had to get in and out of the tents with great care. This Camp overlooked the Advance Base Camp and commanded an excellent view of the valley below.

That night, from our precarious perch on the rock face, we could see someone in the Advance Base Camp trying to send a message in morse with the help of a torch. We could not interpret the signals, but it was clear that they were practising. We were able to pass over to them "O.K." and "Good Night" by a torch. We could also see the very dim lights of Darjeeling well below the line of sight and more than thirty miles away as the crow flies.

The students enthusiastically practised their lessons in ice and snow craft, scrambling on rocks, and rope work. There were two or three parties moving up and down the glaciers daily, gaining valuable experience. Most of these parties were

accompanied by veteran Sherpas who gave demonstrations and corrected faults in technique where necessary.

At Camp II trials on the oxygen apparatus were carried out. Similarly our wireless sets were tested. It was interesting to find that sometimes moving the set only 10 yards or so on the mountain made all the difference to the performance.

A couple of days later I went to Camp II which had been sited at a height of over 19,000 feet just above the ice-fall. Kabru North looked quite approachable from the Camp, but we could not climb it because the mountain is sacred to the people of Sikkim. In fact our Camp was overlooked by two other sacred peaks, Kabru Dome and Kabru South.

We were nine climbers and Sherpas in this camp that night and had enough tents to house five or six more. Before turning in we saw the last rays of the sun on Kabru North and Kabru South. Within seconds of the sun going down it was very cold and we went inside our tents. I was alone in a Meade tent, while the other tents had two or more occupants. It was absolutely quiet except for the noise of ice avalanches crashing down the mountain face with monotonous regularity.

I do not know when I dozed off but I was soon woken up by the sound of the loudest avalanche I have ever heard. It was obviously a huge ice avalanche. The tell-tale metallic and sharp clatter of pieces of ice was only too clear. The noise appeared to be coming nearer and nearer but by then we had got used to these noises. We knew that our camp was sited on a rise and most of the avalanches normally stopped in the basins on either side of the ridge. We knew we were safe.

Very soon my complacency was shattered as an avalanche appeared to be approaching and with a premonition of impending danger I gripped my sleeping bag tight and held my breath. Almost simultaneously a strong gust of wind tore open the sleeve door near my feet and the next moment a gale seemed to blow right across my tent; it shook me so violently that I felt that the tent had become airborne! The opening near my head began to flap violently. The wind seemed to suffocate me and I found myself shivering with cold even though I was fully protected by my sleeping bag. I tried to get up but my sleeping bag seemed very heavy. With the light of my torch I was horrified to see

that everything inside the tent was covered by a thick layer of powdered snow.

Soon the wind fell and stopped suddenly. I was not quite sure what had happened and what should be my next step. I could, however, hear climbers and Sherpas talking loudly in the other tents. I then realised that my tent was still on its original site. It soon became apparent that the wind had been caused by the blast preceding the avalanche. Had it not stopped short of our camp, the blast would have been followed by tons of ice and snow, sweeping everyone of us down with it.

I could hear somebody walking towards my tent. As he came near he shouted to ask if I was all right. I recognised the voice of Da Namgyal, one of the Sherpa Instructors, and flashed my torch. As he entered the low tent on all fours I could see that Da Namgyal was shocked to find me in that condition. He picked up a mess tin and with it started removing the snow from my sleeping bag. After scraping away all the snow from the tent he collected it in a huge big heap near the door and then shovelled it out.

Da Namgyal told me that, although somewhat shaken, everyone else was quite safe. The doors of their tents were not in the direction of the avalanche and, therefore, they had escaped the horror of what I had experienced. One of the unoccupied tents, however, was slightly damaged by the blast. Da Namgyal gave me some hot coffee from my thermos flask. He then wished me goodnight and returned to his tent.

It was to be expected that I would not sleep well that night. Strangely enough I got up next morning feeling quite fresh. Walking round the camp area I saw that the avalanche had stopped barely twenty yards from my tent. Blocks of ice of various sizes with sharp jagged edges lay strewn all round. It was indeed a narrow shave! A Sherpa later explained to me that I owed my life to the fact that we had recognized the sanctity of holy Kabru.

That afternoon when I reached the Advance Base Camp Tenzing came out to meet us. He had heard about the avalanche on our wireless link. For some reason he looked very upset. When I asked him if there was anything wrong he said that he had just heard on the radio about the tragedy which had befallen the Women's Cho-Oyu Expedition. Madame Claude Kogan, the leader, and a Belgian climber, Claudine Van der Stratten, were

reported missing. Apparently they had been carried away by an avalanche. Tenzing was greatly interested in the fortunes of this expedition. It was the first all-women's expedition to such a high mountain, and his two daughters, Pem Pem and Nima, and his niece Doma were members of the expedition. He had done a lot to assist Madame Kogan in organising it and had spent nearly a month in Kathmandu just before the expedition left. He was very fond of Madame Kogan who was a great mountaineer. We talked about the great loss the mountaineering world had suffered as a result of the tragedy. My own harrowing experience of the night before was soon forgotten and we got on with our work.

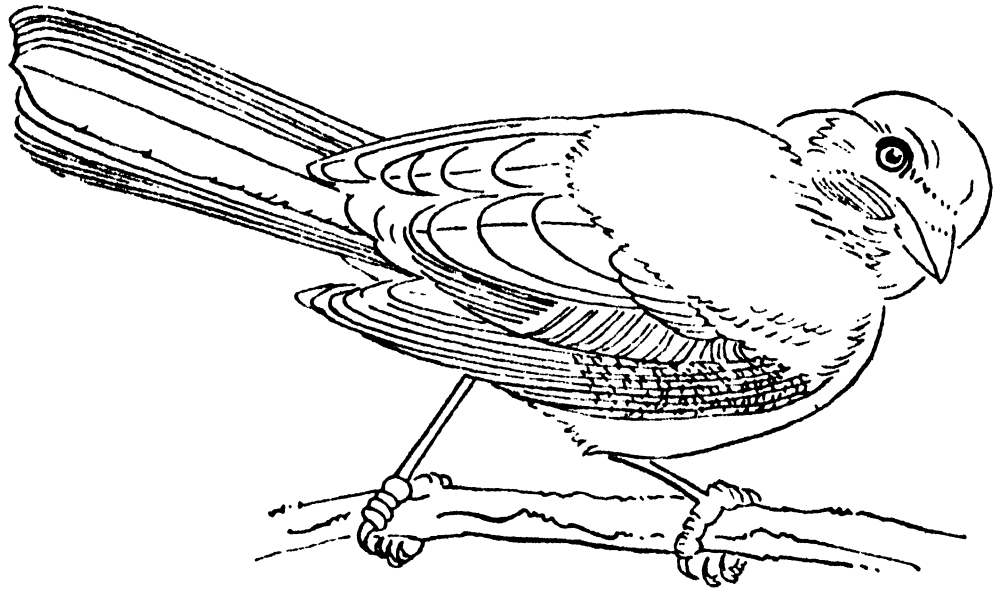
Most of the climbers had had plenty of experience of the ice-fall, although some of them did not acclimatise well on the mountain and could not reach Camp II. The last two days were kept for practice of actual techniques lower down on the glacier. Here, under the direct supervision of Tenzing and the Sherpa Instructors, the students bridged crevasses, lashed logs of wood, cut steps and fixed rope lines on steep ice traverses and generally covered all the finer points.

We had practically finished our technical training on the ice-fall when we left the Advance Base Camp on the 29th October. However, we continued our training on the glacier on our return journey. The students halted a day at the Base Camp where the two doctors on the course carried out certain physiological observations. In order to compile a report on the equipment, comments on all the indigenously produced trial equipment were collated. The next day we started on the trek back to Darjeeling.

Tenzing and the Sherpa Instructors accompanied us to Yoksam where they were going to have two days rest before the next Basic Course students joined them for field training.

After two days' march from Yoksom we met the Basic Course students who had arrived in the camp earlier. These young trainees, some of whom had probably never been on a mountain before, received the Pre-Everest Course students as heroes. That night in the camp, while the Basic Course students entertained the Pre-Everest trainees to music, the 'veterans' in their turn talked about their experiences. Here once again the transfer of equipment took place and the Pre-Everest trainees handed over their high-altitude equipment to the Basic Course students.

On arrival at Darjeeling the students were given two days to prepare their syndicate plans after which each plan was considered at group discussions attended by all the students. For five days we thrashed out every aspect of administration, including the movement and actual ascent plans of the expedition. At the end of this we finalised the list of equipment and prepared specific instructions for their procurement.



The Pre-Everest-cum-Advance Course concluded on the 15th November. That night there was a farewell dinner for the students, and we were very happy. Pem Pem, Nima and Doma who had returned safely from the Cho-Oyu Expedition that afternoon were able to join the function. Although the Expedition had ended in disaster, the three girls had done well on the mountain. Nima was especially congratulated by everyone for establishing a world record for a teen-age girl by climbing to a height of 22,440 feet.

The passing-out ceremony on the 16th November was attended by many friends of the students and visitors to the Institute. Mr. Sarin, who had specially come from Delhi to finalise the selection of the Everest Expedition team, presided over the function and pinned the embroidered badges of the Institute on the pullovers of the successful trainees.

Throughout the Course the students had worked very hard. Although I discourage competition in this sport I must confess that I was not unhappy to observe a spirit of healthy competition amongst them. Everyone of them wanted to do well enough to be selected for the expedition and now, with the Course having finished, there was an air of suspense. The team had yet to be announced.

All wish to know but few the price will pay.

JUVENAL

III

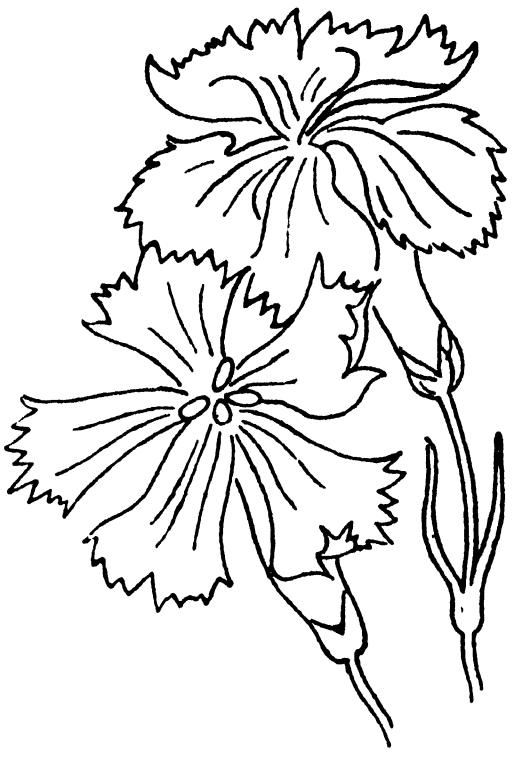
THE TEAM

THE selection of the team was made after a discussion between Mr. Sarin, on behalf of the Sponsoring Committee, and myself. He made it clear that while each case might be discussed at length, where there was a difference of opinion the view of the Leader would prevail. He also said he wished that Tenzing was back in Darjeeling. I told him that I had already discussed the performance of each trainee with Tenzing and we had not differed about a single case.

Mr. Sarin and I discussed the selections the night before the graduation ceremony of the Pre-Everest-cum-Advance Course. We became so absorbed in this that it was 1 a.m. before we realised that it was time to go to bed. Some cases presented difficulty, and there were long discussions about them. We had finally to make a choice and select some and turn down the others. Decisions in each case were made with complete unanimity.

After the passing-out ceremony the trainees assembled in the Principal's office, when Mr. Sarin announced the team amidst pin-drop silence. The suspense was at last over and we could see the evidence of excitement on many faces. Mr. Sarin very thoughtfully started talking to me, and the students took this as a signal to break their silence. There were handshakes, congratulations, thumping one another on the back, and, of course, expressions of sympathy for those who had not been selected.

There was silence again when Mr. Sarin looked up. He said that the selection had not been very easy, as most of them had done well, but only a specified number had to be selected. He wished everyone luck, godspeed and good climbing. He said, he hoped that those who were not lucky enough to be chosen for the Everest Expedition would get opportunities on other expeditions.



In addition to the twelve climbing members, including the Leader, the names of a photographer and one doctor were announced on November 16. Those selected were: Brigadier (then Colonel) Gyan Singh (Leader); Keki F. Bunshah (Deputy Leader); Flt.-Lt. A. K. Chowdhury; Capt. S. K. Das; Nawang Gombu; C. V. Gopal; Sonam Gyatso; Inst.-Lt. M. S. Kohli; Capt. Narinder Kumar; B. D. Misra; Da Namgyal; Rajendra Vikram Singh; Ang Temba and C. P. Vohra.

We still had to find another doctor, a meteorologist and a signals officer. The Government Departments concerned were very co-operative and volunteers to accompany the Expedition were nominated without much difficulty.

It was later discovered that, though most of the other equipment would be ready to accompany the Expedition, the oxygen bottles would only be ready about three weeks later; and Flt.-Lt. A. J. S. Grewal, who had attended the Pre-Everest Course, was selected to follow with the equipment.

Capt. A. B. Jungalwala of the Gorkha Rifles had done well on the Pre-Everest Course, but was not considered for the Everest team because he was ear-marked for another expedition, which he was unable to join because of some misunderstanding. With the concurrence of the Sponsoring Committee, he was selected to accompany us as an additional climbing member. His fluency in Nepali got him the assignment of Transport Officer during the approach march.

In all 19 climbing and non-climbing members were selected. Later, two other men of the Indian Army Signal Corps and a Liaison Officer from the Government of Nepal were included. Finally, Sohan Singh, who had been working as Secretary to the Sponsoring Committee and was very keen to go to the mountains, was included in the team with the approval of the Sponsoring

Committee, bringing the total number of members of the Expedition to 23. Those who were chosen after the announcement of the team on the 16th November were: Flt.-Lt. N. S. Bhagwanani; Flt.-Lt. A. J. S. Grewal; Capt. A. B. Jungalwala; Lt. S. C. Nanda; S. U. Shankar Rao; Sohan Singh; Naik Balakrishnan; Signalman Om Prakash Vaid; and Dhanbir Rai, Liaison Officer of the Nepal Government.

उद्धरेदात्मनात्मानं।

To raise oneself one should depend on one's own strength.

BHAGAVADGITA

IV

PLANNING FOR THE EQUIPMENT

DURING the Pre-Everest training held on Mount Kabru in Western Sikkim, groups of students had already gone into all the details of administrative planning for the expedition. On return to Darjeeling final plans were drawn up. We were all conscious of the hard work that lay ahead. It was, however, encouraging to all of us to find that every member was extremely keen and could be seen straining at the leash.

Now that the suspense was over and the final selection had been made, we found that, though disappointed, even those who were not lucky to have been selected for the team accepted the decision sportingly and offered their assistance to the Expedition in any other capacity.

Before the Course dispersed the following time-schedule, which had been finalised earlier, was made known to the members:

1. 15th November 1959 — Announcement of the team.
2. 16th November 1959 to 19th February 1960 — Manufacture, purchase and import of stores and equipment.
3. 20th February 1960 — Assembly of the team and arrival of stores and equipment in Delhi.
4. 27th February 1960 — Checking of the equipment and repacking according to our packing plan.
5. 1st March 1960 — Despatch of heavy baggage to Jaynagar in North Bihar.
6. 4th March 1960 — Assembly of the team, Sherpas and porters in Jaynagar.

7. 5th March 1960 — Allocation of loads, etc. to porters.
8. 6th March 1960 — Departure from Jaynagar.
9. 24th March 1960 — Arrival at Pangboche acclimatisation training camp.
10. 12th April 1960 — Arrival at Base Camp after completion of acclimatisation training.

Tasks were assigned to each member. Clarifications where required were given. Implementation of each task was fully discussed.

We had only three months in which to place orders for the equipment and have it delivered at Delhi where the team was to assemble on the 20th February, 1960. Some items of equipment including oxygen apparatus had to be imported. The bulk of the special clothing and technical equipment, however, had to be manufactured in India. This was a major task as indigenous industry had not handled such manufactures before.

Work progressed simultaneously at Darjeeling, Calcutta, Shahjahanpur, Kanpur, Bombay and Delhi. It was necessary for one or more members to be placed in each of these centres of activity. Distances between these centres being great, the coordination of work was not easy.

In addition to being my headquarters, Darjeeling was the place where all woollen clothing and knitted-wear had to be made. Tenzing had agreed to supervise the manufacture of woollen garments. We needed seventy pullovers, two hundred pairs of stockings, four hundred pairs of socks and dozens of gloves, mittens and balaclava caps, one hundred and fifty woollen shirts and seventy pairs of climbing trousers. For this a few hundred yards of fabric and over five hundred pounds of wool had to be obtained from the Punjab. Between Ludhiana in the Punjab and Darjeeling the consignment was lost for about ten days, which caused us many anxious moments as there was not much time left for knitting and sewing the garments.

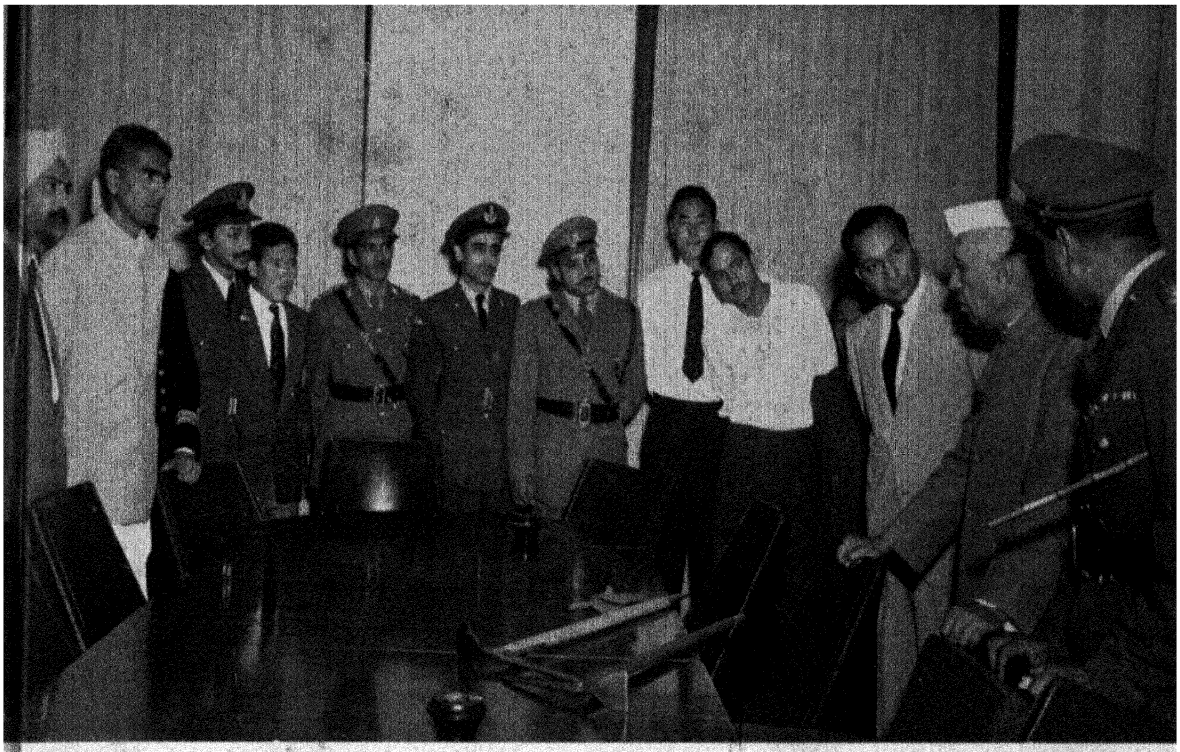
Finally, when the material did arrive, Tenzing distributed the wool to Sherpanis and Nepalese women who are not only good at knitting but are very quick at this work. For a few weeks in January and February practically every Sherpani and

Nepalese woman in Darjeeling was seen knitting frantically for the Everest Expedition. This made them somewhat unpopular with their husbands, but despite this they maintained a very high turn-out of work. Tailors were employed to sew shirts and trousers under the personal supervision of Tenzing. The Sherpa Instructors of the Himalayan Mountaineering Institute made various lengths of rope ladders which were to be used on the Expedition. All of them — the Sherpanis, the Nepalese women, Tenzing and his army of local workers—laboured almost round the clock and managed to deliver the goods in time.

On the 16th November Keki Bunshah and I left for Calcutta. Kohli and Vohra joined us there the next day. Before leaving Darjeeling we had examined the prototypes produced by the Ordnance Factories as well as the samples of boots made by Batas and the air mattresses made by the Bengal Waterproof Works. Only in a few cases minor modifications were necessary. We were, therefore, able to place firm orders with Ordnance Factories and other firms.

We spent a whole day with the Director General of Ordnance Factories, and at the Metal and Steel Factory at Ishapore and the Gun and Shell Factory at Cossipore, going into details of manufacture, the quality of metal required for crampons, pitons, tent poles, wire ladders, and a host of other metal components of our equipment. A representative of the Director General of Ordnance Factories, who accompanied us, co-ordinated questions like procurement and transfer of special material from different factories and also the manufacture of components like leather straps for crampons to be made in Kanpur and the assembly with the metal part of the equipment. Each item of equipment posed a different problem and had to be considered in detail. This naturally took a little time and we found that we had to work well beyond the normal working hours. Our conferences and discussions sometimes dragged on up to 10 o'clock at night. We felt guilty at keeping these hard worked people so long, but they invariably told us they were happy to be of help to the Expedition.

Next day we placed final orders for our air mattresses with the Bengal Waterproof Works. The firm has for years manufactured heavy air mattresses but their first prototypes made to our specifications were as good as any imported air mattress of the same type. The firm not only promised to donate all our

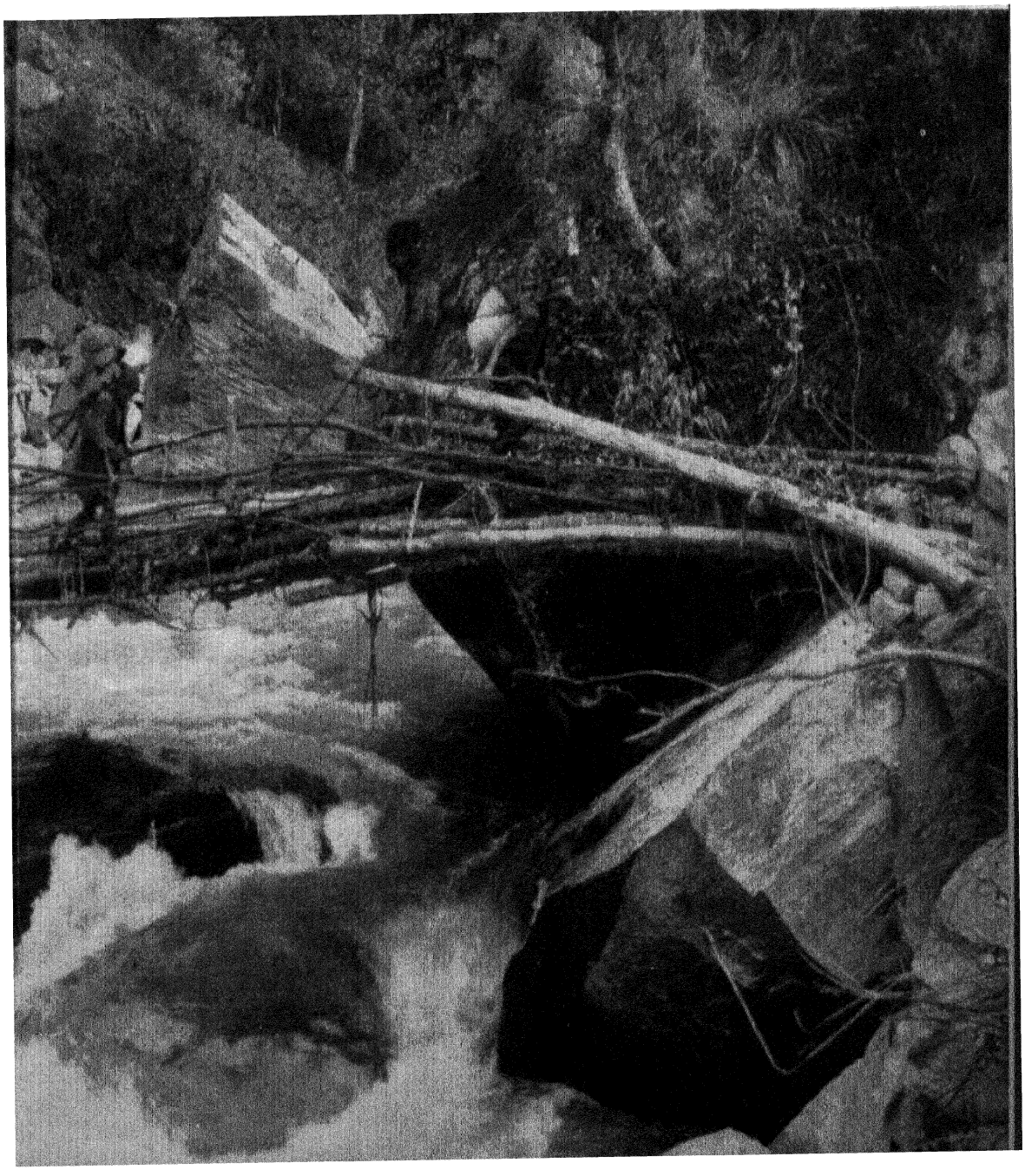


A word of cheer from Mr. Nehru

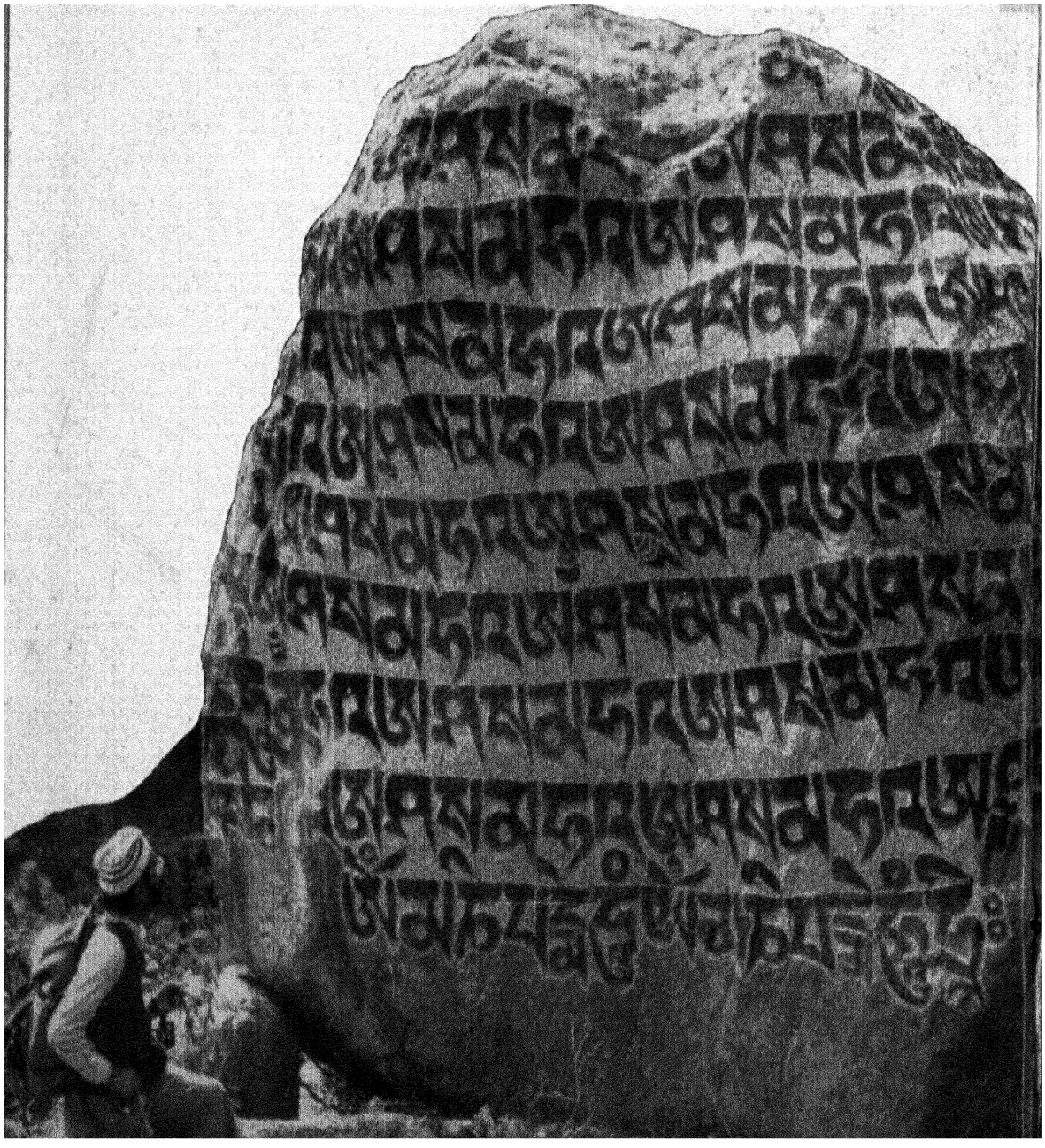
Loads being allotted to porters at Jaynagar

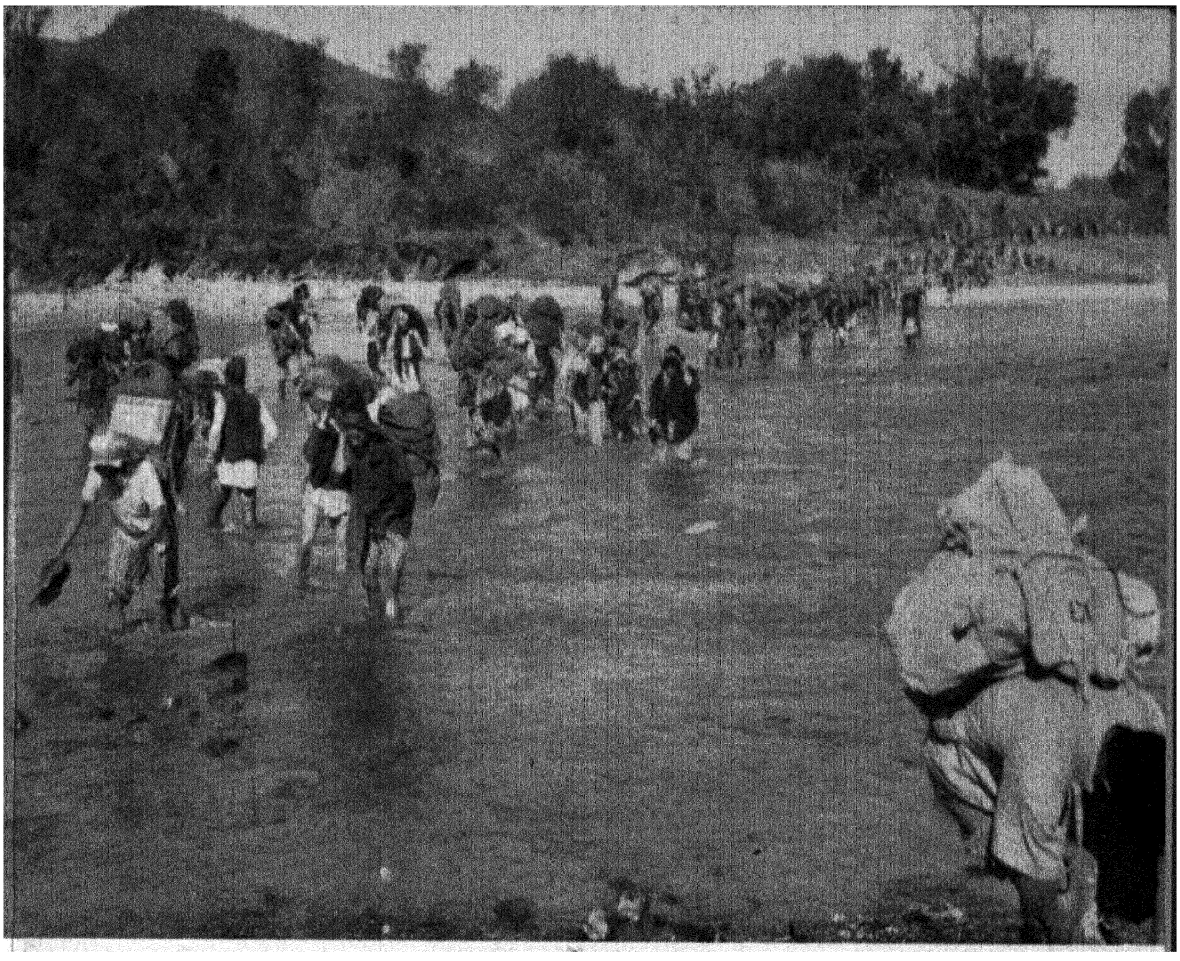
"Tiger" Tenzing saying good-bye to the Leader of the Expedition

Across a rickety bridge of bamboos over a turbulent stream

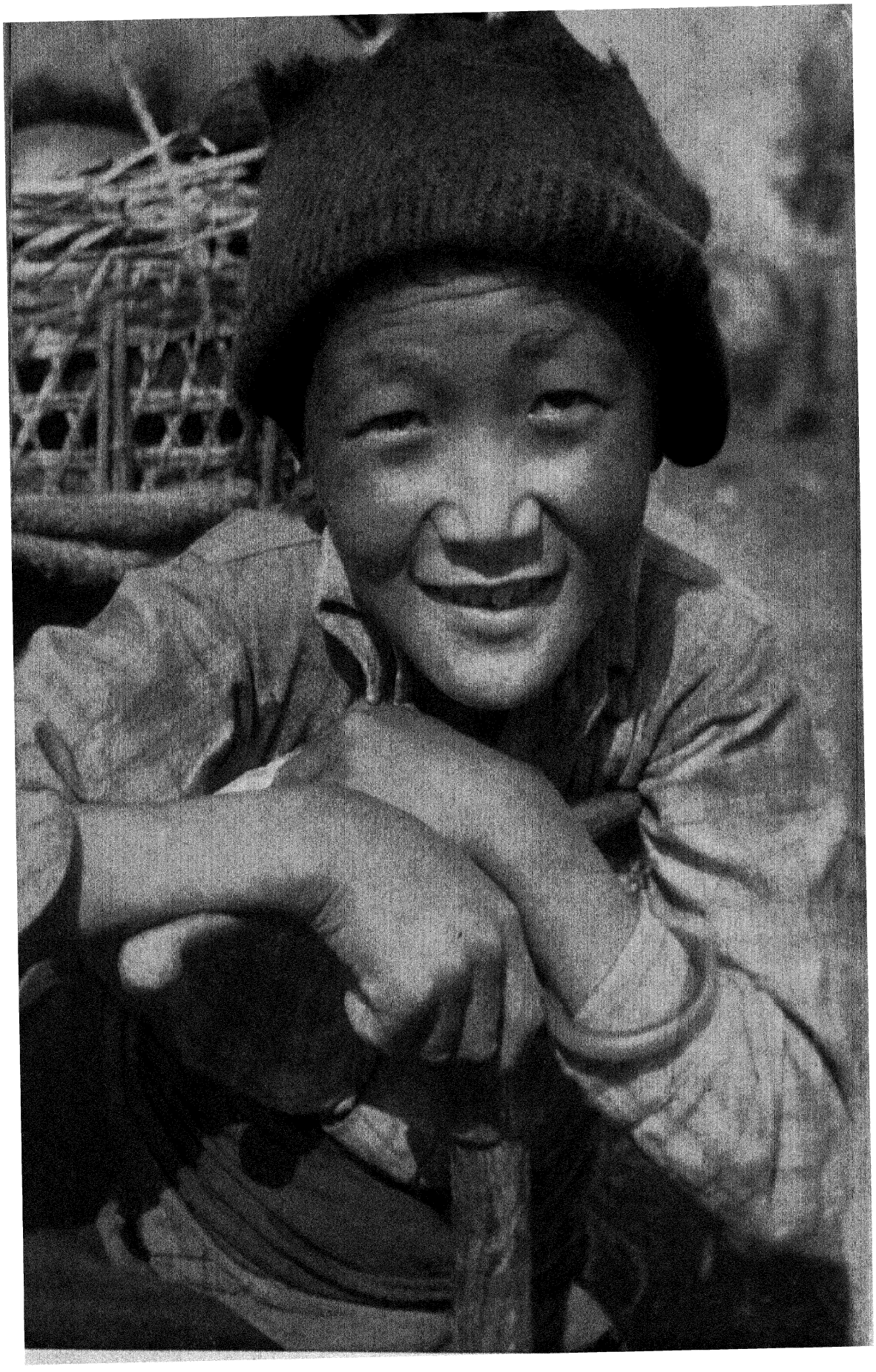


A rock carving of Buddhist prayers

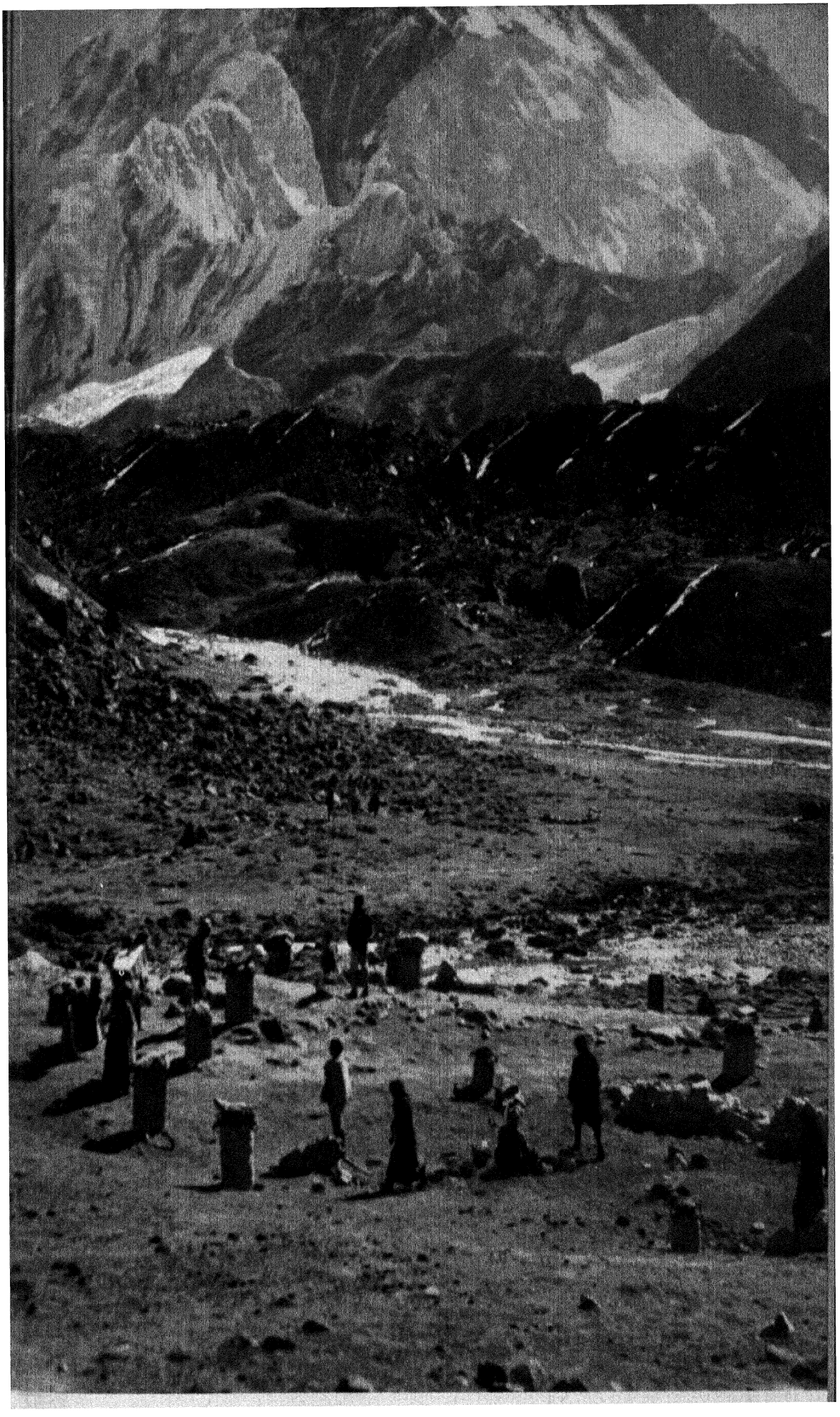




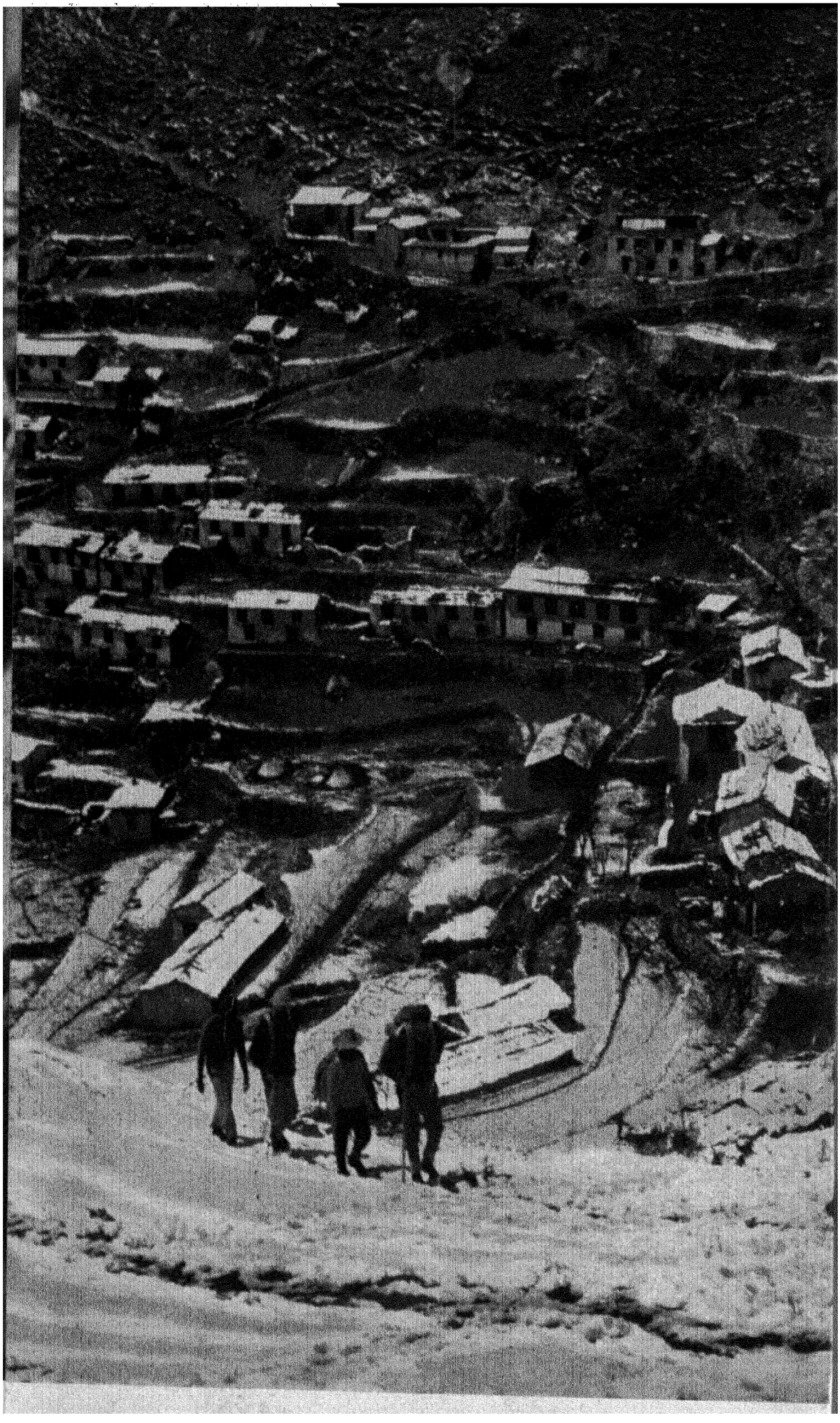
Wading across the Kamla river, two days after leaving Jaynagar



A smiling Sherpa porter



On the way to Namche Bazar



The sprawling township of Namche Bazar

requirement of air mattresses, but also offered to manufacture rubberised tarpaulins to be used as floor coverings for our tents. These tents were to be manufactured by one of the Ordnance factories in Kanpur. We were very impressed with the co-operation of the staff and their appreciation of the sense of urgency with which they had to undertake this big task at short notice.

Batas had made a couple of samples of climbing boots which were tried out by us during our training courses. We had found the boots satisfactory. Later, when we approached them to manufacture the boots for the Everest Expedition, the Bata Shoe Company had to be given new specifications. They produced a hand-made sample of the boot within a few days, but we had no time to try it out on the mountain during our Pre-Everest Course. Satisfied with the quality of boots tried earlier by the Institute, we placed a firm order for seventy pairs of climbing boots and thirty pairs of approach march boots. But the Managing Director of Batas insisted that we should try out the latest boots in snow and ice before firm orders were placed. There was not much time left and the next Course at the Mountaineering Institute was not due to go into the mountains until March. It was, however, a question of the life and safety of the climbers and Sherpas and the reputation of the firm. We accordingly decided to subject the boots to trials in snow. There were also other items of equipment which needed trying out.

A quick decision had to be made to send someone with the boots to a snowbound area, because the manufacture of the boots could not be started until the trial reports were received. Keki, Kohli and Vohra were with me at the time. Keki had to go to Bombay to handle the work connected with the imported equipment, Vohra had already been detailed to co-ordinate the work in Calcutta. Kohli, who was the only one who could carry out this task, had yet to join his unit at Vishakapatnam after the Course. Sanction of his Commanding Officer and Naval Headquarters in Delhi had, therefore, to be obtained. It was decided that the trials should be conducted at Gulmarg because this was the only snowbound area which could be reached speedily. I rang up Mr. Sarin about Kohli; he took the matter up with Naval Headquarters, and within an hour rang back to say that Kohli could go. It was as simple as that!

A few days later Kohli returned after trying out the equipment at heights above 13,000 feet near Gulmarg. He was satisfied with the performance of the boots and the other equipment. As regards the boots we appreciated the fact that a highly mechanised firm like Batas does not normally undertake work of this nature because our boots had to be hand made, but with the help of Mr. M. L. Khaitan, the Chairman of the Board of Directors, this difficulty disappeared in no time.

During my European tour the Swiss Foundation for Alpine Research in Zurich and the French Mountaineering Federation had offered all help we needed for our Expedition. We took advantage of this promise whenever we were in difficulty. However, when I wrote to them later that we had planned to make our own equipment in India for the Expedition they were naturally a little sceptical. A sympathetic friend from Zurich who had been associated with organising similar expeditions for many years wrote as follows:

> ".... I have been going through the papers you left here concerning the Indian Everest Expedition and the list of equipment you propose manufacturing in India, and the more I read the more my hair stands on end....
>
> .... As you will surely meanwhile have realised yourself the project of manufacturing your own equipment by next January and using it on Everest, aims far too high to be reached within so short a time....
>
> .... We cannot judge the situation in India, of course; that is where you must come in to complete the picture. We only know that even if the whole Expedition were equipped with European material, orders would have to be placed latest by the end of October, and this with manufacturers who have everything ready and working smoothly; stocks, suppliers, staff, machines and experience of years. We do not quite see how it will be possible in India even with the best will and the highest skill, to catch up with all this in such a short time. These doubts apply above all to specialised equipment and metal articles which have to be cast. If you can do it, however, and perform the miracle, we shall be the first to truly value and admire the unique achievement...."

We had accepted the challenge. The miracle had to be performed before February, 1960.

The Government Harness and Saddlery Factory in Kanpur had to manufacture a large number of items, including Meade tents, ice-axes, sleeping bags and rucksacks. The Ordnance Clothing Factory at Shahjahanpur was given the task of making feather garments, windproof suits, caps, mittens and camp boots. While actual fabrication was no problem to these factories because they had the craftsmen for this kind of work who were as good as any in the world, the question of appropriate materials to be used posed numerous problems. Eider-down feather for sleeping bags and other special garments had to be imported. Quite a number of fabrics which had to be windproof and of a special specification to prevent the fine down-feather from leaking had also to be procured from abroad. Indigenous alternatives had to be tried out wherever feasible.

Kumar, who had considerable experience of mountaineering equipment, happened to be in Mathura, not far from Kanpur and Shahjahanpur, and he was asked to attend to the work in these two factories. He had to make numerous trips to Bombay, Kanpur and Shahjahanpur to solve hundreds of problems connected with these very important items of equipment.

As the special fabrics and consignments of feather arrived in Bombay, they had to be sent to the factories without delay. The Customs authorities, who had been told of the urgency of the matter, were extremely co-operative.

Kohli's trial report promptly reached the Ordnance factories, but some components like zips and materials came late. This meant that the factories had to work overtime, which they did without hesitation. No one grudged the long hours. They even departed from government procedure in some cases, and I hope that the audit authorities do not read this portion of the book!

Bombay was a centre of intense activity. On account of his heavy professional work, Keki was burning midnight oil to attend to the procurement of oxygen, some special high-altitude tents, eider-down feather and special fabrics, all of which had to be imported. In many cases, to save time, the material or the equipment had to be flown out.

The Swiss Foundation for Alpine Research in Zurich co-ordinated most of the work of obtaining material in Europe. When we ran short of foreign exchange for oxygen, owing to

increase in prices, this organisation sent us a gift of oxygen bottles valued at approximately three thousand rupees.

The French Mountaineering Federation in Paris was equally helpful and negotiated with numerous firms on our behalf and obtained special concessions for us.

For weeks there was a constant stream of telegrams, letters and trunk calls over the hundred and one problems that cropped up as time went on.

During one of my trips round the country, I was in Delhi. I was woken up at about one in the morning by my sister-in-law who told me that there was an urgent telephone call from Kumar. When I went to the telephone, Kumar said that he had received a trunk call from Keki in Bombay. Certain snags had cropped up with regard to the delivery of specialised fabric. Keki wanted the Leader's decisions about changing the specifications. During a long telephone conversation, a number of alternatives were discussed and decisions taken. When I told my sister-in-law with whom I was staying that the telephone call was about some vital equipment she admonished me for not waking her up to put her in the picture. "Look at all the worrying hours I have lost", she said.

Back in Bombay, with the kindness of the Naval authorities, Kohli had been permitted to establish a well organised office in the Naval Barracks. He was assisted by Chief Yeoman of Signals, K. P. Sharma, who in addition to being a good office organiser was also a keen mountaineer, having reached the peak of Nanda Kot with Kohli in 1959. Besides being responsible for the local purchase of stores, Kohli had to maintain statistical data and charts showing the procurement of equipment and stores as well as the position with regard to the budget. He had to send periodical reports to the Sponsoring Committee in Delhi and the Leader's headquarters in Darjeeling. Jungalwala later joined Kohli and his help was invaluable in contacting numerous firms and shops for indigenous equipment.

The task of collecting medical supplies and surgical instruments was assigned to our physiologist and doctor, Das. The Director General of Armed Forces Medical Services and other Services medical authorities in Delhi gave all help by way of advice. They also loaned equipment which could not be obtained in India.

While most of the members drove themselves hard to keep the time schedules laid down, Mr. Sarin in Delhi had also to share a considerable part of the burden. I had seen him work under great pressure in his day to day routine. Even so he was never too busy to attend to the numerous problems of the Expedition that were put up to him. He gave every member his unstinted support to overcome any obstacle that came our way.

I had to make frequent trips to Calcutta, Bombay and Delhi and work on strict schedules. Towards the end of our preparatory period, as many as 50 to 60 letters and up to a dozen telegrams would be awaiting attention when I arrived at a place. As I did not have the luxury of a secretary travelling with me, I had to resort to scribbling replies on the margins of the letters themselves, and I am glad to say that no one took offence at this.

While I was beginning to feel the pressure of work myself, I knew that some of the other members were perhaps subjected to heavier strain. I was, therefore, anxious about their health. We did not wish to flog ourselves during the period of preparation so much that we were completely fagged out when we went to the mountains.

I, therefore, addressed a personal letter to all members to pay particular attention to their health. This is what I wrote:

INDIAN MOUNT EVEREST EXPEDITION
Camp: Bombay
19th January 1960

My dear—

The doctor's appreciation of the medical cover is attached for your information. Amongst other technical details given by the doctor, may I ask you to do the following?

(a) Have yourself checked up medically, preferably by a specialist where possible. Particular stress should be laid on fitness with regard to throat, bronchial and respiratory troubles, teeth, ears, sinus, stools and any other pet ailments that you may have.

(b) If you are fond of your bottle, please put it away for the time being. I have stopped drinking myself.

(c) If you are a smoker, perhaps it would be unkind to ask you to stop it completely, but I would advise you to

reduce it by resorting to chewing gum or some other device. Will power is perhaps the best answer.

(d) Keep yourself fit by regular exercise. If you have the time, I would strongly recommend that you take long walks, preferably carrying a rucksack with at least 30 to 50 lbs. in it. I started my New Year with a resolution to take daily exercise of this nature, and have, for the last fortnight, been walking 2 hours a day with 56 lbs. in my rucksack; I feel fitter than ever before.

(e) The doctor tells me that deep breathing exercise is very good, particularly nasal breathing. Please practise it. May I also suggest that while walking you practise co-ordination of breathing with your pace? You will find this very helpful during the climb.

You should be protected against typhoid, smallpox, cholera and tetanus. We shall arrange for anti-tetanus and cholera injections when we assemble on the 20th February. But if you have not had T.A.B. within the last one year and vaccination within the last two years, please have these done now. Please send the dates of your last T.A.B. and cholera inoculations and vaccination to Capt. S. K. Das, Himalayan Mountaineering Institute, Darjeeling, together with your medical report.

Yours sincerely,
GYAN SINGH

Rajendra Vikram Singh, being the scientist member of the expedition, was assigned the task of checking the scientific equipment like oxygen and transistor radio sets. He had also to go to Kathmandu in early February to make arrangements for the enrolment of high-altitude Sherpas. There was some difficulty regarding Darjeeling Sherpas because, according to the rules of the Government of Nepal as well as the Himalayan Society of Nepal, only Sherpas residing in Nepal could be employed on expeditions in Nepal. However, with the co-operation of the officials of the Government of Nepal and the Himalayan Society, the problem was resolved amicably.

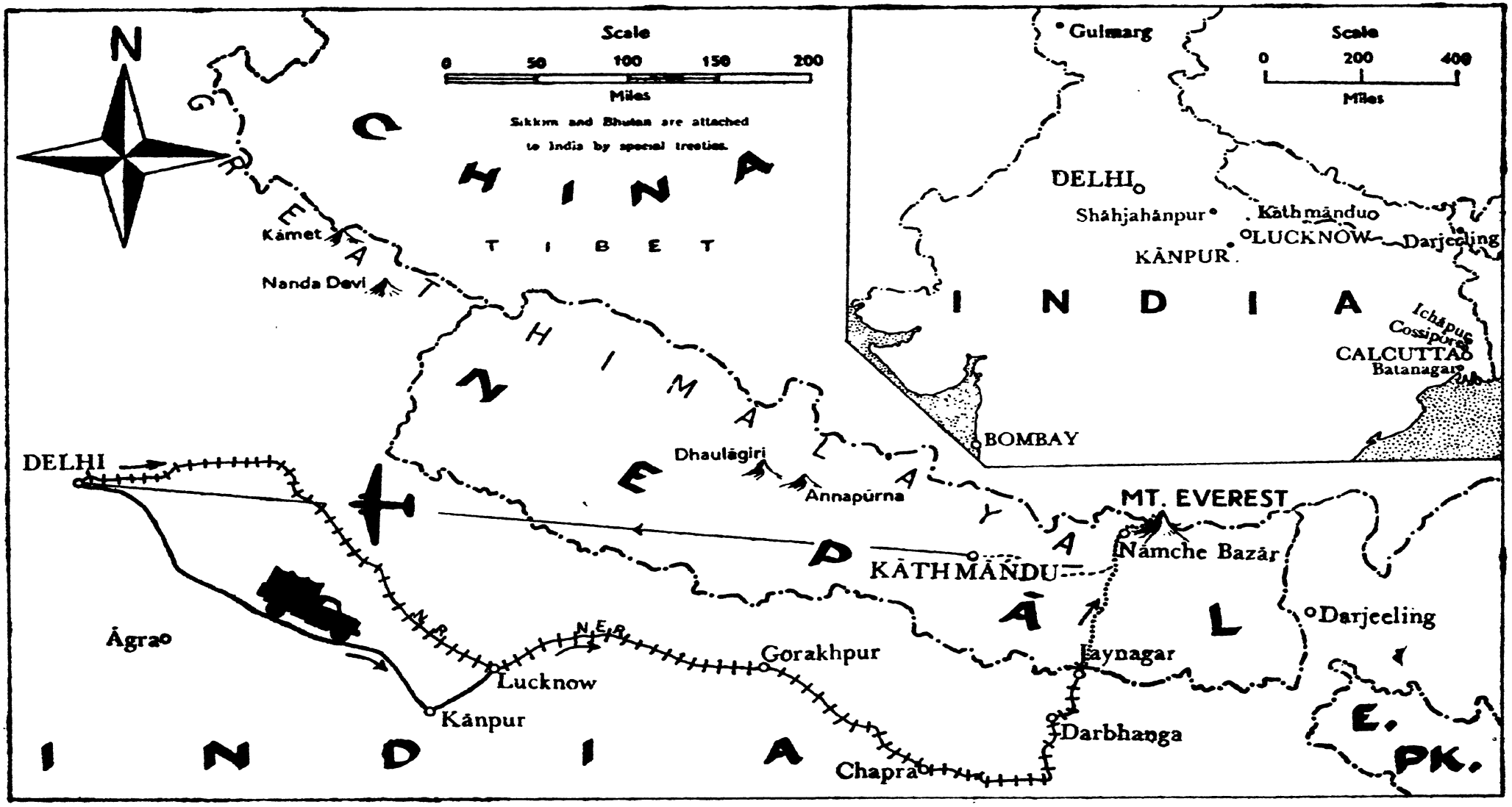
Towards the beginning of February the tempo of work in all the centres had gone up considerably. The target date, 20th February, 1960, for collection of men and material at Delhi was

fast approaching. The Sponsoring Committee had to worry about finding suitable storage space for the hundreds of packages that would start pouring in from the second week of February onwards, and also housing the members. Mr. Sarin fixed this up with Gp. Capt. S. W. Bobb, the Air Force Station Commander in Delhi. Gp. Capt. Bobb made available five or six rooms for the stores and enough accommodation for the members at the Central Vista Mess.

All members, except the geologist and Rajendra Vikram, who was in Kathmandu, arrived in Delhi by the scheduled date, 20th February. Some members had to come much earlier because the finished equipment and other stores had already started coming in. By the 15th February there was a stream of packages, parcels, stores, rations and foreign goods arriving at the Central Vista Mess, and soon all the rooms allotted for storage and the spacious verandahs of the building were littered with the packages, which had to be opened for a check-up and re-packed. At this stage our packing office presented the spectacle of a confused mass of clothing, equipment, cooking utensils, rations, ropes, tents, rucksacks, oxygen equipment and packing cases.

A complete packing plan had been made for separate items of stores and equipment required for various stages of the Expedition. Groups of serial numbers had been given separately for equipment, rations, oxygen apparatus, medical stores, etc. Also, different colours were allotted for different stages like approach march, acclimatisation period, Base Camp and higher camps on the mountain. The members were divided into different groups, each group knowing exactly what it had to do with regard to the stores or equipment for which it had been made responsible.

Das and Bhagwanani, the two doctors, got all the medical stores and medicines together. More than three hundred packages of composite rations had to be packed, in addition to the bulk rations for our three months' stay in Nepal. We knew that we could not depend on local purchase very much once we got into the interior of Nepal. Kohli, helped by Jungalwala, Chowdhury, Sonam Gyatso and Ang Temba, was assigned the duties of Quartermaster. By the time the packing machinery was put into operation the packages not only occupied the whole of the space allotted to us, but had overflowed into the many verandahs of the Mess.



The route from Delhi to Namche Bazar and back

Rajendra Vikram and Grewal checked and packed part of the oxygen equipment which had arrived. Grewal was sent to Calcutta to get 8 oxygen bottles (5 Swiss and 3 French), which were used during the Pre-Everest training, recharged by Indian Oxygen Ltd. There he was told that since the mountaineering oxygen bottles were not normally charged by them the special permission of the Chief Inspector of Explosives in India was necessary. He finally obtained permission over the telephone and the Indian Oxygen Ltd. undertook the work that very day. At the time of inspection of the oxygen which was already inside the bottles, it was found that there was moisture in some of the bottles. It was a serious matter.because the presence of moisture at low temperatures would have caused freezing inside the bottles. Grewal immediately sent a cable to the Swiss Foundation requesting them to ensure and confirm that the fresh consignment of oxygen bottles under despatch was moisture-free and contained high-altitude oxygen.

The next day Grewal reported to me in Delhi, and within a few hours he was made to fly back to Calcutta with two new bottles out of the partly received oxygen consignment. On inspection, it was found that they were free of moisture and I heaved a sigh of relief. Subsequently, it was confirmed by the Swiss Foundation that the bottles supplied earlier for the Pre-Everest training were filled with hospital oxygen due to the shortage of time, and that the fresh supply had been thoroughly checked to be moisture-free. Grewal was then sent to Bombay to make arrangements to collect, inspect, and bring the bulk of the oxygen bottles and other foreign consignments which were due to arrive about the middle of March.

Meteorological equipment, signals equipment and office equipment including stationery and postage stamps for the members and Sherpas had to be checked and packed by Rao, Nanda and Sohan Singh. Gopal had to make sure that all necessary photographic equipment, both for movie and still photography in black and white and colour, was got ready.

On the morning of the 27th of February, nearly 600 packages were laid out on the lawns outside the Mess for a final check. In the afternoon the packages were loaded on four large trucks to transport them by road to Lucknow. The same evening the small convoy moved to Lucknow under Nanda.

The 27th February was a Saturday. We felt greatly relieved and looked forward to some relaxation during the weekend. After the hectic excitement of getting things ready, we felt that we deserved it. On the 28th February we assembled after lunch for a couple of hours to tie up various loose ends and to close the packing office.

At about three in the afternoon when most of the members had already gone home, my brother and his wife dropped in at the Central Vista Mess. My sister-in-law handed over a telegram to me. After reading the telegram I asked them to sit down for a few minutes and went out to see if I could find any of the members. I saw Jungalwala and Chowdhury some distance away making plans for the evening. As we all walked into the office again I told Jungalwala to arrange for a truck and Chowdhury to bring a taxi. My sister-in-law was looking anxiously at us. I could see that she was worried; so I asked her to have a cup of tea, but she sensed that something was wrong. I read the telegram out to her. It was sent by Nanda from Sikandrabad and read:

> "One truck overturned twenty miles from Delhi. Require (a) one truck (b) one member and some labour. Leaving Jagdish with vehicle. Self proceeding Lucknow. Most boxes broken."

We wondered if this was the truck which contained delicate equipment like wireless batteries and oxygen apparatus. I could not hang back so we left my brother and his wife and within an hour were at the scene of the accident. On the way Jungalwala and Chowdhury informed me that they had arranged to entertain some friends that evening and hoped that they would be back in time to keep the date.

We found the truck lying upside down on the side of the road with its four wheels in the air. Young Jagdish, an ex-student of the Mountaineering Institute, who was helping us in our preparation, was standing guard like a sentry with ice-axe in hand. The driver of the truck and his companion were fast asleep under a tree. We were relieved to find that the truck contained only food packages which were buried under the truck, and quite a number of them were smashed while most of them were badly damaged. Tins of food, rice and various other provisions lay scattered round the vehicle. We tried to remove the packages but found that they were badly pinned down, and had to spend

nearly five hours to patch up the damaged packages and reload them in the truck we had brought with us.

It was about ten o'clock at night when we said goodbye to Jagdish. Jungalwala and Chowdhury were naturally disappointed at having missed their date.

The following day some superstitious friends expressed concern at what they called the bad omen. But my mother laughed it off and recalled that, on the day I left to join my unit for the first time in September 1936, the *tonga* carrying my luggage had also overturned. "This small mishap did not stop my son from rising from a sepoy to a Brigadier". She smiled and blessed me saying that all would be well.

The next two days in Delhi we spent in the Government of India offices bidding farewell to many of our well-wishers. We met the Prime Minister, the Defence Minister, the Minister for Scientific Research and Cultural Affairs, the Minister for Education, the Chief of the Army Staff, and members of the Sponsoring Committee. They all wished us godspeed.

The Expedition members left for Jaynagar by train on the evening of the 2nd March. I had to go to Darjeeling to collect a few items of equipment from the Himalayan Mountaineering Institute. After a touching farewell from the staff and my family, Tenzing and I left Darjeeling on the 4th March to join the rest of the team.

When we arrived at Jaynagar the place was bustling with activity. A gathering of nearly 700 Sherpas and porters, and nearly twice as many spectators, presented a scene similar to that of an Indian fair. We were met at the railway station by members of the team, local officials who had been tipped off by Mr. Sarin, and a number of press photographers. I was glad to find that all the baggage and the high-altitude Sherpas and porters had arrived on schedule.

There was a lot to do for everyone. The porters had to be registered and paid advances, loads had to be allotted to the porters, and mountaineering kit had to be distributed to the Sherpas.

Sonam Gyatso had arrived with more than one hundred thousand rupees in Nepalese currency. Thanks to our Embassy in Nepal, he had not only got the money exchanged in Kathmandu quickly, but was provided with an armed escort to Jaynagar.

The Embassy also sent an officer to Jaynagar to assist us.

We were glad of Tenzing's presence amongst us. His way of handling the Sherpas and organising the porters was a treat to watch.

For the approach march we decided to split up in two parties. A train of nearly 700 people was too big to control, and it would have been difficult to find camping sites to accommodate such a large number. Most of the climbing members were in the first party which included Dr. Das; and, Jungalwala was asked to lead the second party with Dr. Bhagwanani in it.

During the day Tenzing got the Sherpas together and gave them a pep-talk. He also talked to the members of the Expedition. He was very satisfied with the hard work done by the members. For him a dream had come true. There was an all-Indian team going to Everest. He stressed the importance of team spirit and exhorted them to do their best. He also said that the final outcome would depend on the weather and luck.

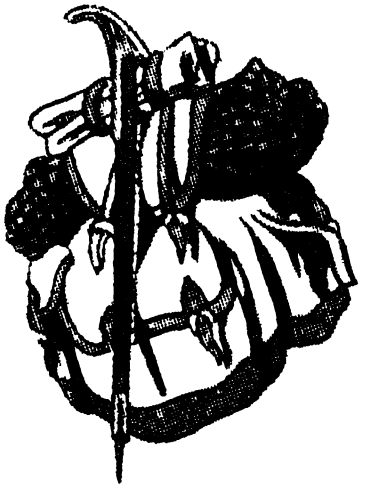
At last the drudgery of planning, months of hard work, moments of anxiety and working against time were behind us. The following day we were to start on our trek and we looked forward to one another's company for the next few months.

Some members and Sherpas were still busy finishing their last-minute packing under the light of Petromax lamps. Jaynagar was quite warm for this time of the year. As I lay on my air mattress in the verandah of the Rest House, I thought of all the people who had helped to make the Expedition possible. From the very beginning we were conscious of our mission, but it was encouraging to be associated with such a venture and to find that people from different walks of life—Ministers, Government officials, businessmen, industrialists, Service officers and even clerks, typists and peons—considered it a matter of pride to do their bit for the Expedition. Throughout the period of preparation we did not come across any person whose eyes did not sparkle with excitement when he came in contact with us. It was this spirit of unstinted support from all quarters that achieved the almost impossible—getting the men and material ready in such a short time.

My thoughts were distracted by the loud snoring of a press representative who had come all the way from Kathmandu to cover the Expedition's entry into Nepal. Just then a telegraphic

messenger handed me the following message from our Sponsoring Committee, a very touching gesture :

"On the eve of your departure for Nepal, we would like you to know that not only we, not only your families and friends, but all India will watch your progress with the greatest interest. We wish you godspeed, all success and a safe return".



All the roads of our neighourhood were cheerful and friendly, having each of them pleasant qualities of their own; but this one seemed different from the others in its masterful suggestion of a serious purpose, speeding you along with a strange uplifting of the heart.

KENNETH GRAHAME

V

THE MARCH BEGINS

IT was the 6th March, 1960. There was an air of excitement in Jaynagar on this day. Tenzing was allotting loads to the porters and giving a final briefing to Sherpas. The members of the Expedition, Sherpas, porters, press photographers and hundreds of local residents were jostling around in the fenced compound.

As we gathered outside to move, Tenzing came up and brought a number of *Khadas*, the traditional scarf, draped on his left arm. He approached me, and putting a scarf round my neck and embracing me affectionately, whispered in my ears, "Best of luck, Bhayya".

There was a *Khada* and handshake for every member of the Expedition and every Sherpa. He stressed the importance of approaching the mountains with friendly respect for the people and their local customs and traditions. He said he was very happy to see such a fine team. As he finished he gave me another scarf, "Take this from me to Chomolungma, Bhayya", he said, with emotion.

By this time there was a general melee in the compound. There was profuse garlanding and handshaking. A number of photographers with cine and still cameras were busy taking pictures. We were told by a local Government official that half of Jaynagar was waiting for us at the border to give us a send-off. We marched through the dusty roads of Jaynagar for nearly three quarters of a mile and came to an embankment on the border of India and Nepal. A gaily decorated arch with the Hindi words *Ap ko safalta ho*, meaning "May you achieve success", had been erected. From a distance we could hear trumpets,

conches, *shahnais*, and the beating of drums. We were all profusely garlanded and the *tilak*, a sacred mark, was applied on our foreheads, accompanied by the chanting of holy *mantras* by a priest.

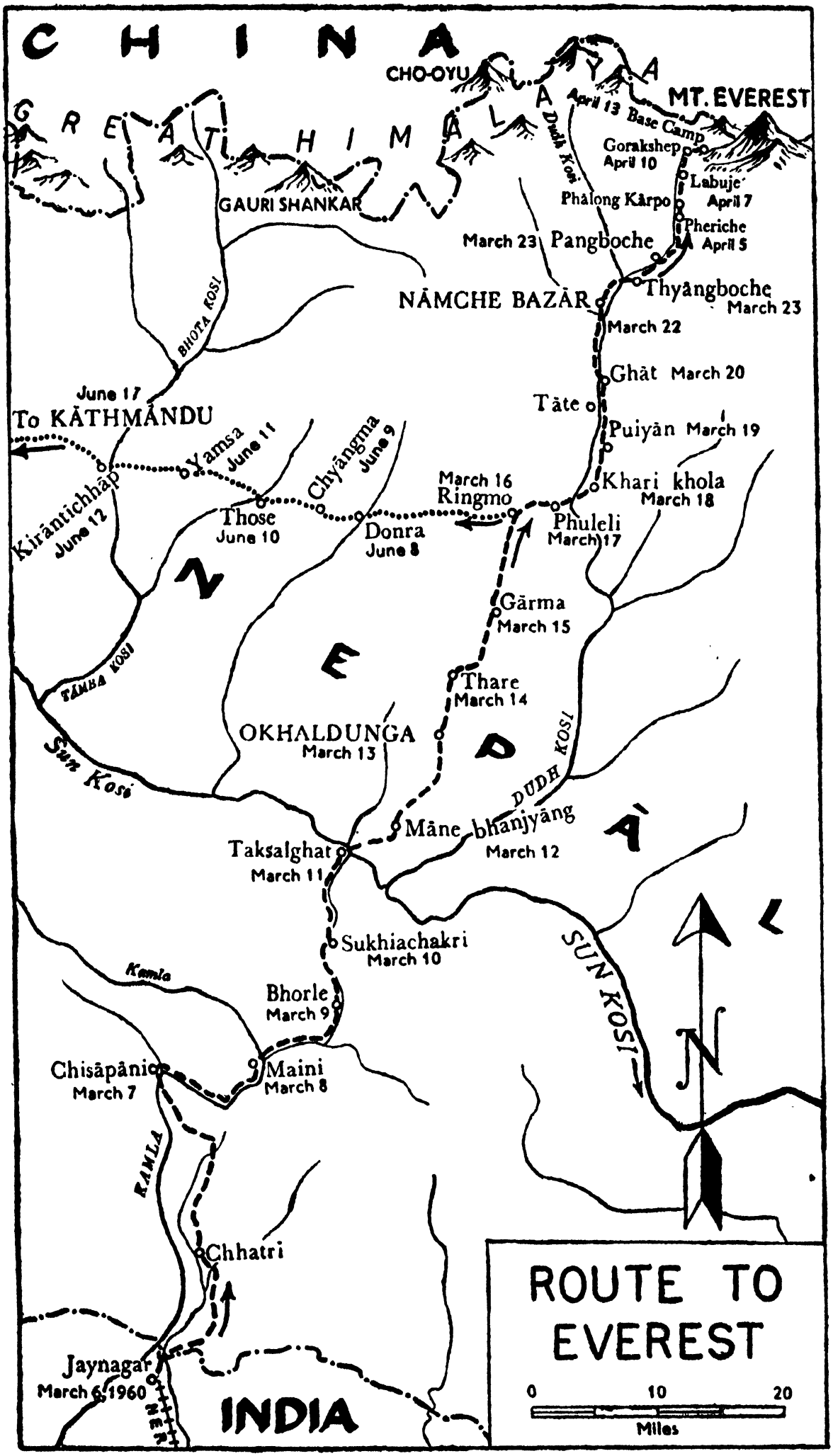
A little girl did *Arati* with an earthen lamp placed on a tray which had a map of India and Nepal, showing Everest and our route done in variously coloured vermillion powder. Another young child garlanded us again, repeating *Ap ko safalta ho* each time.

There were more garlands, bouquets, shaking of hands and expressions of good wishes. The cameramen were trying to elbow in and push people aside to take pictures. Rajendra Vikram carrying the small portable tape recorder was busy recording his running commentary and the sound effects of the ceremony. He would occasionally come to one of us and ask how we felt. There would be some incoherent words; we were so worked up with emotion. At last it was all over and we thanked the people of Jaynagar for their warm send-off, and stepped into Nepal. Excitement was visible on every member's face.

Press photographers sprinted forward into Nepal for their last snapshots from vantage points. We had gone only a few yards in Nepal territory when a very polite customs officer of the Government of Nepal approached us. He was most apologetic for interrupting us and finished the customs formalities in a few minutes and let us proceed.

The porters, including about fifty Sherpa women in their colourful dress, high-altitude Sherpas and members of the first party poured into Nepal through the narrow defile of the archway and fanned out. They were all excited and stepping out fast. A final goodbye to the press photographers and we were off in a stiff breeze, through low, flat country, away to the north towards Everest. Sonam Gyatso was marching by my side, and as I looked at him, I found him lost in thought and muttering some prayer.

For quite some distance we walked along the banks of the river Kamla. After about an hour's march some of us halted for a few minutes. I took out from my rucksack a coconut and other offerings which my wife had given me before I left Darjeeling. Wading knee-deep into the river I consigned the flowers, coconut and all in the stream and watched them being carried away by the swift current.


CHINA
GREAT HIMALAYA
CHO-OYU
MT. EVEREST
April 13 Base Camp
Gorakshep April 10
Labuje April 7
Phalong Karpo
Pheriche April 5
March 23 Pangboche
Thyangboche March 23
NAMCHE BAZAR
March 22
Ghat March 20
Tate
Puiyan March 19
Khari khola March 18
March 16 Ringmo
Phuleli March 17
Garma March 15
Thare March 14
OKHALDUNGA March 13
Mane bhanjyang March 12
Taksalghat March 11
Sukhiachakri March 10
Bhorle March 9
Maini March 8
Chisapani March 7
Chhatri
Jaynagar March 6, 1960
INDIA
GAURI SHANKAR
BHOTA KOSI
To KATHMANDU
June 17
Yamsa June 11
Chyangma June 9
Kirantichhap June 12
Those June 10
Donra June 8
TAMBA KOSI
Sun Kosi
DUDH KOSI
SUN KOSI
Kamla
RAMLA
NEPAL
N
ROUTE TO EVEREST
0 10 20
Miles

We passed through fields growing wheat, gram and millets, waded across a number of streams and went through many villages. After about six hours' march we reached our camp site near the village of Chhatri situated in a low-lying open area on the north bank of the river.

After dinner that evening I went into the big mess tent to see how everyone was, and I noticed that a game of bridge was in progress. Kohli and Rajendra Vikram were busy in one corner recording songs and stories from different members on the tape recorder. Sonam had fallen asleep and soon offered a recording of his snores.

That night it thundered violently and there was a heavy downpour. Next morning the whole place appeared to be flooded but the tents had not leaked and everyone had a comfortable night. It was still drizzling when we got up.

Although we did not expect to get any breakfast under those conditions, Thondup, our head cook, soon served an excellent breakfast. The porters had gone to the village for shelter, so we were late in starting. Finally we got off at 9.30. On account of heavy rain and flooding no tracks could be seen, so we walked in single file along the rice field embankments which made our progress slow. We did not seem to be going in any particular direction as we followed the zigzag embankments. Local villagers' guess of distances was as unreliable as our own estimate.

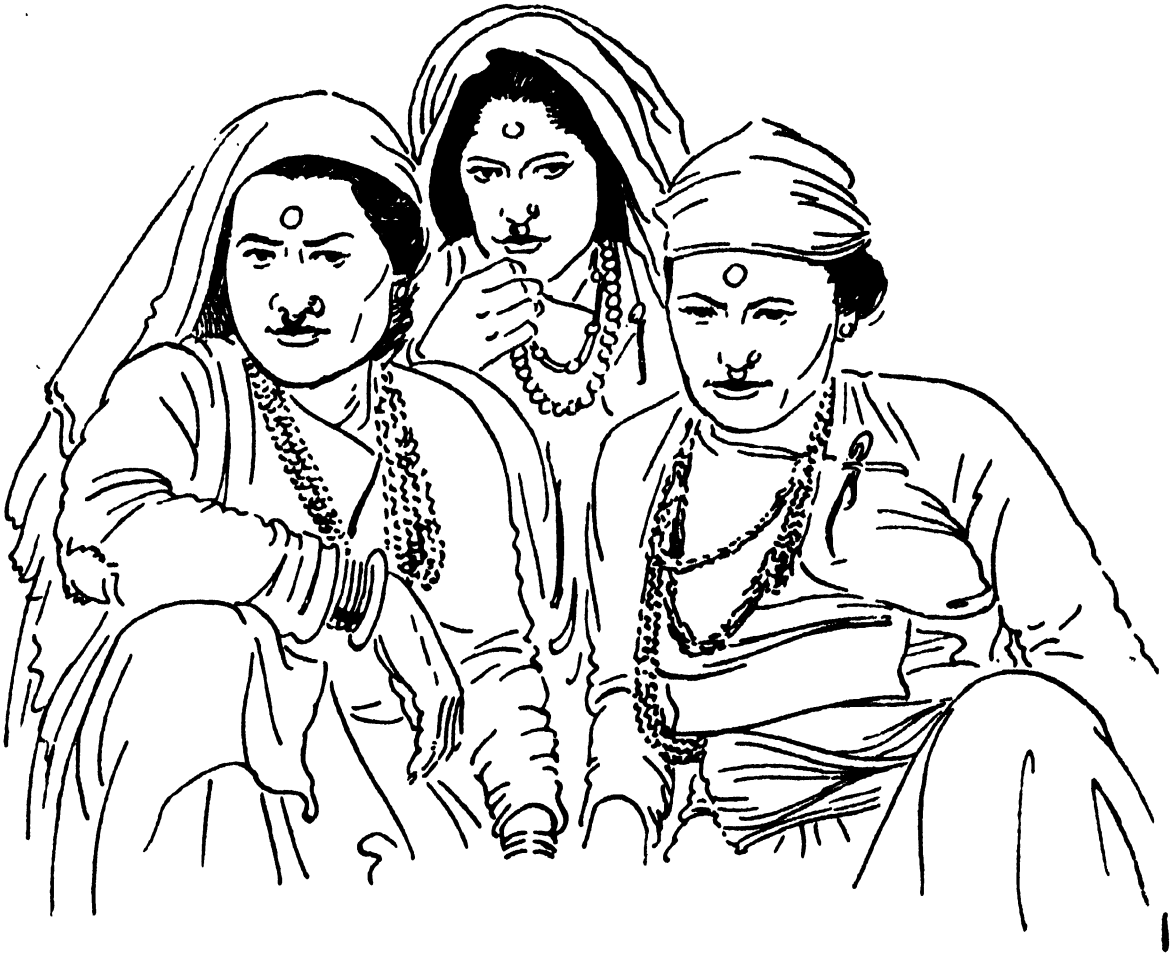
We went through many villages along slushy, dirty roads. Reading the map was a bit difficult here on account of poor visibility and absence of prominent landmarks. Some very large villages were not even marked on the maps; obviously they had come up after the Survey maps were last made.

Throughout that day's march we could see the range of hills in front of us and were anxious to get into the mountains. After marching for what seemed a very long time we found ourselves near the foothills. From a distance we could hear jungle fowl and partridge calling in the wooded hills. As the sun went down we passed through a gap in the hills and after walking for about half a mile we marched into an open space with the river flowing down from the north into the plains. Across the river there was a big prosperous village called Chisapani. The porters hurriedly dumped their loads at the camp and ran

across to the village, which was the biggest market-place in the area, to buy provisions.

This was the second day of the march and a long day over very wet tracks, and some of us limped into the camp. There were blisters on many a foot and the poor doctor had a busy time dressing them.

Within half an hour of our arrival the dinner whistle went. As we gathered round the kitchen tent we expected no more than some hurriedly cooked food, but Thondup again produced a delicious chicken curry, vegetables, *dahl*, and fragrant *basmati* rice. There were plenty of pickles and *chutneys* and butter-*ghee*. Somebody remarked, "I bet the folks back home are thinking of poor us, roughing it out in the wilds."



During our planning we had decided that on the approach march we must be fed well. Appetites were good and we meant to build up a reserve of energy and vitality. We knew that when we reached the higher altitudes it would be a question of forcing oneself to eat.

Our route next day lay through wooded country on undulating hills. On the way Chowdhury, or Chow as everyone called

him, sighted a sleek looking snake on a tree. He swore it was highly poisonous: "looks dicy to me", was his schoolboy way of expressing it. Sohan, who had heard a lecture on snakes at the Haffkine Institute, wisely declared that ninety per cent snakes were non-poisonous. He also propounded the theory that if the indiscriminate killing of snakes was permitted, it would result in the whole earth being overrun by frogs.

It was hot and sultry and heavy going as we moved through the sandy patches in the jungle. At last we reached Tawa Khola, a fast flowing river with a stony bed, running across our track. We took our boots and socks off to wade across. We were beginning to get used to this drill. Kohli had a touch of diarrhoea that day and so Kumar, like a good samaritan, offered to take him across on his back. As the water was nearly thigh-deep in some places it was a difficult and risky business, but the 'bull', as Kumar was called, was known to be tough.

A number of members who had crossed the river earlier got their cameras ready to click in case of a fall which appeared to be certain. It was touch and go in one or two places. Kumar played up to the expectant photographers a couple of times and pretended to lose his balance. Poor Kohli, however, white-faced, clung to the 'bull's' neck for dear life.

On arrival at the camp we found that the signal detachment had opened up the wireless set and by 3 p.m. had established communication with Kathmandu. We transmitted our up-to-date report. There were three or four telegrams wishing us godspeed and a safe return.

That afternoon in camp Kumar decided to perform the cowboy act. He persuaded a villager to let him ride his pony. He commenced to show off his equestrian skill, but much to his disgust and everybody else's amusement, he found that the horse did not co-operate. His body swayed with uplifted arms like a bird about to take off, and the horse's reluctance to respond was quite a treat to watch and attracted much attention. A mixture of trot, canter and gallop were displayed with violent body movements, irregular bumps and a wild swinging of the legs, with the eventual slipping out of the stirrups. We now knew how not to ride a pony.

There was another excellent dinner that night by Thondup, who was a veteran of many expeditions. He was over fifty and

still he was the last to leave and the first to arrive at camp. Thondup was beginning to be a legend connected with Everest expeditions.

The next day's march was through a long open valley in the Terrai foothills. We hadn't gained much altitude yet and it was quite warm. At night and even during the day giant mosquitoes plagued us.

From now onwards we had arranged to have our breakfast after two or three hours' march. We would start early after a mugful of tea and a couple of biscuits and the kitchen party went well ahead. Breakfast was ready when we arrived.

When we reached Amtai, Misra offered to give me the promised hair cut. Although he gave a professional touch to this operation I soon found that actually he knew nothing about it. The obvious result was that I had to have my head clean shaved! As I looked up I found to my horror that practically all the cameras of the Expedition, including the cine, were focussed on my head. Kumar suggested to Misra to take my moustache off too to add a Yul Brynner to the party.

We were anxious to reach the hilly areas. The previous three or four days had been very hot. After crossing nearly two miles of open country interspersed with patches overgrown with tall elephant grass, we reached the hills on the fifth day. We climbed a couple of thousand feet and camped on a low spur of a hill with a river winding almost right round it. Some acrobats had followed us and had their tight rope and other equipment ready even before we reached camp. They gave a not very high-class performance to an interested audience of climbers, Sherpas and porters.

Here I decided to have a look at the second party following a day behind under Jungalwala. Next morning the first party left at seven. Rajendra Vikram, Rai, the liaison officer, and a few porters and Sherpas stayed behind with me in the camp to let Jungalwala and his party catch up with us.

The second party was not expected for a few hours, so I strolled away from the camp for some time. After walking around alone for a couple of hours I sat on a stone which was carved by the flowing water in the shape of a chair. I thought it was a nice place to sit alone and relax for some time.

As I sat there, lost in thought for a long time, numerous ideas flitted through my mind. About the oxygen consignment which

would arrive in Bombay three days later; the 21st Basic Course of the Mountaineering Institute, the season for tourists in Darjeeling and many more visitors to the Mountaineering Institute. My mind drifted to the hundreds of people who were associated with our adventure, our Prime Minister, Mr. Nehru, the West Bengal Chief Minister, Dr. B. C. Roy, men of the Ordnance factories, the Bata Shoe Company, the Bengal Waterproof Works, numerous donors, Members of the Sponsoring Committee: "All India will watch your progress with interest....", I said to myself, and recalled Sir John Hunt's message: "I will be with you every step of the way. There are few things which would give me greater pleasure than that your party should get up."

What a proud assignment, yet what a responsibility! More than seven hundred people and eighteen tons of stores, all meant to put a couple of men on top of Everest!

It was nice to be able to contemplate. That is what is very satisfying about mountaineering. There is time to think. One can afford to indulge in reflection away from the hustle and bustle of modern life, telephone calls, visitors, conferences and meetings, correspondence and files and hundreds of other things. One walks about five to six hours a day, arrives in camp fatigued and hungry. Living conditions may not be good by civilised standards, but then one has to look at a porter woman carrying a sixty pound load and perhaps her small baby. She does not possess an air mattress or a sleeping bag.

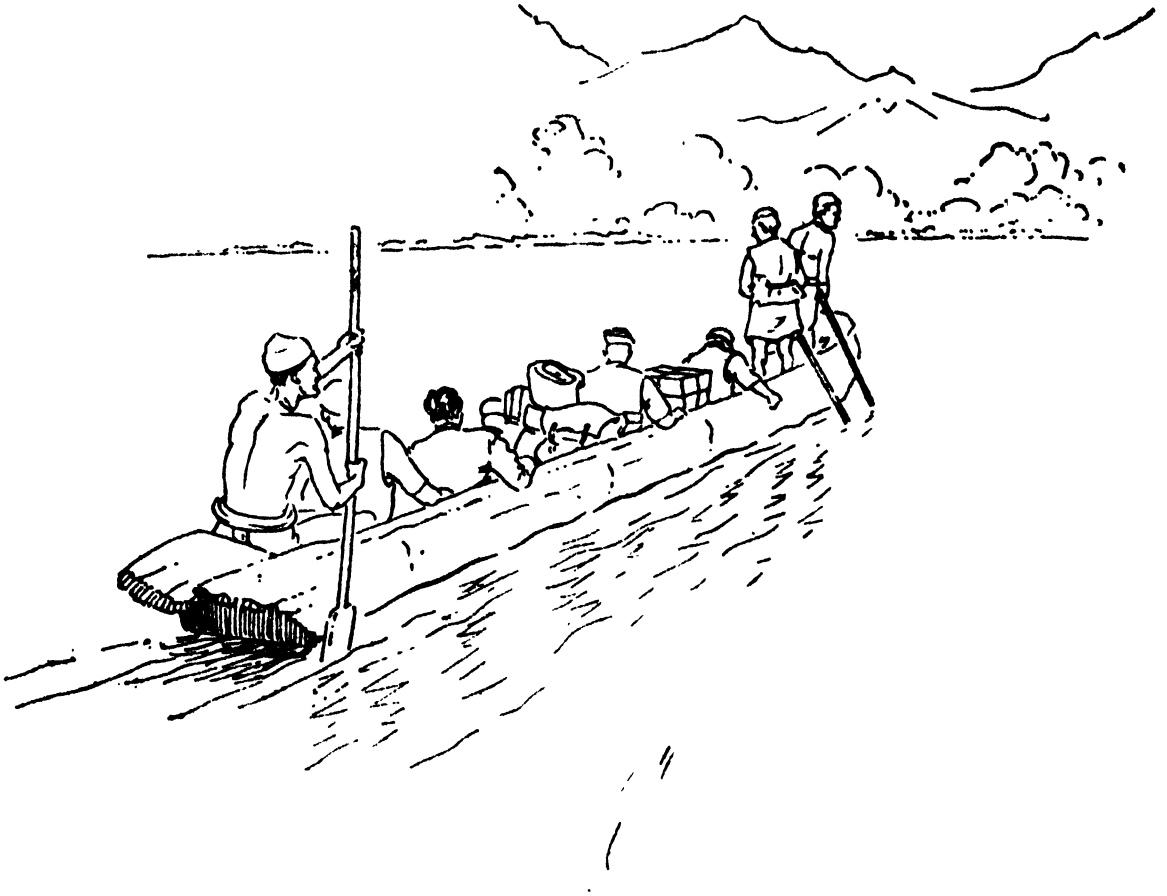
I looked at my watch. It was almost 11 o'clock. I had been sitting there for nearly two hours. It was time for me to go back. As I reached camp I could see the forward elements of the second party arriving. We were soon joined by Jungalwala, Gombu, Bhagwanani, and our meteorolcgist, Rao, in a Hawaian shirt. The party had decided to camp a mile and a half further up.

I noticed that instead of a mixed group, the second party porters were almost entirely Sherpas and Sherpanis from the Solu and Khumbu districts in Western Nepal. In the camp they had settled down in small groups and had started brewing their tea and cooking their meal. As I went round making my acquaintance with them, I found they were cheerful and friendly. Some Sherpas showed their Himalayan Club record books, others displayed photographs given by members of previous expeditions. The Sherpanis in their multi-coloured clothes and Tibetan boots

and the Sherpa porters wearing jade earrings and long hair, made a very colourful gathering.

The doctor at his sick parade dealt with not only our Sherpas but also a host of villagers who had come from long distances to see him. The news of the Expedition's progress spread well ahead of our arrival, and we found as time went on that the number of patients the doctors had to treat kept on increasing.

We were all happy to meet these unspoilt, unsophisticated, simple and sturdy people who laughed at the slightest pretext. They stood in strange contrast to their brethren who had spent some time in the cities, and had tasted modern ways of life.



That evening Rajendra Vikram recorded some Sherpa folk songs on the tape recorder. In the beginning the Sherpanis were a little shy, but later it was difficult to stop them from singing.

As the bulk of the climbing members were in the leading party, I had to join them again. So, the next day Rajendra Vikram and I left the second party behind and stepped out to catch up with the leading group at its next camp.

This was the sixth day of our march. So far we had walked in comparatively flat country. After Chisapani we entered the

hilly region but kept to the low-lying foothills and river beds. Even our last camp was barely 2,500 feet above sea level. The people, their language, their build and their faces were more akin to the Biharis than the Mongoloid features of the Nepalese. But now we were beginning to notice the difference.

Our trek started with a fairly steep climb. Some of the porters had left very early with their loads. The climb seemed to be accentuated by the sight of the porters zigzagging uphill in front of us. It was an eye-catching spectacle, the Sherpa porters in their Tibetan boots and the Sherpanis in their colourful striped aprons.

Throughout the morning we climbed up and down through small villages. Our winding tracks skirted round hills, descended into valleys where the hardy local people were busy ploughing their terraced fields. Every inch of cultivated land had to receive personal attention not only of the farmer but of the whole family.

We were now going through some really beautiful country. The increase in altitude and the clouds made it pleasantly cool for the day's march. I had intended to go fast ahead of the column, but slowed down again to listen to some Sherpas and Sherpanis who, affected by the mountain air, burst out into song. The party of Sherpanis who had sung for the tape recordings the previous evening were marching together and could be heard singing in the distance. So far we had heard their slow-going and haunting devotional songs, but what they were singing now was a marching song.

While we sat down to rest we could hear some village women singing in the slushy terraced paddy fields. Dhanbir Rai told us that the singers improvised their own verses as they sang. According to him this was one of the methods of courtship among young people. The girl starts off by singing some sarcastic remarks about the boy and the boy has to sing back an appropriate reply without much hesitation. So the competition goes on till one or the other loses. Generally the girls are cleverer at the game and are able to have their way. This practice is more common amongst the Newars, but some of the people in eastern Nepal also adopt this method of choosing a mate.

We left Das, the doctor of the first party, to stay behind and took Bhagwanani, the Air Force doctor, with us. Gopal, our photographer, also came up to join the leading party.

On reaching the river Sun Kosi we hailed the boatman from a distance. We looked for the boats but could not see any. On hearing us, three men rushed out of a hut on the other side of the river and jumped on to what looked like a big log of wood. As they rowed across with crude paddles we noticed that the boat was no more than the trunk of a big tree about twenty feet long and four feet in diameter. It had been hollowed out to accommodate the passengers and loads.

As we went on board, the captain of the 'ship', a dark, wiry man in loin cloth, ordered all passengers to fold their umbrellas. It was raining heavily. I hesitated to obey his instructions, but as one of the boatmen pushed against the bank with a log of wood, the craft lurched violently to one side. For a second I thought it was going to turn right over. The captain again shouted something at us in Nepali. I promptly folded my umbrella and took my rucksack off my shoulders in case I had to swim.

Rajendra Vikram was smiling as he watched my discomfiture but the boatmen pushed, heaved and paddled quite nonchalantly. I heaved a sigh of relief when I stepped out of the boat on the opposite bank. When we reached the other side the boatmen told us that the members of the first party had preferred to swim.

The next day's climb was stiff and our progress was slow. Quite a number of people seemed to display more than usual interest in local flora and fauna and often stopped to admire the scenery and talk to the people.

After another hour's march we reached the highest point of the ridge along which we were travelling. Here for the first time we saw rhododendrons in bloom. There was a small forest of rhododendrons covering the slopes on either side of the ridge. The deep red flowers looked like the rubies studded in beautiful Indian jewellery.

Our next camp site at Mane Bhanjyang was on an absolutely flat piece of ground. It looked like a miniature polo ground. It was a good and clean camp site and that afternoon after a heavy tea with *sohan halwa* and some other Indian sweets and biscuits, we played *kabaddi* and football.

At tea-time we asked Vohra, our geologist, how an absolutely flat piece of land, nearly 250 yards long and about 100 yards wide, could appear in a mountainous region. The villagers seemed to have no use for it. In any case it did not seem possible that the

work had been done by manual labour. We had also seen a few other such flat plots at about the same height as this place, but they were not near any village. He thought it must have been the bed of a river. Through some subterranean upheaval, the whole area must have been raised and the ridges had assumed their present shape through centuries of erosion.

Vohra went over the elementary geology of the area. During the first two days of our march from Jaynagar we had passed through alluvium plains. Then, after Chisapani, we entered the low outer ridges of the Himalayas, consisting of sandstone and clay. Higher ridges further north were of dolomite, limestone, silica bands and purple shale. Carbonaceous phyllite, which was also associated with limestone and which was found further north, contained streaks of "fool's gold". Though of no economic importance in the concentrations in which it was found, it thrilled some of us to whom it did not fail to justify its name. The area to the north of Sun Kosi consisted of schists and granite.

We left Mane Bhanjyang on the 31st March, a week after we had entered Nepal near Jaynagar. After a couple of hours' gentle climb on a ridge we came to a place where Thondup and Ang Temba had established a field kitchen to prepare our breakfast of shredded wheat, omelette and tea. Here a Tamang girl came up to us with a pot of milk and about a dozen eggs in a basket. Placing these offerings on the ground she greeted me with folded hands. I was told it was a local custom while welcoming strangers and that she expected nothing in return for this charming gesture. However, we offered her a cup of tea and some packets of cigarettes and five rupees which, after some diffidence, she accepted. We distributed sweets to the many children who had gathered and took leave of our friends.

Sonam told us about another interesting custom in one of the villages. He wanted to buy some goats as well as chicken. He approached the male member of the family who sold him the goats, but said that he had no right to sell chicken, ducks or eggs. According to custom, birds and eggs were the property of the lady of the house, and Sonam had to haggle a second time with the women who were invariably more shrewd than the men.

Our advance party entered Okhaldunga before midday on the 13th March, but the bulk of the party arrived later. *Chhang*

(rice beer) shops on the way proved irresistible to many of our porters, who did not clock in till after four in the afternoon.

As we entered the town we noticed that practically every man's and woman's face was dyed red, and there were patches of red powder strewn all along the stone-paved streets, bearing testimony to the festivities earlier that morning. Everyone looked very gay and happy. It was the second day of *Holi*, the Hindu festival of colour. The Hindu influence was predominant in the town where there were numerous idols of *Shiva* and *Vishnu*. Lines from the Hindu scriptures were written on most of the doors of shops and houses. In one or two shops we could hear a radio playing full blast. Many houses and shops had geranium pots and other bright coloured flowers decorating the windows. Generally the whole town looked clean and tidy.

Next day, after our porters had replenished their rations from the market, we left for our camp called Thare at seven in the morning. After a steady climb for about three hours we descended about seven hundred feet. It was a windy day and as we climbed higher we found the wind blowing more hard and the clouds drifting past us. Quite often visibility was reduced to a few yards. On this day's trek we observed a marked change in vegetation. Rhododendrons were beginning to be more and more stunted and there were fewer blooms. It was only a short march, hardly seven miles, and we reached our camp before midday. After lunch the doctor gave us a talk on the breathing mechanism of human beings.

During the last two days we had met Rais and Limboos as well as Tamangs. Most of the people in these parts follow the Hindu religion, but the Tamangs are Buddhists. After Okhaldunga, Buddhist influence appeared to be on the increase and we came across more and more Buddhist stone structures called chortens, Mani walls, prayers carved on stone, as well as prayer flags fluttering on tall bamboo poles. Reciting "Om Mane Padme Hum", all Buddhist members of our caravan passed the Mani walls leaving them on their right.

Within an hour of our next day's march we came upon a panorama of countless snow-covered peaks. It was a bright and clear day, and the view was truly breathtaking. Every member was hypnotised by the spectacle, and instinctively reached for his camera. There was more film exposed during an hour or so

that morning than for a week earlier. There was a great deal of excitement. We were now in direct touch with the mountains. Survey maps, compasses and binoculars were brought out to identify the many peaks we could see. There were arguments about the names of the various peaks, but we could easily pick out Gauri Shankar, Numbur, Karyolung, Kooangde, Tawache and Everest.

To the east of Everest there were a host of peaks including Baruntse and Chomolunzo in the area of the Arun river and the Barun valley. There were some doubts about the correctness of the maps, but we did not have the means to verify this.

For the rest of that day's journey we wore our gas masks to get used to the discomfort of wearing them on the mountain. In the beginning we found them irksome and uncomfortable but very soon got used to them. In the valleys, when the sun was up, the masks were very uncomfortable and irritating, particularly when perspiration trickled down the face inside the mask. Vohra said it was sacrilege to wear masks when there were such beautiful views to admire.

मरुतः शिवा नवतृणा जगती विमलं नभो रजसि वृष्टिरपाम् ।

Pleasant breeze, green grass-covered earth, clear sky and a slight drizzle on the dust.

'BHARAVI

VI

IN SHERPA LAND

WE crossed a river and noticed that the vegetation of the valley looked very different. It reminded one of Kashmir and Switzerland. We had entered the famous Solu Valley, the land of the Sherpas.

I recalled Tenzing's daughter Pem Pem's words, "Uncle, wait till you see our Solu Khumbu. You will forget Switzerland." We had not seen Khumbu district yet, but Pem Pem certainly had reasons to be proud of her country.

The beautiful green alps, neat houses, well maintained fences, the walled-in fields, cherry blossoms and flowering bushes, and vegetation in all shades of green from pale yellowish to dark brown, made the valley look like a land out of this world. It gave an impression of beauty as well as plenty. Simple people who lived in this serene area went about their daily labours unhurried. They were charming and friendly at all times. Men, women and children stopped to look at us in curiosity, but were not camera-shy when we wanted to take their pictures. Luckily tourists had not yet spoilt this beautiful land. The lack of communications was perhaps a blessing in disguise!

We camped in a beautiful alp. On the slope all round there were scattered Sherpa houses which were neat in construction and generally white-washed on the outside. The ground floor was used for housing the cattle, the first floor was the living room, while the top floor was used as an attic.

As usual, our porters dumped their loads and ran into various houses. Generally they lived in small groups and billeted themselves in the homes of the villagers. These paying guests had to buy the minimum stipulated quantity of *chhang*, or *rakshi* costing not less than one *sukka*, which was a quarter of a Nepali rupee. The guests did not have to pay for their sleeping accommodation or the privilege of cooking on the premises. Each group of porters spent from five to ten rupees per day and shared drinks and accommodation.

The first mail runner from Kathmandu met us here. There were a few letters. We also had a welcome bunch of magazines and newspapers.

The next day the porters appeared to be in a great hurry to move on; they were round our tents almost at dawn and were itching to pick up their loads and go. They wanted to reach the next village, which was a big market place.

Exactly at six the Sardar blew his whistle which was a signal for the porters to collect their loads. The whistle seemed to have triggered an avalanche. The porters swarmed noisily round the heap of baggage, the small mass of humanity converging on to one central point, elbowing, pushing, jostling each other, like bees on a hive. Soon the porters who had got their loads first were seen running away. Within minutes they were all off, hurrying away in the direction of the village, where they hoped to get the best bargains by being the first to arrive. To avoid such stampedes we decided to scatter the loads in future.

On the morning of the 16th March the mail runner left our camp with mail and many still and cine films exposed by the members. The films were provided by the Expedition and those using the cameras had to caption each exposure. The films were then collected and packed and sent to the Sponsoring Committee in Delhi.

Rajendra Vikram had to send the tape recordings also with the mail runner. The Sponsoring Committee had arranged with All India Radio to play back the recordings in the weekly Newsreel programme. Some tapes had already been sent from Jaynagar and we were looking forward to hearing the recordings.

After half an hour's walk we reached the village of Darpu which was crowded to the point of overflowing with the influx of more than 300 men and women porters of our Expedition. All the

porters had arrived in the market town before us and the Sherpas and Sherpanis had crowded into the shops. It was impossible to see what was inside.

I elbowed my way into one of the shops. The shopkeeper, a handsome young man, was selling fur caps, cheap colourful clothes, shawls, Tibetan aprons, broad leather belts with attached wallets, combs, rosaries and numerous other trinkets. Practically every customer was shouting to attract the attention of the shopkeeper. Some Sherpanis were whispering to each other that things were cheaper in Darjeeling.

A Sherpa bought a pair of Tibetan boots. Keki was bargaining for a couple of aprons which he wanted to send as gifts. Bhagwanani and 'Chow' bought a fur cap each, and were seen strutting around wearing them. Another Sherpani was walking away with a folded piece of green coloured flannelette. She was visibly happy as she felt the soft material with the back of her hand. This was a present for her 'Daju' (elder brother).

The shops were no more than small wooden stalls. In addition to the wooden stalls which were occupied by the shopkeepers only on market days, there were a number of big permanent provision shops. In a corner of the road there were villagers who were selling potatoes and rice which they had brought from the surrounding villages.

We had spent more than two hours in this great shopping centre of the area. The Sherpas were reluctant to leave as they wanted to buy gifts for their relations in Namche Bazar and other villages in the Khumbu district where there was no market.

A couple of our members went off to visit a nearby village called Saleri, which boasts of a High School with a staff of three teachers and 45 children. English, Nepali and Hindi are taught in the school, and each student has to pay four rupees per month as fees. The school is run by a *Panchayat* (village committee).

The previous evening Das had sent a note from our second party which was a day behind us. We were glad to hear that he was able to save the life of a man by performing a minor operation in the field. There was a quarrel and this man was hit by a young porter on the head with a stone and might have bled to death. The patient had to be carried on a stretcher, and the porter who had inflicted the injury was made to pay for the stretcher bearers.

There had been three or four other serious cases which were given timely medical attention by our doctors. They had attended to more than four hundred patients in eleven days. All that meant hard work and late hours after a tiring march, but they bore the strain very cheerfully. This was the least we could do in return for the friendship and hospitality of the people we met.

After trekking nearly three miles we reached Ringmo, our next camp, where the track from Kathmandu to Namche Bazar joined our route.

We had gradually climbed up to a height of about 10,000 feet and had camped on another beautiful alp. Even before most of us had reached the camp our wireless detachment made contact

with Kathmandu at three in the afternoon. We received a couple of cheering messages, including one from Mr. Sarin on behalf of the Sponsoring Committee.

In addition to the 'walkie talkie' sets which we were going to use for establishing contact between various camps on the mountain, we had powerful sets for direct wireless communication with Kathmandu. From Kathmandu our messages were sent to Delhi on a similar link, which had been arranged through the courtesy of the Army authorities and our Ambassador to Nepal.

At about 9 o'clock the next morning we reached a pass at 10,500 feet, from where we descended a few hundred feet to reach the famous Takshindu Monastery. We were met outside the building by the Head Lama and other Lamas who brought some potent looking pink liquid in eight or nine small glasses. The strong odour made it obvious that it was not a very well matured *rakshi*. I did not wish to drink, but the ritual had to be performed and I was advised to dip the index finger of my right hand in the liquid and flick a few drops in the air.

Before entering the Monastery a donation book was brought by the Head Lama. We made a token donation and entered the premises. In a small room outside the Monastery we saw a cylindrical prayer wheel about five feet in diameter and about ten feet high. The prayer wheel had leather straps attached to its rim which we held and walked round clockwise turning the wheel as we went. In the courtyard of the Monastery was hung an empty oxygen cylinder of some earlier expedition. This was used by the Lamas as a gong.

We had to climb down a few thousand feet to reach our next camp at Khari Khola which was full of the most gorgeous orchids; on the surrounding hills rhododendrons and magnolias were in bloom. These flowers presented a most colourful sight.

We left Khari Khola at six-thirty in the morning of the 18th March, the 13th day of our trek to Everest. We had to climb nearly one thousand feet and then descend to the river Dudh Kosi. It was a fast flowing river with bluish green water. The thought that these waters came straight from the Everest region thrilled us. Crossing the river on a rickety log bridge took a long time as we had to go over the frail bridge one by one.

That afternoon we received an encouraging message from Mr. Sarin informing us that Grewal was expected in Jaynagar with the oxygen consignment in a couple of days. Little did we know that there was a hitch about the oxygen at the last moment. Grewal had found that on fitting the regulators on the nozzle, there was a leakage in the valve. Mr. Sarin and Grewal had some anxious moments. Two more cylinders had to be sent to Bombay for a further check. There was little time. The commercial aircraft operating on the service to Bombay were not willing to carry material like oxygen which facilitates combustion.

The Air Force was contacted and Air Vice-Marshal Pinto agreed to fly out the cylinders in a Canberra bomber. Within a matter of a few hours the cylinders were in Bombay. The leakage could not be stopped and Grewal again contacted Mr. Sarin in Delhi. Mr. Sarin put him on to the Army Engineers who detected the cause of trouble; after a small adjustment they succeeded in stopping the leakage, and all was well.

And then, there was a complication regarding the despatch of the oxygen cylinders by passenger train. According to Railway regulations, not more than 15 gas bottles could be carried by any one train. An exception could only be made by the Chief Inspector of Explosives. Grewal booked frantic trunk calls to Nagpur to convince the Chief Inspector that the bottles were very safely packed and that there was no danger if the whole consignment consisting of 120 bottles was permitted to be despatched by one mail train. Permission was finally given and the Central Railway was very co-operative and allotted a complete van and detailed one inspector to accompany the consignment to Jaynagar.

According to the message, all foreign consignments had been received, including the transistor radio sets. My first despatch had already appeared in the *Times of India*. The second article had reached Delhi and was due to appear in two or three days' time.

After dinner that evening we held group discussions on our acclimatisation plan. The different syndicates discussed Hunt's and Eggler's acclimatisation programmes before we finalised our own.

The next day's journey was through some of the most beautiful forests we had so far seen. On account of the height, however, the rhododendrons appeared to be a little stunted and the colour of the flowers was of a much lighter shade than the ones we had seen earlier. Crossing another pass from where we could see Cho-Oyu, the Turquoise Goddess, Sonam and Keki nostalgically talked about their expedition to this beautiful mountain.

We had now entered the Khumbu district, and could see that instead of the mellow beauty of Solu, with its gradual slopes, alps and fields, Khumbu looked raw and rugged. Because of the nature of the terrain cultivation was restricted and the people looked poorer. About midday we reached our camp at Puiyan

situated in the midst of a magnolia forest, through which flowed a small stream.

That afternoon we had a full conference and drew out a detailed programme for our acclimatisation training around Pangboche where we were to spend the next three weeks.

As we went through the villages there were scenes of many joyous welcomes and heart-warming reunions. Large numbers of people came out as we passed the villages. The arrival of an expedition was always welcomed because it brought money to the valley.

On the way an old lady was offering free *chhang* to everyone. She was doing this in memory of her husband who had died sometime ago. Many villagers offered us hot boiled potatoes as we went through the villages.

When we left our next camp on the 21st March, we knew we had only a short distance to go because we had decided not to camp in Namche Bazar village. Instead we planned to stay at the junction of Dudh Kosi and Bhote Kosi rivers, a mile and a half short of Namche Bazar.

When we reached our camp at about two in the afternoon we felt a definite nip in the air. Later it became cold and windy and towards the evening we saw the first flakes of snow drifting down gently. This was a signal for us to change our attire. Most of the way from Jaynagar we had been wearing large-brimmed felt hats to protect us from the sun, a cotton sports shirt, a pair of shorts and excellent hiking boots made by Batas. We now took out our heavier climbing boots with hard rubber soles. Hereafter, we would be climbing heights far in excess of 12,000 feet. We took out our woollen clothes, but we continued using the felt hats during the day when the sun was very bright and hot in the clear air of the mountains. In the evenings we wore balaclava caps, jerseys and feather jackets, but we decided not to wear gloves till after the Base Camp.

That night it snowed heavily and one of the big mess tents collapsed on account of the weight of the snow. Six or seven members who were trapped inside extricated themselves with some difficulty and had to find shelter in other tents.

The next morning the Sardar reported that the porters from the plains and foothills would not go further because of the snow. They did not have proper shoes and were not adequate clad for

these conditions. There were nearly two hundred such porters, so we were forced to halt at the camp for a day. The unwilling porters had to be paid off and we sent Sherpas to the various villages to look for new porters. The assignment was accepted willingly, because this was an ideal opportunity for them to go and visit their friends and relations. That afternoon as we finished paying off the two hundred porters the second party caught up with us and camped a few hundred yards behind our camp.

Since we were stopping for the day, we decided to spend it on indoor training, particularly as this was the first time after reaching Jaynagar that all the members and Sherpas were together.

That afternoon we received a message from Delhi which read as follows: "Personal for Brigadier Gyan Singh from Sarin. Meeting of the Himalayan Mountaineering Institute held in Prime Minister's House yesterday. Council was greatly interested in good progress made so far by the expedition. Prime Minister, Dr. B. C. Roy and other members of the Council send their good wishes for success in all your endeavours. Their thoughts will be with you until you return to India". We were thrilled to get the message, but it also made us homesick.

Nanda gave an introductory talk and demonstration on the wireless sets. This was followed by practice in establishing communication and in wireless procedure. Bhagwanani gave an interesting talk on eye troubles, particularly snow blindness, its causes and prevention. Rao spoke about meteorological data and interpretation of weather forecasts.

The next morning, the 22nd March, was the coldest we had experienced since leaving Jaynagar. We were all looking forward to reaching Namche Bazar. After a steep climb we reached the crest of the ridge nearly half-way to Namche Bazar. Here we saw Everest again. It had a heavy snow-drift plume flying like a banner from its top. Nuptse and many other lesser peaks could also be seen from this point.

The track was inclined to be slightly slippery due to frozen snow. The fresh snow on the slopes and on the trees gave a wintery look, but there was bright sunshine and a strong glare.

As we climbed slowly up the steep zig-zag track towards Namche we could see a continuous stream of men, women and children running down towards our last camp in the hope of getting some loads to carry. Some of these people had come from

Thamy, Tenzing's village, and others from even more distant places. Amongst these people I could recognise a number of Sherpas who had, at one time or the other, worked as porters for our Basic Courses in Darjeeling. On seeing me they would stop for a few seconds, smile and say a few words, then hurry down even faster to regain the time lost in these greetings.

We did not see Namche Bazar until we arrived within its own perimeter. Situated in a hollow bowl, it appeared to be completely shut off from view or wind on all sides. The houses were built in rows on the slopes. The place looked like a large amphitheatre.

We called at the house of Mrs. Gyalzen, a distant cousin of Tenzing, who had gone all the way to Jaynagar with her husband who was employed as one of our Sardars. An enterprising lady with tremendous drive, she was a great help to us in controlling the porters in the second party. Mrs. Gyalzen greeted us at the door of her house and led us into the living room. The kitchen and pantry were next door. Here, on a big fire burning under an ineffective chimney, three or four women were busy cooking food, frying eggs and brewing tea. At one end of the room there were a number of trunks and boxes with markings which showed Gyalzen's association as a Sardar or high-altitude Sherpa with the British Everest Expedition, the Swiss Expedition, the Women's Cho-Oyu Expedition, the Yeti Expedition and the Japanese Jugal Himal Expedition. There were many items of equipment like rucksacks, ice-axes, nylon ropes, water bottles, climbing boots, neatly arranged on shelves and hanging on the walls.

The rest of the room looked like a curio shop, with hundreds of odds and ends arranged on shelves. There were attractive brass and copper utensils, some of Tibetan origin, bottles, photographs, mirrors and numerous things collected over the years. The general effect in the room was one of cosiness; but what impressed us most was the warmth of the hearts of the people who lived in it.

Mrs. Gyalzen approached two or three members who were bargaining with Gyalzen about the price of a rug. A girl followed her with a few glasses and a jug of *chhang*. The boys looked towards me and shook their heads with affected deliberateness, as they said something to Mrs. Gyalzen. She came up to me with a glass of *chhang*. I folded my hands and said that I did not wish to drink. But she would not take 'no' for an answer. She signalled to her burly looking sister and these two proceeded to force the drink down my

throat. Embarrassed, I dipped a couple of my fingers in the milky liquid and put it on my lips as a token of having accepted the drink, but that was not good enough; I must drink. The boys were all clapping, they appeared to be quite amused at my embarrassment. Two of them rushed up with their cameras to photograph me being woman-handled. The room was much too dark for photography, but despite this the cameras clicked. In the scuffle some of the liquid went in and most of it was spilt on my clothes.

Their attention was then diverted towards Rajendra Vikram who smiled and said he must have the Leader's permission to drink. I nodded approval but Rajendra Vikram did not seem to need much persuasion, and as Mrs. Gyalzen held the glass to his mouth, he gulped down the drink in one breath. A similar performance was repeated by young 'Chow'.

Later, *thukpa*, a Sherpa dish made with minced meat, rice and spices, was brought in. While we ate, the two ladies sang some Sherpa songs and Rajendra Vikram recorded their haunting music on the tape recorder. After lunch, when we took leave, they were most apologetic about the "poor" arrangements. They wanted to throw a bigger party and how they wished we could stay another day there. This was very typical of the people of the mountains. It was gracious warmth and hospitality with no strings attached!

We had half a dozen similar invitations but had to decline them. However, we had to make some hurried duty calls. All the houses we went to were exactly the same in lay-out as Gyalzen's house. In every house we were offered *chhang*, and as soon as we had a sip from a cup, it was promptly filled to the brim. It was impossible to drink in every house, but Sonam told us we could leave the cup filled to the brim after sipping it three times. It was considered quite the right thing to do.

Our next camp was about a mile and a half short of Thyangboche Monastery. That afternoon we held a conference to discuss the composition of the teams for acclimatisation training.

Ang Temba with Keki, Kohli and Jungalwala were to form team No. 1; Da Namgyal was to lead No. 2 team with Kumar, Vohra and Misra; and Gombu was the leader of team No. 3 with Sonam, Chowdhury and Rajendra Vikram as members. The Sherpa Instructors were chosen as leaders of the groups because of their previous experience—an arrangement which was acceptable to all. Team No. 1 was to be the first to reach the Base Camp which was

to be roughly in the same area in which the British and Swiss Expeditions had established their Base Camps.

The two doctors held a short discussion on dehydration and stressed the need for drinking 8 to 10 pints of water a day during the acclimatisation period, and 10 to 15 pints after the Base Camp.

We had sent word to the Incarnation Lama of Thyangboche and he promised to give us an audience at nine-thirty. It was a clear day and the view from the small plateau on which the Monastery was situated was very striking. Several snowclad peaks towered round the place, with Everest peeping over the Nuptse massif to the north-east. To the right the majestic Ama Dablam looked like a giant tooth reaching out into the sky. As the time for going to the Monastery drew near, all the members got together and rehearsed the ritual of presenting ceremonial scarves to the Incarnation Lama.

After entering the Monastery we went across a courtyard and climbed a flight of stairs to enter the hall at the end of which the Lama sat on a decorated dais waiting for us. Sonam was to be our interpreter while Gombu played the role of master of ceremonies. We approached the benign looking young Lama, barely 26 years old, bowed in turn, and placed the scarf in front of him. He put out his hand and touched our heads in blessing. After that we sat on a low bench on the Lama's right with a long table in front of us.

Through Sonam the Lama told us that he was very happy to see an Indian expedition going to Chomolungma. He recalled Tenzing's visit and the assistance given by Tenzing and the Sherpas of Darjeeling in carrying out repairs to the Monastery. He warned us that the climbing conditions on Everest might not be very good this year because they had a very poor winter. There was not much snowfall and we should expect many crevasses and slippery ice slopes, which would make the task difficult. He stressed that climbing mountains

should be undertaken in the proper spirit and undue risks should be avoided. He added that a good expedition was one in which everybody, after doing his best, returned safe to his home.

The room in which we sat was like the interior of any other monastery. The walls and ceiling were completely painted over with pictures of the Buddha in various poses. There were other sketches and scenes depicting different aspects of the Buddhist religion. On the pillars in front of us there were pictures of the King of Nepal in full regalia and another of Tenzing in Nepalese clothes with his medals pinned on his jacket. The picture of the Dalai Lama had a silk scarf draped round the frame. On shelves in the room there were holy books contained in caskets. There were also statuettes of the Rimpoche, Buddhas and various Lamas as well as some exquisite small images in copper and gold, and two large images of the previous Incarnation Lamas of the Rongbuk and Thyangboche Monasteries. Another beautiful casket inlaid with precious stones held the bones of the last Incarnation Lama of Thyangboche Monastery.

After drinking tea served in delicate Tibetan cups, I stood up and bowed again to take my leave. The Incarnation Lama said that he would offer a prayer every day for our safe return until we came back from the mountain.

It was nearly mid-day when we left the Monastery for our camp near the village of Pangboche. Our track lay through rhododendron, juniper and birch forests. There was still plenty of snow in the forest, which made the track very slippery. We camped in two or three fields enclosed by low stone walls. There was no habitation nearby. The nearest village, Pangboche, was across the river Imja Khola.

We spent the afternoon checking up stores, reorganising the lay-out and paying off most of the porters, which was a painfully slow process. There were many porters of the same name, quite a few had lost their number discs and identification became very difficult, particularly on account of their large number. To add to the confusion some of the porters had inadvertently mixed up their identity discs. I sat at the pay table for a couple of hours and found that there were dozens of Pasangs, and among the women, perhaps as many Phutis.

There were at least six or seven people involved in the paying operation. One man would call out a name and a number, and

after a lot of shouting three or four men would run up and show their numbers to the Sardar who would try to identify the porter and check the number. The porter would then be sent to the first table where one of the members would take his or her thumb impression on the register, and call out the amount of money that was due to the porter. On the second table another member would count out the money and hand it out to the man on his right for a second check. The money would then be counted in front of the porter and handed over to him. The porter would then go to the assistant Sardar who would collect the advances that were paid to the porter earlier. This was a laborious process, but it was essential to satisfy the porters that they had been paid their dues correctly. Even then there would be some arguments. Members were at the pay tables for more than six hours that afternoon, but they could not finish paying off, and there were about 40 or 50 men and women who had to be paid the next morning. The following morning after paying off we selected two hundred porters to ferry our loads to the Base Camp.

That evening I was handed a wireless message which brought the sad news of the death of Thondup's wife in Darjeeling. We all felt very sorry and offered our condolences to him. After he recovered from the initial shock, he came to me with tears in his eyes and announced that he wished to leave. He said he was very unhappy to leave the Expedition even before we got to the Base Camp, but he had small children and there was nobody to look after them. I promised to send a telegram to Tenzing to make arrangements about the children's welfare, but Thondup felt that in this hour of misfortune his place was with his family. We did not wish to persuade him any further although we knew we were going to miss him. Thondup was not only an excellent cook, but was one of God's own men. During my European tour both Hunt and Eggler had talked about him in affectionate terms. His experience and advice on routine administration and selection of camp sites had been invaluable to us. He was popular and respected. Before he left the members made a collection and gave him three hundred and one rupees as a gift. Thondup was the oldest member of our party and with his mature experience and sound judgment he was an asset to the Expedition. We were to miss him throughout the Expedition.

....to climb steep hills
Requires slow pace at first.

SHAKESPEARE

VII

ACCLIMATISATION EXERCISES

On the morning of the 25th March we got all the Sherpas together and checked them against the list sent to the Government of Nepal. We had employed 55 Sherpas, including cooks and Sardars. I gave them a pep-talk. I was glad to see that they felt that our success was their success. The rest of the day was spent in checking up equipment and issuing kit to the members and Sherpas.

That afternoon Rajendra Vikram was asked to give his first introductory talk on the oxygen equipment. We had selected nearly twenty Sherpas for high-altitude work and they were also required to attend the lecture. It was evident that they did not understand any of the technical details. We, however, succeeded in making them familiar with the working of the apparatus. Sonam Girmi, the assistant Sardar, was made to wear the oxygen mask for demonstration. Later, Gombu put on the mask and with the oxygen switched on at four litres a minute ran up and down the hill for a short time. He returned panting and declared that the oxygen was no good. Moreover, the wearing of the mask caused discomfort. Das, our physiologist, carried out some tests on blood and urine and also checked up the vital capacity of all members. He also gave us what he called the mental efficiency test which consisted of doing some very simple addition sums in five minutes. He weighed all the members and found that no one had lost any weight during the three weeks or so that we had been on the march.

In the evening we heard the All India Radio programme covering our departure from Jaynagar, which included my address

to the members of the Expedition at Jaynagar and recordings of interviews with some of the members. We heard Sonam talk about the use of oxygen, and Gombu say a few words about his previous experience on Everest. Misra, a professor of economics, gave his views on the implications of an Expedition of this size for the economy of the people of Solu Khumbu. It was a well presented programme and we all enjoyed it.

On the 26th March the first ferry party of 200 porters, left under the assistant Sardar, Sonam Girmi, to dump some loads at the Base Camp. It was a bright and clear day again and the sun was so hot that most of us had to shed our jerseys and warm shirts. That morning the Indian and Nepalese national flags were hoisted in front of my tent, which was on a high ground overlooking the camp.

The three groups of climbers spent the morning drawing up plans for their acclimatisation training. Each of them had a large-scale map of the area.

Gopal and I had noticed a small herd of yaks enter the vicinity of our camp. These inquisitive animals were strolling around, and while they were busy sniffing our baggage, we decided to take a few close-up shots and add local colour to the documentary film which we had planned to produce. However, our activities came to an abrupt end when one of the yaks charged us with his head down.

At about 10.30 that morning, a co-ordinating conference was held to finalise the acclimatisation plan. The three teams had, by then, worked out the details of each respective programme.

Before the discussions on the actual schedule, the two doctors were asked to give a talk on the physiological aspects of high-altitude climbing and the requirements of an acclimatisation programme. Both Sir John Hunt and Tenzing had advised me that we should not rush on to the mountain until all the members were thoroughly used to living at progressively increasing altitudes. The doctors explained that the important aspect of acclimatisation was to get used to the progressive lack of oxygen in the atmosphere. They said that human beings normally need a certain minimum quantity of oxygen to live and work. As the altitude increases the pressure of air is reduced and proportionately the pressure of the oxygen content of the air also decreases. Thus, at about 18,000 feet, the air pressure is nearly half of what

it is at sea level, so that at 18,000 feet a man, for a given volume of air, gets half the molecules of oxygen which he would get at sea level. The lack of oxygen is, therefore, bound to affect him adversely if he was suddenly taken to a height of 18,000 feet.

Fortunately, the human body has an intricate mechanism which, if given time to adjust itself, can cope with the changing conditions. Medical experts have found that when men climb to higher altitudes, the proportion of red blood corpuscles to their white counterparts increases so as to make the maximum use of the reduced oxygen tension. Although considerable research work has been carried out on human physiology at higher altitudes, the results have not been conclusive. Two different human beings do not react in the same way to changing altitudes. Equally, the same man on two different occasions might not behave in the same way. On account of some unknown causes, sometimes even an acclimatised man can suffer the ill-effects of high altitude.

The first time a man may start feeling the effects of altitude is after a height of 12,000 feet. The initial symptoms take the form of a headache, nausea, giddiness, loss of appetite and sleep and general fuzziness in the head. As he goes higher, the climber loses interest in his surroundings and he cannot eat or sleep. Expeditions have sometimes come across acute acclimatisation failures where the system refuses to accept the lack of oxygen. In such cases the climber has to return to lower altitudes.

During the Women's Expedition to Cho-Oyu in 1959 one of the members could not get used to even the altitude of the Base Camp which was about 19,000 feet. The lady was a very experienced climber and was reputed to be one of the best performers on rock and ice in Europe. But, in spite of her proficiency in mountaineering tech-

niques at lower altitudes, she could not adapt herself to the heights, and had to spend many weeks in Namche Bazar whilst some of her less talented companions were on the mountain.

Mountaineers have found from experience, and this has been confirmed by scientific observations, that the human body can be acclimatised to a maximum altitude of 22,000 feet. However, it is not possible to live indefinitely at this altitude without additional oxygen. People who have lived in camps at altitudes of 22,000 feet or so for a week or more have lost weight considerably and have had to come down to lower altitudes to recoup their health. Any prolonged stay beyond 22,000 feet results in the deterioration of the body tissues which may cause serious physiological and mental deficiencies. Climbers are, therefore, not advised to stay long in camps which are located in the "deterioration zone" beyond 22,000 feet without taking oxygen.

While climbing smaller mountains, it is possible for mountaineers to rush the peak without adequate acclimatisation. While attempting a mountain of the magnitude of Everest, however, there have to be a number of camps beyond 22,000 feet. Climbers have not only to live in the deterioration zone but have to engage in heavy physical exertions like marking the route and carrying loads uphill, etc. That is why it is essential to use oxygen while attempting very high peaks.

In our acclimatisation programme, the first week was to be utilised in climbing from 15,000 to 17,000 feet in small parties. In the second phase, which was to last from 10 to 14 days, parties were to climb separately from higher camps in different areas allotted to them. It was hoped that at the end of this period every member of the team would be thoroughly acclimatised for heights up to 20,000 feet.

The first party was to leave Pangboche camp on the 1st April for Labuje which was two days short of the Everest Base Camp. They were to stay there at a height of a little over 16,000 feet until the 5th and to do ice and snow-craft training on the nearby glaciers. They had also planned to make an ascent up to 19,000 or 20,000 feet. Since this party was the first one detailed to probe the ice-fall, their acclimatisation period was slightly reduced. It was expected that during the first week on the ice-fall they would not gain much height and would thus get automatically acclimatised.

The second party had planned to go to the Dingboche area, north of Ama Dablam, from where they were to climb the surrounding peaks. This party was required to reach the Base Camp by the 12th April, when it would relieve the first party on the ice-fall, which was then to return to Labuje camp for a short rest at a lower altitude.

The third party was given the longest time for training. It had planned to establish a camp on the southern slopes of Taweche and then move to the valley to the south of the Nuptse wall. This party was required to relieve the second party on the 17th April. The second party would then go back to the rest camp at Labuje. Thus the three parties were required to work in shifts on the ice-fall.

After the conference, the doctor gave a lecture on first aid which was followed by some practical work on the use of equipment and medicines in the first aid kits which had been prepared for each party. An elaborate medical plan was drawn up according to which each member carried some medicines and each camp had a first aid box. Instructions were written out and kept in the various first aid kits. Members were given practical training in the identification of medicines and recognition of simple symptoms of high-altitude sickness. First aid lectures were also attended by some of the Sherpas.

We had spent the whole morning in conference and in listening to lectures and felt that we had had enough of classroom training for one day. Our appetites were good and some of the members were already looking towards the cookhouse.

The new cook, Ang Tshring, who was appointed on probation for three days to replace Thondup, was trying his best to please us. He gave us a good lunch with "Mo Mo", a Sherpa dish made of minced meat-balls steamed in a jacket of flour paste. It was served with hot chilli soup. For tea, Ang Tshring baked two cakes.

After tea there was a demonstration on the use of plastic explosives for felling dangerous ice towers on the mountain. Some of the members were scared of the explosives and were not too keen to go near them. Kumar, who was responsible for this subject, made the whole operation look very simple. As a finale to his lecture he placed two and a half ounces of explosive on the side of a slope and told the spectators to take cover. We went round a nearby hill followed by Kumar who had lighted the fuse. Although the fuse length selected was supposed to ignite the primary within a minute, it seemed a much longer time to us all, sitting behind the

hill. At last there was a thunderous bang and a cloud of dust. The sound kept echoing in the valley for many seconds. Kumar then led us all to the site to show the effect of the explosive. It was interesting for us to note that although the explosive was placed on the surface, the blast effect was towards the hill in which there was a huge hole. Kumar remarked that unlike most of us the explosive worked against the solid mass instead of taking the line of least resistance!

The 27th March was the first day of our practice climbs, and, therefore, there was considerable excitement in the camp. During this phase of training we had planned to go in twos and threes on various peaks and return to camp after a few hours' climb.

Kumar and Da Namgyal were the first to leave followed by Ang Temba, Keki and Phursumba Sherpa. The two parties returned in the afternoon after having climbed rock peaks of up to 16,700 feet to the south of the camp.

Gombu, Sonam, 'Chow' and Das had gone across the Imja Khola towards the Taweche feature to the north of the camp. They climbed the Pangboche peak (16,000 feet).

Bhagwanani and I had decided to climb a rock peak near our camp. Distances and heights in the mountains are deceptive and our objective did not turn out to be as near as we had thought. The rocks and boulders mixed with deep snow were not too easy to negotiate. Being the first day we took it easy and climbed slowly. When we reached near the top, we saw Kohli, Misra and three Sherpas already there. The last 20 or 25 feet of the rock represented a fairly difficult but interesting scramble, so we took the precaution of roping up. Bhagwanani was the less experienced of the two, so I led at the rope but I must confess I was not performing well. One of the Sherpas offered to belay me from the top of the rock, but instead of just keeping the rope tight he was literally trying to haul me up like a sack of potatoes. To add to my indignity, Lakpa Sherpa, an old friend of mine, pushed me from behind. It was not at all necessary and I kept on protesting to them, but the two Sherpas were going to make sure that the 'Burra Sahab' reached the top of the rock.

That afternoon at lunch Bhagwanani noticed that a number of climbers had slightly inflamed eyes. He attributed this to their not using snow goggles on the higher slopes where there was still some fresh snow. This called for a talk

by Bhagwanani on the effects of solar radiation on the eyes.

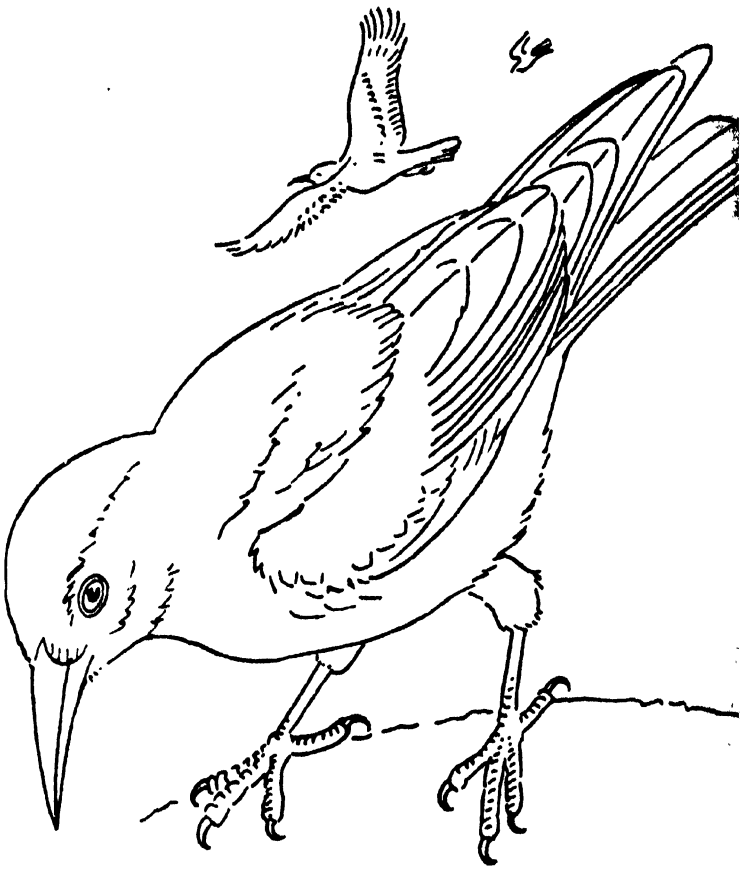
At higher altitudes mountaineers have to protect their eyes from the rays of the sun which consists of visual spectrum, infra-red rays and ultra-violet rays. On the snow, when the sky is clear and the sun bright, the glare effect (excessive brightness of the visual spectrum) is so intense that it is most uncomfortable to the eye and causes a strong burning sensation. If the exposure is prolonged and severe, the conjunctiva or whites of the eye become red and are very painful. This condition is transitory and can be avoided by wearing sun glasses. Fortunately in bright sun the glare is so strong that one does not omit to wear glasses.

Infra-red rays on the other hand are heat rays as opposed to light rays. At higher altitudes concentration of heat radiation increases. If the eyes are exposed to this, conjunctivitis or common sore eyes occur and the eyes become red and watery and again there is a burning sensation. There is also a feeling that the eyes are full of sand particles. Concentration of this kind of radiation can burn the retina, the sensitive nerve membrane inside the eye, which normally receives the image of the things we see. If these burns reach the retina, permanent blind spots in the visual field are caused. One can experience this in the plains when one observes a solar eclipse. Bhagwanani pointed out that watching an atomic explosion could also produce similar conditions: this did not seem to worry us in the immediate future.

Snow blindness is a very dreaded condition on the mountain and is caused by the exposure of the eyes to ultra-violet rays. At lower altitudes these rays are absorbed by the air. In fact, even up to a height of 10,000 feet, there is satisfactory absorption of these rays by ozone in the air, but above this altitude the concentration of ultra-violet rays increases dangerously.

It was interesting to learn that snow blindness really is a misnomer because the condition is neither blindness, nor is it caused by snow. We were also relieved to find that it is transitory and complete recovery is possible. The only danger is that those who suffer from snow blindness once are liable to get an attack again if exposed to even less radiation. In snow blindness there is inflamation of the cornea, which is a thin, transparent and colourless membrane covering the black of the eye. In medical terminology this ailment is sometimes called

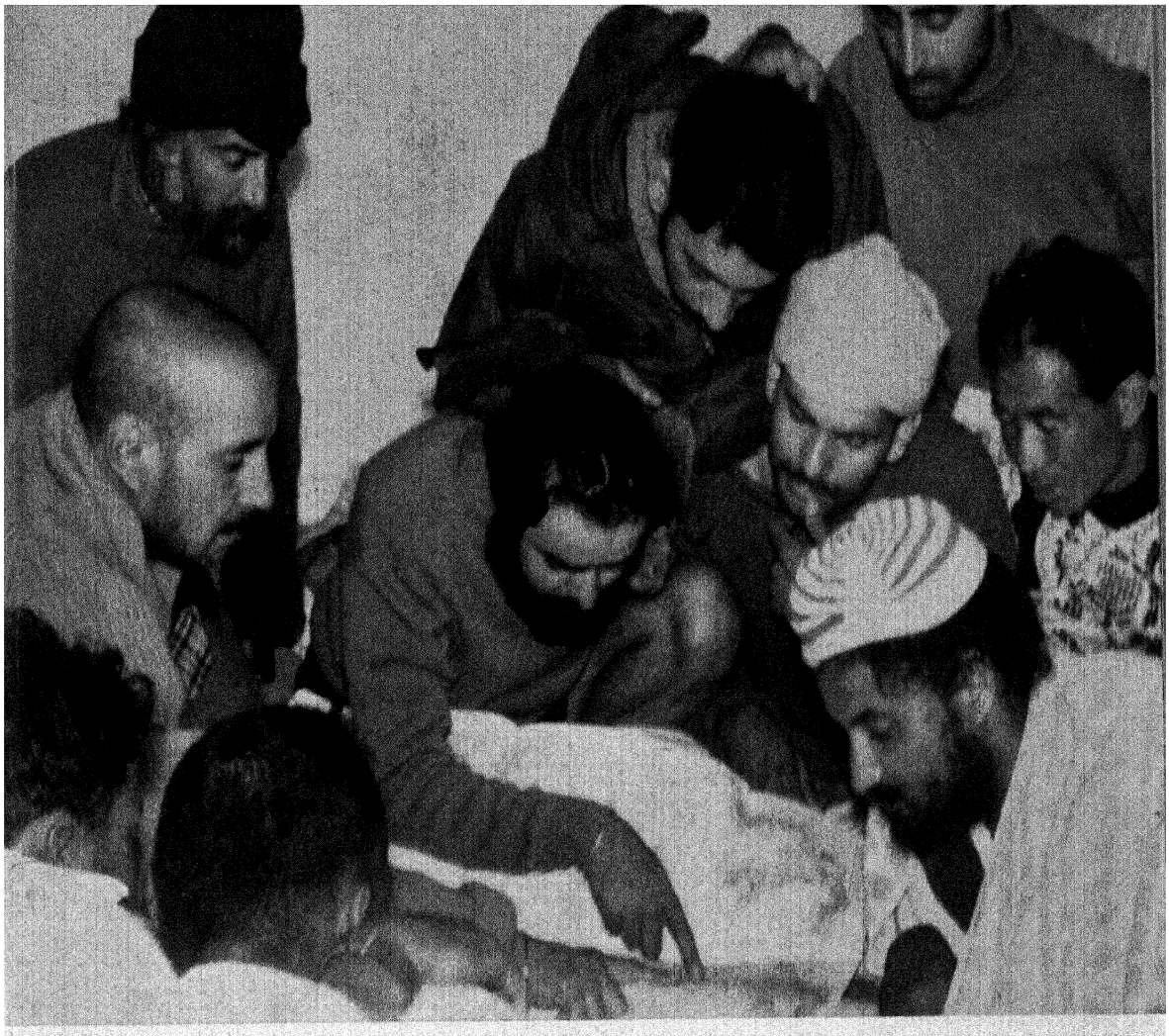
photophobia or inability to look at light. Looking at the light is so painful that the patient does not want to open his eyes and this makes him feel that he is blind.



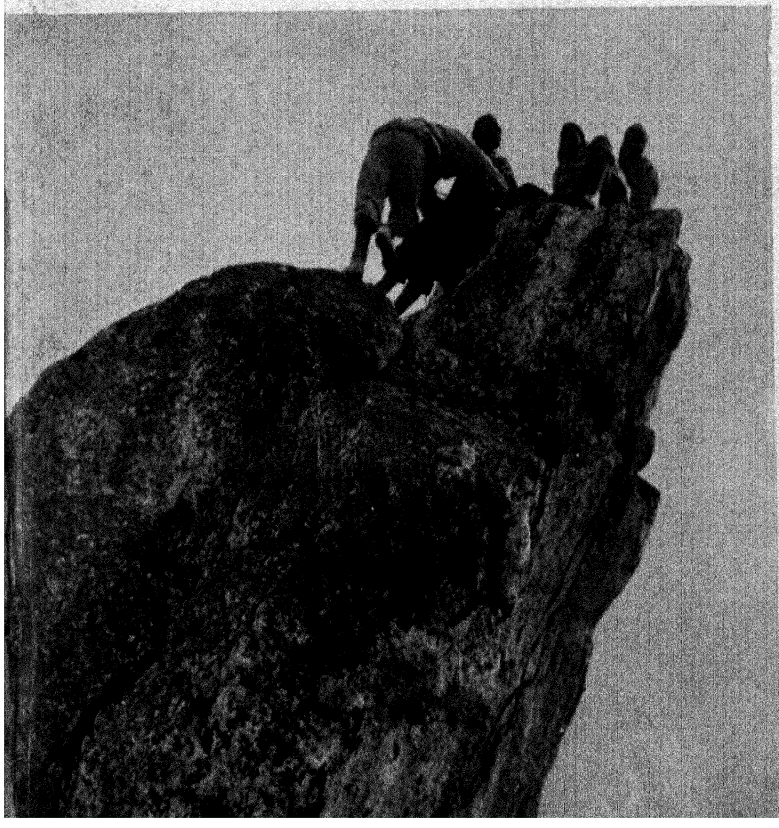
There is a mistaken belief among some people that in cloudy weather or during a snowfall in the day, use of goggles can be dispensed with. Even if there is no glare, the harmful ultra violet rays can be present in dangerous concentration, because each crystal of snow falling and scintillating in the air radiates a barrage of these rays.

It is possible to cure snow blindness in a couple of days, but what is most important is prevention, because it can be prevented by the use of coloured glasses. Mountaineers prefer amber coloured glasses because this colour does not reduce visibility. Climbers should, as a rule, keep a spare pair of goggles in case of loss of the pair in use. Many a climber has paid the penalty of getting snow blindness because he had taken only one pair which he lost.

During the British Expedition, the first party of porters led by Hillary to the Base Camp had suffered badly on account of snow blindness because there was a fresh snowfall and the porters had no goggles. Hillary ingeniously devised protection for the porters' eyes with the help of cardboard, black tape and coloured celluloid pieces. A bandage of black cloth with slit holes for the eyes and the application of black soot under the eyes also gives some protection. We had provided for more than two pairs of goggles for each climber and high altitude Sherpa, and having learnt from Hillary's experience with the porters, we had also brought nearly 250 pairs of cheap goggles to be used by the porters who were to ferry the loads to the Base Camp.



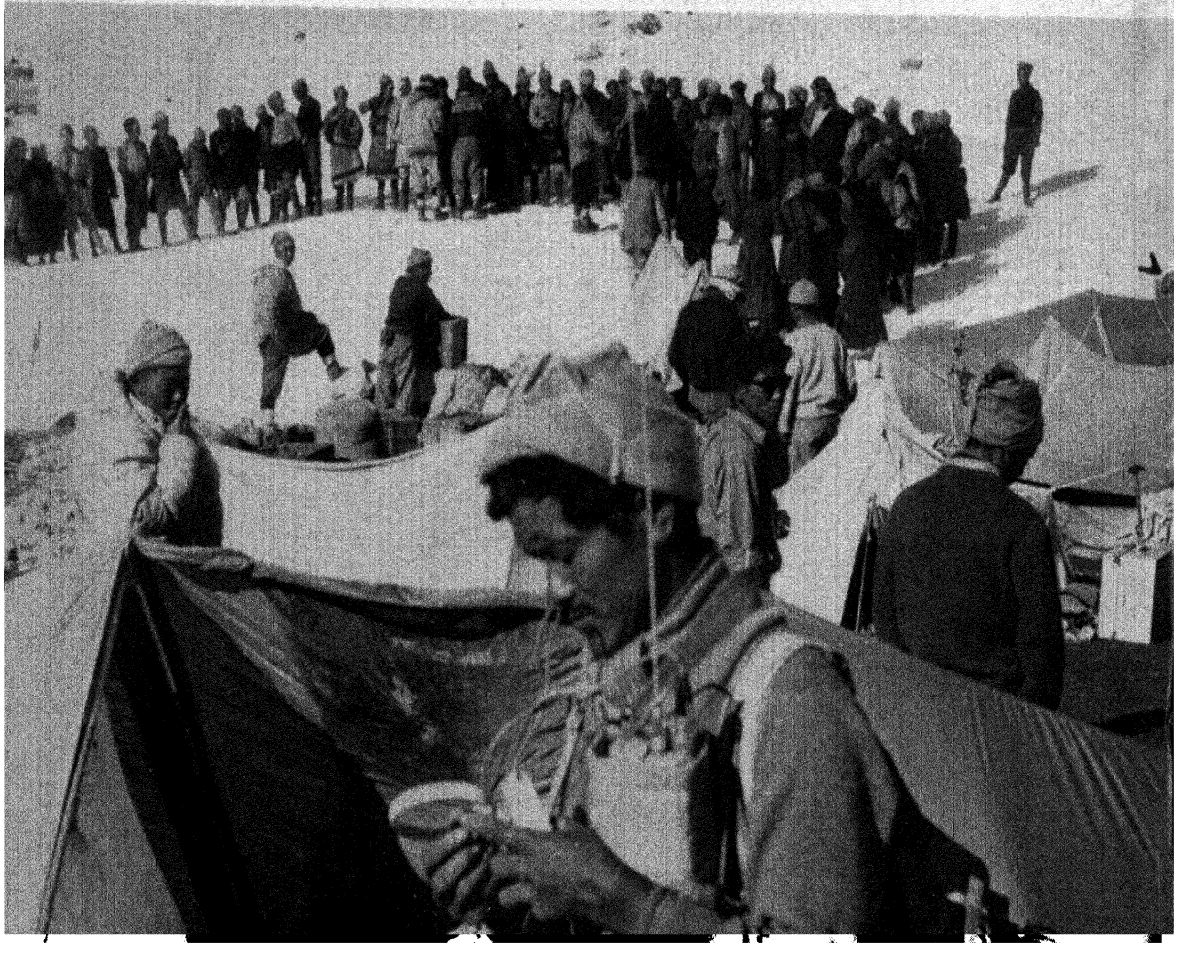
Finalising the acclimatisation plan

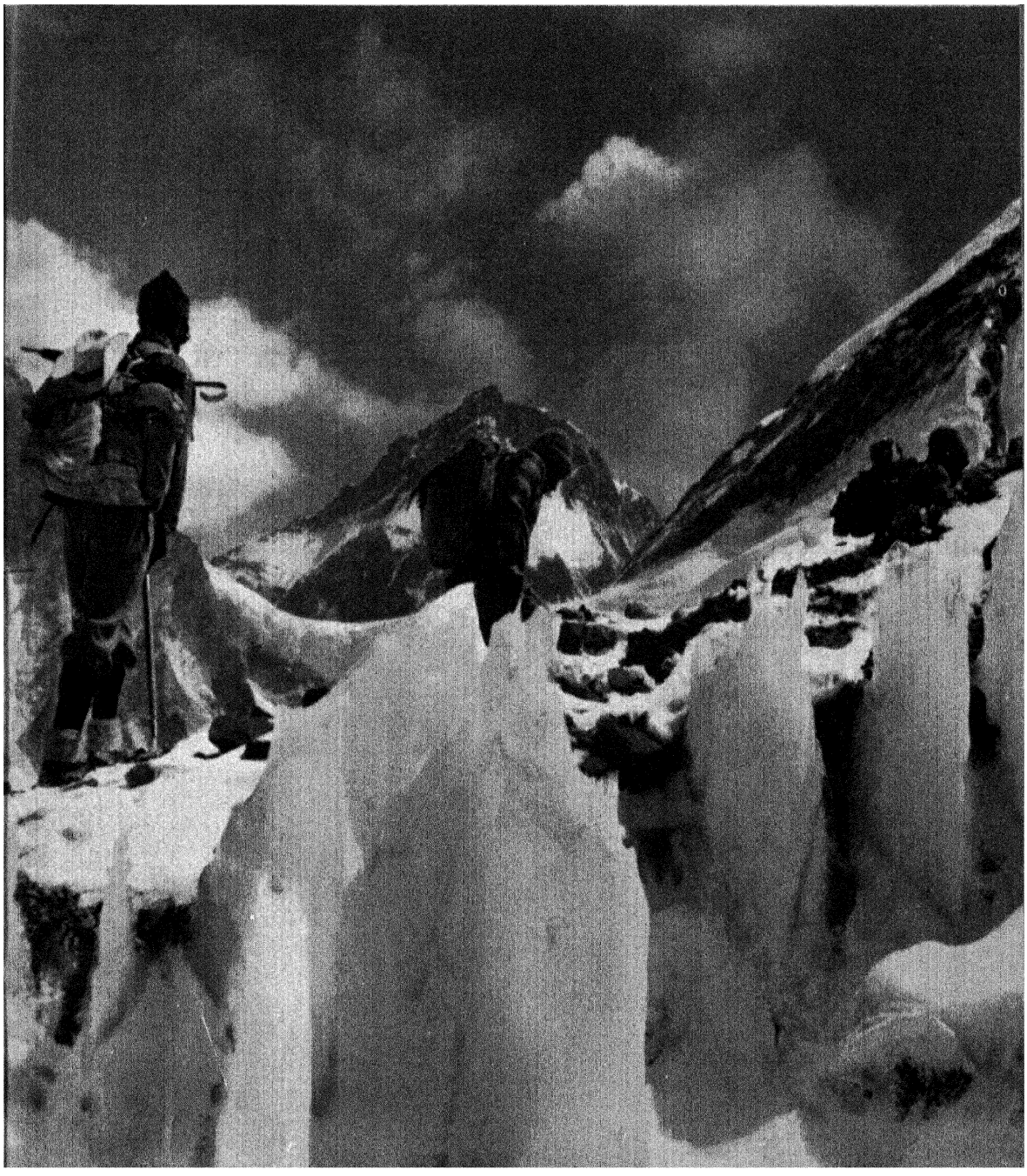


On top of the "Yellow Needle"

An acclimatisation party

A Sherpa has a look at one of the "walkie talkie" sets

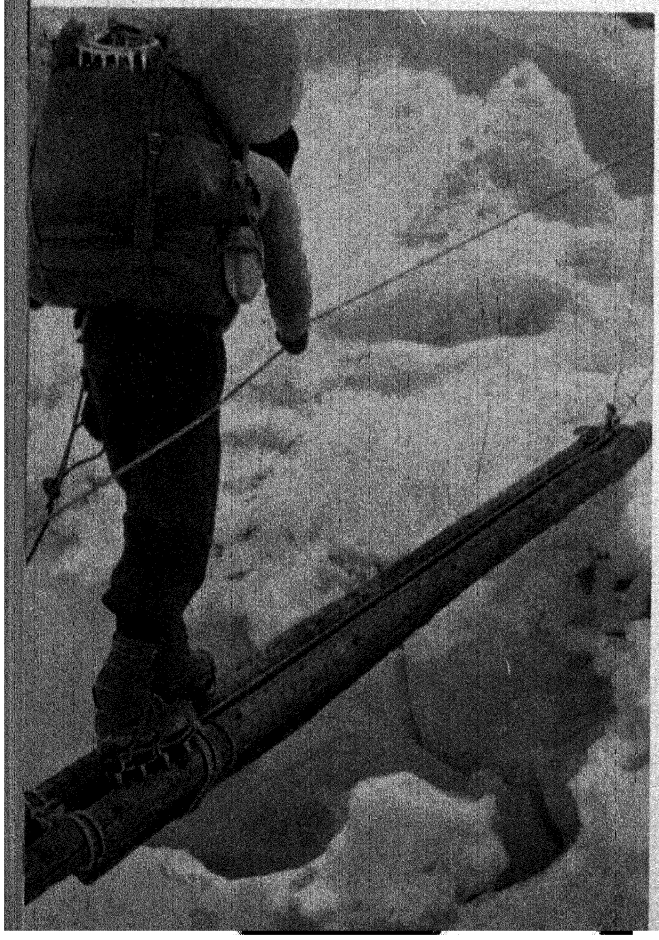




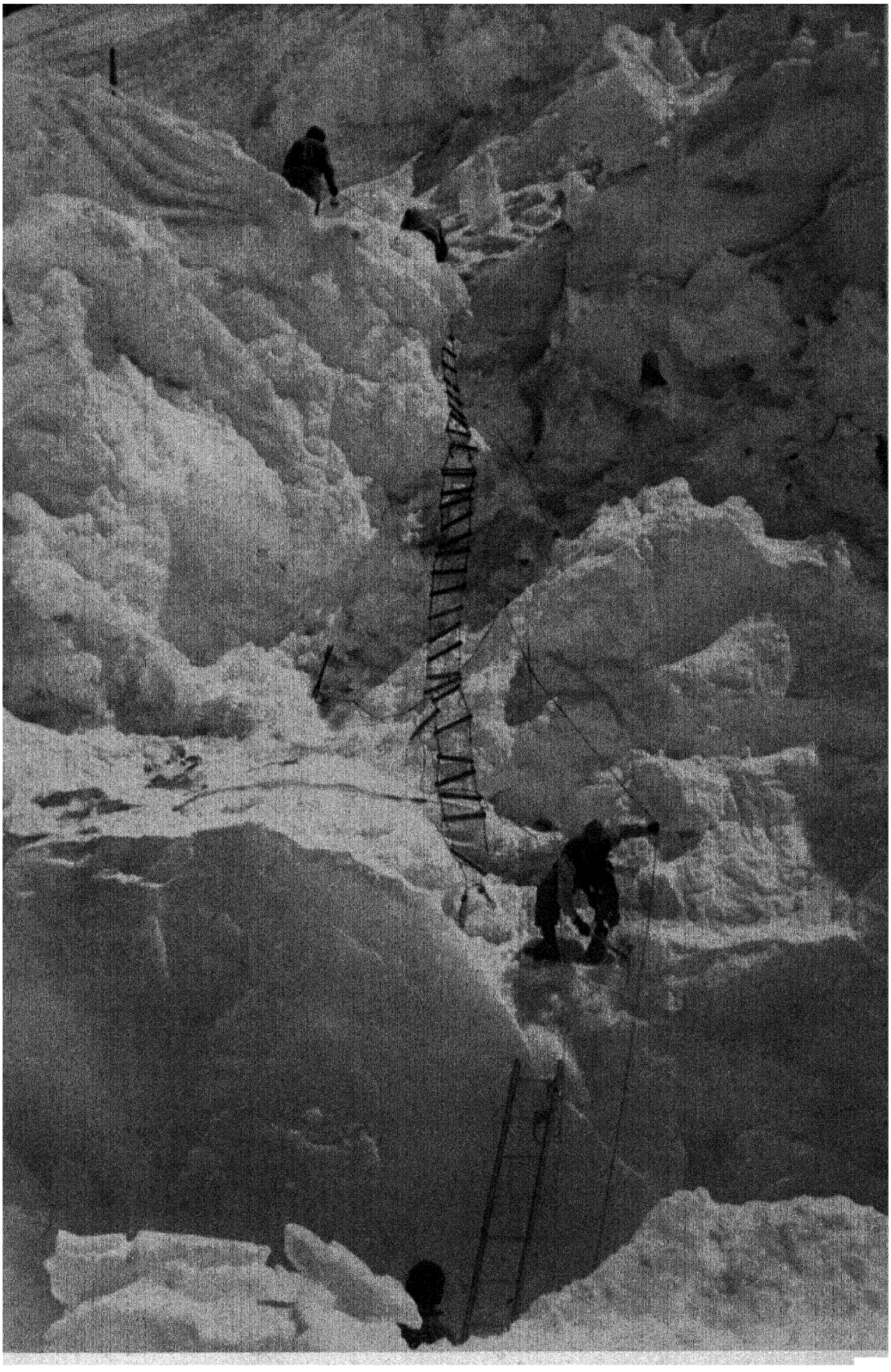
A climbing party beyond the Base Camp

Ice pinnacles on th Khumbu glacier

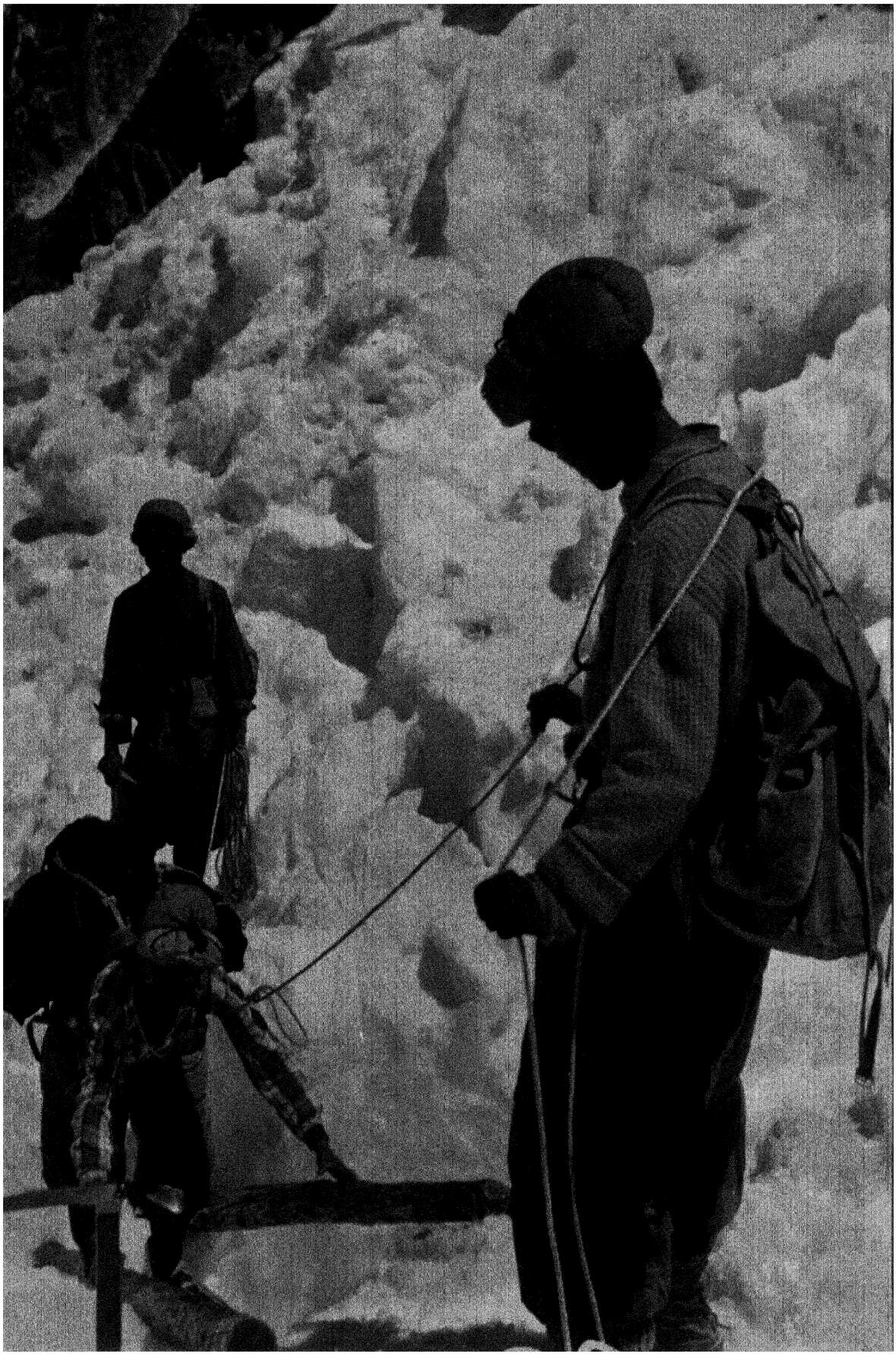
Path-finders flagging the route



A log bridge over a deep chasm



Negotiating the Khumbu ice-fall



A Sherpa being belayed on a log bridge

Having spoken of acclimatisation to altitude and solar radiation, Das touched on the need for acclimatisation to cold. He, however, pointed out that in our case no deliberate effort was required because our daily routine from the time we left Jaynagar was gradually acclimatising us to the variations in temperature.

Our discussion which was nearly over was suddenly broken up by the arrival of the mail runners from Kathmandu. The two surprised looking Nepalese runners were led into the camp by the members almost in a procession. The rest of the evening was spent in reading letters and newspapers and replying to the letters we had received.

On the second day of acclimatisation training, our parties went up again in different directions. Kohli and Da Namgyal climbed a peak of 18,400 feet to the north-west of the camp. The weather forecast for the day was not favourable. We were not very happy to know this as the meteorological forecasts broadcast by All India Radio had been very accurate.

Most of the climbers returned by three in the afternoon having climbed 3,000 to 5,000 feet during the day. We noticed some cases of altitude sickness, particularly amongst the non-climbing members.

After tea I reminded the members once again to maintain their daily diaries. In the beginning most of them found it irksome but I noticed that some of them were very regular by then. Kumar, however, did not think it was a good pastime and even went to the extent of remarking that mountaineering would be fun if one did not have to write a diary.

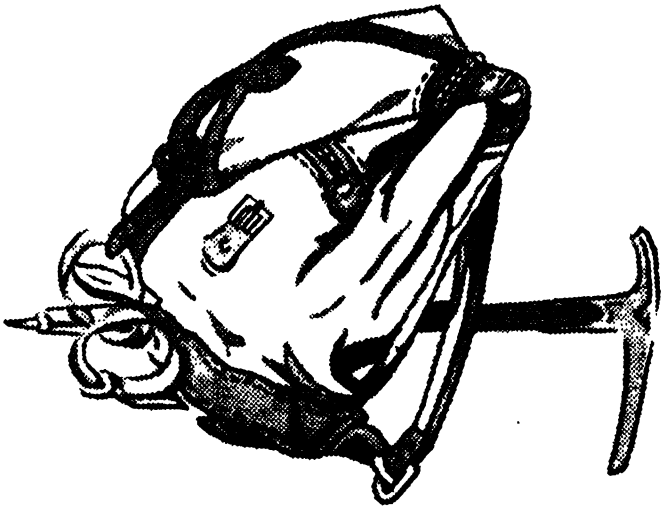
There was a slight drizzle in the evening and we could see snow falling on the higher slopes. Rao, the meteorologist, called it a westerly disturbance and according to him this could be expected at intervals during the spring.

The snow did not make any difference to our programme. All the climbers were out again in twos and threes and climbed in different directions. It was also the day to practise climbing with oxygen masks. We did not take oxygen but used only the masks to get familiar with the discomfort and resistance of the air intakes and exhaust valves in breathing. I also wanted to try out a pet theory of mine. While using the mask earlier I had noticed that quite a lot of moisture from the exhaled air

used to condense and accumulate inside the mask. The main cause of dehydration and irritating throat coughs at higher altitudes was loss of water from the body through breathing in of very dry, cold air, but with the mask on, the dry air from outside had first to come into the cavity of the mask which had a certain quantity of moisture. Therefore, the air breathed in was no longer as dry as the outside atmosphere. Formerly, I had noticed that I had irritating coughs at higher altitudes, but when using the mask the cough disappeared. On this day, for nearly six and a half hours I was climbing up and down but I hardly coughed once.

On returning to camp the two doctors were informed of my trials. They laughed and felt that the moisture we could accumulate from the exhaled air could not make much difference. However, to console me they added that it might be possible to invent a special mask which would enable the air to carry some water vapour before inhalation.

We also tried our wireless drills that day. Fixed time communication at 9 a.m., 12 noon and 3 p.m. was established. Generally communication was good but some of the members were slow in picking up the technique.



मनस्वी कार्यार्थी न गणयति दुःखं न च सुखम् ।

A determined person intent on accomplishing his task heeds not pain or pleasure.

BHARTRIHARI

VIII

TRAINING FOR THE HEIGHTS

IMMEDIATELY above our camp there was a thick forest of rhododendrons not higher than fifteen or twenty feet. The other surrounding hills were also covered with vegetation up to 15,000 feet. There were juniper bushes and reasonably good grazing up to 15,000 or 16,000 feet.

During our approach march we were a little disappointed at not seeing much wild life, but the inevitable Himalayan crow and the large ravens were always there, scavenging round the camps. We had also seen golden Himalayan eagles and some snow pigeons. But somehow choughs, which are always there in large numbers in most mountainous areas, had not been seen, except one or two in the Solu district on our way up. Choughs had been observed earlier at very high altitudes by various expeditions. According to the late Major Jayal, one particular chough had followed them to all the camps on Kamet, and in fact he sighted this friendly bird even from the summit.

The hill to the south of our camp appeared to be a favourite spot for musk deer. During our climb on this hill a few days earlier we had noticed droppings of musk deer at about a hundred different places. However, none of us saw any of the animals, presumably because they had moved to another area after we established our camp at Pangboche.

On the hills to the north of Imja Khola, Sonam and 'Chow' had seen two barahls, a species of mountain goat. It was obvious

that these animals had never been shot at because they were not at all scared of us. Many other members had sighted barahls during their climb and were surprised to find this normally shy animal behaving like domesticated cattle. Some of us had also seen hill fox, woodcock and hill partridge up to 17,000 feet, beyond which hardly any fauna was observed except a few birds.

The 31st March had been set aside for reorganisation. But the temptation to climb the many interesting peaks was a bit too much. Kohli, Ang Temba, Jungalwala and Bhagwanani together with a couple of Sherpas decided to climb what the Swiss Expedition of 1956 had named Sepahi peak. The approach from our camp appeared to be quite simple. The Swiss had approached the peak direct from Thyangboche. Our party left very early in the morning and after climbing for nearly six hours found that they were crossing one false crest after the other. They, therefore, returned to the camp that afternoon without having climbed the peak.

Vohra, Das, Nanda and two Sherpas tried to climb the peak which Sonam and 'Chow' had attempted the day before. They went round a hill and then climbed up a gully but had to give up nearly two hundred feet from the top as they were confronted by a vertical rock wall.

A party of our non-climbing members, Gopal, the photographer, Rao, the meteorologist, and Rai, the Liaison officer, and the two signallers climbed Pangboche peak. They were not experienced mountaineers and when they returned Das noticed that nearly all of them looked dehydrated because they had not taken enough water, tea or coffee with them.

This was the last day that we were going to be together, and it was felt that before we dispersed everyone must know the serious problems a mountaineer is faced with on account of dehydration.

Dehydration is a very expressive word for the condition and, as the word implies, it is literally drying-up of the body. Water is the major and most important component of the body, and constitutes about seventy per cent of the body-weight. Therefore, its lack is bound to have a significant effect on health. Somehow this is a factor which is most commonly neglected. Out of the seventy per cent water content of the body some small percentage which approximates to about three litres exists in the blood.

Nearly a quarter of it is in the tissue fluids and the major part is in body cells. For proper physical and mental functioning it is essential to maintain the correct water proportion in the body.

Water from the body is lost by breathing from the lungs, sweating through the skin and in very small quantities through urination and stools. Of course there is the abnormal loss during diseases which result in vomiting and diarrhoea.

In temperate climates a man loses about 300 to 400 c.c. of water in a day from the lungs through normal breathing. But, at higher altitudes, breathing is very fast on account of the lack of oxygen. A man at the South Col of Everest (26,000 feet) would be breathing ten times faster than normally, even while walking slowly. Thus at higher altitudes, the water loss from the lungs is increased several times and this is one of the causes of dry throat and dry cough in the mountains.

The normal daily water loss from the body at a temperature of about 90 degrees F. is approximately eight pints, but this goes up considerably with the increase in temperature because of excessive sweating. Trials conducted by the Army have shown that at atmospheric temperature of 105 degrees F. an infantry soldier who has walked 15 miles has to replace twenty pints of water. On the mountains very high temperatures are quite common, and Everest expeditions have recorded open sun temperatures of 158 degrees F. Therefore, at higher altitudes, when a climber is subjected to severe physical exertion in the blazing sun, he sweats profusely. In sweating one loses not only water but considerable quantities of salt which also has to be replaced. Therefore, to combat dehydration, the correct level of water and salt must be restored.

Dehydration is one of the biggest enemies of climbers. In the initial stages of deficiency of water, the climber feels very thirsty and his tongue becomes dry. With further loss of water there is a marked loss of efficiency, and, as dehydration increases, there is progressive weakness, diminished urination, and the face turns slightly ash-grey. Temperamental characteristics are exaggerated until a stage is reached when the mental powers are also affected, resulting in confused thinking and even hallucinations.

According to experts, the mental changes also occur because of lack of oxygen at higher altitudes, and are greatly exaggerated by dehydration even in the best acclimatised men. Hallucinations and conditions of mental confusion are quite common in the mountains. Once the famous mountaineer, Frank Smythe, while climbing alone, felt that he was accompanied by another man. In his confused state of mind he was so convinced about the existence of this man that he even offered the mythical man something to eat when he sat down to rest. During his ascent of Kamet, the late Major Jayal was seen holding his right hand down, as if dragging something. He would stop every few minutes, look back and make some noise with his mouth and then move up again. His companion watched this movement a few times and then asked him what he was doing. Jayal looked up and replied that the goat he was leading up was not moving. According to Nandu Jayal's own admission, he felt he had been leading the goat up to Kamet for nearly an hour.

While a man can be acclimatised to a certain extent to low oxygen tension and to cold, acclimatisation is not possible so far as dehydration is concerned, and the only remedy is to keep on replacing the lost fluids.

Salt deficiency, on the other hand, creates symptoms of lassitude and apathy; there is muscular weakness and a tendency to giddiness. The skin becomes dry and inelastic and there is also a feeling of nausea and vomiting, thus exaggerating the normal altitude sickness.

Therefore, mountaineers have to drink considerable quantities of fluid. In fact, most of the diet is in the form of liquids—soup, fruit juice, coffee, tea, cocoa and ovaltine are some of the very important items of any mountaineer's diet. We were advised to drink up to 15 pints of water daily. Whereas excessive drinking of water does no harm, its deficiency has serious repercussions and can jeopardize the health of a climber.

From the very beginning we had taken ample precautions to combat dehydration. During our approach marches, the doctors used to give us a salt tablet every day. This was not popular with some members who could not retain the salt in that form. They were advised to put a few pinches of salt in their water bottles. We also drank considerable quantities of lime juice with salt and a little sugar. It was a delicious drink and was very popular. The necessity of drinking fluids had to be impressed on every member and Sherpa at this stage because as we climbed higher there would be a tendency to decrease the load and perhaps not take water in the water bottles, and tea or coffee in the flasks.

The doctor's talk on dehydration, however, had the desired effect, and immediately afterwards, there was great demand for water from each member. The Sherpas working in the kitchen were beginning to wonder what had caused the abnormal thirst!

There was considerable work to be done to provide kit to the various parties, each of which had 10 high-altitude Sherpas with it. They had to calculate the requirements of tents, technical stores and food for the next few days, while they climbed independently. The stores and equipment had to be distributed and re-packed and the climbers and Sherpas were busy till late in the evening, nailing up boxes and generally getting ready for the next morning's move.

The members were excited about moving out the next day in small, compact parties. I was glad we were splitting up in groups, because I felt that it would give the younger climbers an opportunity to use their initiative. We also noticed that the effect of living in a restricted society was beginning to tell on some. They were inclined to be a little sarcastic, critical and even slightly intolerant of others. I thought that a pep-talk was indicated. I called it "psychological acclimatisation", and fixed the time for the talk later in the evening after dinner.

It is well known that at higher altitudes people are irritable and quarrelsome and are inclined to be intolerant of one another. The habit of a companion in the tent, snoring, coughing, whistling or humming a tune, can cause friction. Quarrels can develop over small things like food, or the feeling that one person is not taking his share of the unpleasant chores to be performed in the camp. Distance from home is another factor which can develop symptoms of anxiety resulting in mental restlessness and despair, specially if a man is deeply attached to his family. We had made provision to overcome some of these problems by having two teams of mail runners moving between Kathmandu and the Base Camp, bringing mail and taking our letters for despatch. We had not so far used the wireless link for personal messages, but this means of communication also provided a very reassuring link with our homes.

We all knew that once we reached the Base Camp the climbing members would be engaged in the actual task of climbing higher and higher, but the non-climbing members would have to stay at the Base Camp and they would have to be prepared to fight boredom. Therefore, it was necessary to give everyone very definite tasks and to impress upon each one of them to what extent the success of the Expedition depended on his efforts.

At higher altitudes even normally cool-tempered and sober people are inclined to be difficult with their companions. The task of the leader under such conditions is even more difficult, because, while he has to make allowances for the abnormal behaviour of other people, he himself is susceptible to those conditions and is perhaps too demanding. A reputed mountaineer has confessed that once when he was on an expedition he felt a strong urge to slaughter every one of his companions. According to him the only deterrent to this homicidal tendency was the

knowledge that when he returned he would have to give long explanations to the friends and relations of the victims.

While the climbing parties were on the mountains the headquarters group, consisting of the secretary, signal section, meteorologist and Das were to remain in Pangboche camp till the two hundred porters returned from the Everest Base Camp. The No. III party had promised to return to this camp after their training on Taweche. They were then to move to the Chunkung area for further acclimatisation. I had also planned to return to Pangboche camp after spending two or three days with the No. II party. The headquarters group was then required to move towards the Everest Base Camp.

There was considerable confusion at Pangboche on the morning the three parties were due to move out for their own climbing programmes. Each party was trying to get its Sherpas together, collecting its stores and making sure it would leave behind nothing that was essential. We noticed there was a tendency at over insurance which meant that the load tables which had been worked out earlier did not conform to the number of porters allotted to each party. At this stage it was not possible to get extra help. The two hundred porters left over were to be used for ferrying loads to the Base Camp. Therefore, the climbers and Sherpas decided to carry extra loads themselves. I reminded members of Sir John Hunt's advice in one of his letters to me. He had recommended that during the acclimatisation period, climbers should progressively increase their loads until they could carry fifty to sixty pounds without much difficulty. Most climbers had practised this already but since the parties had to be completely self-sufficient, some of them had to carry even more than sixty pounds.

The No. II party was the first to move out at about ten in the morning. The weather was perfect and everybody appeared to be very happy to start on their team venture on such a bright and warm day. I joined this party as a member of the team and not as the Leader as I did not wish to unbalance the responsibilities of the team leader.

There were hearty farewells, handshakes and photographs because we knew that not until after the expedition was over and all climbers and Sherpas returned from the mountain to the Base Camp would we be together again.

After crossing the Imja Khola river we walked for nearly three miles along its northern bank. After a short halt at the junction of the Imja Khola and Khumbu Khola rivers, we turned to the right in the direction of Dingboche. The porters bound for the Everest Base Camp followed the course of the Khumbu Khola. We walked for nearly a mile and half when we came to what looked from a distance a big village. On the map also it was marked as a very large village named Dingboche. We expected to meet many people in the village, but to our surprise we found that it had hardly any population. We soon discovered that this was the summer farmland of some of the villagers who lived in the warmer part of Khumbu district lower down during the winter.

The height of our camp, which was to the south-east of Dingboche village, was nearly 15,000 feet. It was an attractive spot surrounded by some very awe-inspiring and beautiful mountain peaks. To our north was the Nuptse wall and the Chunkung range which was completely snow covered and stood like an ice wall enclosing the Imja valley. We could see Makalu beyond this range. On account of its distance and lack of snow on the slopes facing us, this giant did not look at all impressive. Across Imja Khola and not very far from our camp was Ama Dablam. It was a proud looking mountain and most fascinating to watch. During the year 1959, two climbers of a British expedition to this mountain had disappeared after having been very near the top. This recalled to our mind the fate of Irvine and Mallory on Everest. To the west was the Taweche group which was not very high but looked nearly as difficult as Ama Dablam itself.

One of the Sherpas cooked a good dinner which we ate round the camp fire. There was chicken soup made from soup powder, roast mutton, potatoes and tinned fruit. Our appetites were still good which meant that we were acclimatising well. Before turning in we played cards for some time. I am not much good at cards. We played a Punjabi version of bridge, and perhaps I had the proverbial beginner's luck; Misra and I beat Kumar and Vohra and won their share of chocolate rations for the next day.

All four of us slept in the same tent. This was the advantage of having a small party in which there was a great deal of cohesion and a feeling of belonging to one another.

Our party's first target was the rock feature immediately to the north of our camp. We left at eight in the morning soon after breakfast. For the first half of the climb it was a uniformly steep gradient, but later on it entailed fairly difficult rock scrambling with good holds on the rock. According to Vohra, the geologist, it was mostly schist and granite. Da Namgyal who led the first rope, made everyone rope up. We reached the highest point of the ridge that afternoon. According to the description given in Eggler's book, the Swiss expedition of 1956 had also trained in this area and one of the parties had actually climbed this peak. We found a large cairn made by the Swiss to which we added a few stones.

Kumar and Da Namgyal, who had got to the peak before the rest of us, were lying on the rocks and were half asleep. When we suggested that we should move down, Kumar theorised that the best way to acclimatise was to eat and sleep at progressively increasing altitudes. The suggestion was accepted by all and we had a siesta for some time before coming down.

We decided to return to camp by a longer route. After descending rapidly for about half an hour we came to two huts, which, from the valley below, had appeared to be perched precariously on the side of the hill. Buddhist prayer flags on long bamboo poles could be seen from a distance outside both huts. Da Namgyal knocked at the door which was opened after a fairly long wait and we entered through a very small, low opening and went into a small courtyard. Inside we were met by an old man, the Lama who lived in that hermitage.

Lakpa Tshring, my Sherpa *sathi*, introduced me to the Lama. As soon as the old man discovered who we were he quickly entered a very dark room through a door which looked like a small window. Standing outside we could see that the Lama was tidying up his room hurriedly. We felt sorry to have surprised this dignitary. However, within a minute he asked us to enter the room. He told us that we should stay for tea but we declined because we were in a hurry. After talking for some time we prepared to leave for our camp. The Lama came outside to see us off. He had a strong personality and a pleasant countenance. According to him he was 80 years old and had stayed in Thyangboche Monastery for two spells of 30 and 15 years

respectively, before the present Incarnation Lama arrived at the Monastery.

On return to the camp we listened to the weather forecast for the next twenty-four hours. It promised fair weather but strong winds at altitudes between 15,000 and 20,000 feet. The winds were expected to be up to 50 to 60 miles per hour.

The day we were moving from Pangboche camp we had heard Vohra complaining about the taste of water in the bottle, but he drank the water all the same. Next day we were about to leave for our day's climb when we noticed that Vohra's Sherpa *sathi* was putting some powder out of a tin into Vohra's water bottle. Closer examination of the powder that was being put into Vohra's bottle revealed that it was a foot-dusting powder which the doctor had issued to each member. Vohra's companion had been flavouring his drink with this powder for the last three days. Vohra had suffered no ill-effects from this, but the thought of having drunk a solution of foot-dusting powder did not make him feel very comfortable.

Our plan for the day was to climb in the Ama Dablam area. We walked along the northern bank of the Imja Khola for nearly half a mile before crossing the river. Climbing slowly up on a glacial moraine we skirted round the Ama Dablam feature and found the going a little difficult on account of soft snow lodged between big stones. One had to keep stepping on the boulders to avoid falling into the gaps which were covered with snow.

The weather was comparatively quiet till about 10 a.m. when the wind velocity started increasing. We could see powdered drift-snow being driven by strong squalls on the northern slopes of Ama Dablam. As we reached the north-east of the mountain, the velocity of the wind had increased tremendously. Fortunately for us the wind was blowing from behind us and the following wind helped us in our climb. Later on when we had to travel against the direction of the wind, we found it difficult to keep our balance on the rocks.

Soon after mid-day we reached a very big boulder in the middle of the basin. As we went round it we found a four-foot high stone enclosure on the other side. As the wind was still strong we made for this shelter and found tins, paper wrappers and other evidence to show that the place had been visited by some earlier expedition. We found a morphine injection label and

another label marked "British Solu Khumbu Expedition, 1959". One of the Sherpas confirmed that this was the Base Camp of the ill-fated British expedition to Ama Dablam last year.

As we sat in the shelter having our lunch, we admired the awe-inspiring beauty of the mountains that surrounded us. To the south-east was Ama Dablam, and connected with it to the south was a semicircular ridge which rose to an average height of nearly 20,000 feet. The whole of the ridge was heavily corniced and numerous glaciers flowed into the bowl from the upper reaches of the ridge. Its vertical face had ice and snow serrations which looked like giant herring skeletons stuck vertically on the ice-fall.

While the rest of the members were having a general look around, Da Namgyal had a pair of binoculars glued to his eyes practically the whole time. He seemed to be looking for something on the face of Ama Dablam. We knew that Da Namgyal was very thorough in his observations and whenever he looked through the binoculars, he scanned the whole area very systematically.

He announced that on the rock ridge of the mountain, about 1,500 feet higher up, he had sighted a fixed rope line. He tried to point it out to us and we all went and looked in turn through the binoculars. But Da Namgyal's target indication was not very good and we could not locate the rope. A little later he told us that he could also see a rope ladder on the rock face to the left of the ridge. However, after some difficulty we were all able to see the fixed line and the rope ladder.

The British expedition route was now quite evident to us. We observed that the rock on the upper reaches of Ama Dablam was composed of very light coloured granite so that from a distance it was difficult to tell the rock from the ice.

After lunch, Da Namgyal, Kumar and Vohra went up the face of Ama Dablam, but after climbing up to 18,000 feet or so, they had to climb down as it was getting late. They were anxious to get to the rope ladder to have a closer look and perhaps bring back a small piece of rope as a souvenir, but the wind velocity and reduced visibility made this impossible.

By quarter-to-three the party was down from the Ama Dablam face and we started back for camp. In front of us we could see the Nuptse wall. Beyond could be seen Mt. Everest with a very heavy white plume being blown off to the south-east. Nuptse

looked very rough and rugged. The bulk of the Nuptse massif was composed of schist and partly of limestone. There were a number of veins of granite running across the face from right to left. A yellowish limestone band, which later appeared to project on Lhotse face, could also be seen on the south face of the Nuptse wall.

The next day was a day of rest for the climbers and I returned to Pangboche where I had left a small headquarters group. On arrival at Pangboche camp, I met Party No. III which had returned after training on Taweche feature. The party had camped at an altitude of nearly 14,700 feet and had attempted the rock peaks to the left of Taweche. They did some interesting rock climbing up to a height of 18,400 feet, and also carried out some training on the ice.

The next day we received the consignment of transistor 'walkie talkie' sets made specially for the Expedition by Phillips. Grewal, who was escorting the oxygen consignment, had sent these sets with some fast runners. Each set, complete with batteries, weighed about three pounds. We carried out initial trials that same afternoon and found the performance of the sets reasonably satisfactory. The six sets which were a gift from Phillips proved to be very useful on the mountain.

That afternoon we heard a radio broadcast based on the tape recordings sent by us. The announcer traced the progress of the expedition as he introduced each item. There were a number of songs by Sherpas and other sound-effects which we had recorded. Every sound we heard on the radio meant a lot to us and we were thrilled with the programme.

The next day, Gombu, Sonam and 'Chow' of Party No. III prepared to leave for Dingboche camp on the way to the Chunkung camp, but Rajendra Vikram had to stay behind to repair the tape recorder.

Just before the party was to leave, Das decided to carry out some blood tests on various members. Gombu, who was to be his first 'victim', was scared at the thought of blood being drawn out of him, and had to be held by his comrades before he would let the doctor come anywhere near him. After carrying out some more tests on a number of persons and checking their weight, the doctor announced that we had all acclimatised well. Practically everyone was eating and sleeping satisfactorily. All members and Sherpas had been given two tablets of multi-vitamin and vitamin C every day. No one had lost a single pound in weight, in fact some of us had put on a few pounds.

The porters who returned from the Everest Base Camp brought a note from Keki to say that the programme of the No. I Party was showing good progress. They had carried out some training on ice and snow on the Labuje glacier and were hoping to move to the Everest Base Camp according to plan. They were in good spirits and were confident that they would be able to establish the first two camps on the ice-fall before the other parties assembled at the Base Camp.

On the 5th April we left Pangboche with a nostalgic feeling. We had been there nearly twelve days and had made some very interesting climbs. All the same everyone was keen to get on to the high mountain and reach the Everest Base Camp as soon as possible.

After a short march we reached Pheriche, which like Dingboche is also inhabited only in summer. The height of this village is about 14,200 feet. Here we were joined by the No. II Party. Kumar told us the story of a climb on a sharp pointed peak which was named by the Swiss expedition as the Yellow Needle. The whole party had reached the top of this peak after some difficult scrambling. Kumar believed that this was a virgin peak because, in Eggler's book, he had read that the Swiss party had gone up to the base of the Yellow Needle which was nearly 18,300 feet and had to return without climbing it.

That evening when Rajendra Vikram asked me to give an account of our acclimatisation programme for recording on the

tape, Kumar was allowed to tell the story of his Party's ascent on the Yellow Needle.

That night at dinner when Kumar was narrating the story of their climb, Rao the meteorologist pointed out that Yellow Needle was not a virgin peak, as it had been climbed by the Swiss. On checking up it was found that Kumar had not read the complete story. The Swiss party had returned from the base of the Yellow Needle one day, but had climbed the peak the following day. Kumar was disappointed, particularly because he had to re-record his story on the tape, leaving out the reference to the No. II Party having climbed a virgin peak.

During that night it snowed nearly two and a half inches. We were unable to leave the camp the next morning because the porters did not want to proceed beyond the tree-line in such weather. During the following day it snowed quite heavily and by midnight there was nearly nine inches of snow. However, when we moved out the next morning for our camp at Labuje, it was bright and clear.

We left the camp late because some porters had gone for shelter to a nearby village. We were very glad to have an adequate number of sun glasses to protect the eyes of our porters because on a day like this we were bound to have casualties on account of snow blindness. As we left Pheriche camp we could not help noticing that we had left the tree-line far behind. We could, however, still see some tall juniper bushes sticking out of the snow, but as we moved up through this bleak looking country to Labuje, at a height of 16,500 feet, there was hardly any vegetation. Round Labuje also we could see only small juniper bushes and dwarf rhododendrons. This camp was located in a sheltered place and boasted of two yak huts, which were to serve as our rest camp.

On our first night at Labuje we found that we could eat well though most of us were disturbed during our sleep by an irritating cough. It was also so cold that night that the water in our mugs and water bottles inside our tents was frozen the next morning. We sent 150 porters with loads to the Everest Base Camp while the headquarters group and the No. II Party waited at Labuje. From then onwards we had to get all our firewood from the Pangboche area, and immediately sent 50 porters down to bring up the firewood.

The weather was excellent on the morning of the 8th April, but very soon the streaky cirrus clouds started drifting from west to east. These harbingers of bad weather did not go unnoticed and true to Rao's forecast odd flakes of snow started drifting down by the afternoon. Very soon it began snowing heavily.

That afternoon we had plenty of excitement. The mail runner had arrived from Kathmandu with quite a number of letters and newspapers. Grewal also arrived soon after with the oxygen consignment. Grewal, who was popularly called Khalifa by us, had done the journey from Jaynagar to Labuje in 19 days and was given a hearty welcome by everyone.

We reorganised our porters once again and after keeping a hundred of them to ferry loads from Labuje to the Base Camp we paid off the rest.

Another day's rest was forced on us on account of bad weather. It had been snowing steadily the whole day and there was no cover anywhere under which to pay off the porters.

Leaving behind a small party consisting of 'Khalifa' Grewal, Sohan Singh, Rao, Rai, the Liaison Officer, and Rajendra Vikram, the No. II Party and the headquarters group left for the Base Camp. The No. III Party was expected at Labuje the following day and was scheduled to accompany the rear party to the Base Camp on the 12th April.

Most of our journey to our next camp at Gorkshep, called the Lake Camp by the British Expedition, was along a lateral moraine of the Khumbu glacier, which was in the form of a ridge of loose stones and boulders pushed by the Khumbu glacier to the side as it flowed down. We had to go up and down the slope of the moraine many times and the going was heavy because of loose stones and fresh snow that had fallen not many days ago. The sky was absolutely clear that day and the sun shone fiercely. Some of us felt that perhaps it was the hottest day we had so far experienced. We felt almost baked in the intense heat and in spite of the anti-sunburn cream and other protective treatment, we were very badly sunburnt. Everybody had become one or two shades darker, and many of us had heat boils on our lips.

The lake near our camp at a height of 17,200 feet was frozen. For the first time we found that there was no water available in the camp and we had to melt snow for cooking and washing. We also noticed that many of us suffered from cough.

JOURNEY TO THE PEAK

Legend

B.C. : Base Camp

I-VII : The various Camps on the way to the Summit.

X : The highest point (28,300 ft) reached by three members of the Expedition.

Next day we had to trek on the Khumbu glacier to reach the Base Camp. It was a comparatively easy march but our progress was very slow because we had to stop frequently to identify various features or to take photographs. There was material for many good pictures as the train of porters wended their way through a forest of seracs on the glacier.

Da Namgyal who was about 50 yards ahead of us stopped to look round when we were nearly half a mile short of our Base Camp. But instead of looking through the binoculars as was usual with him he seemed to be concentrating on some landmarks on the ground. When we caught up with him he pointed out a depression on the glacier, and told us that the British Expedition of 1953 had camped there. He stared at the place nostalgically for a couple of minutes and then moved on. A little further on we passed through an avenue of tall seracs, and for more than a hundred yards the ice-towers were lined up in a row on each side of the wide space. Da Namgyal smiled, baring his two gold teeth, and remarked, "Mall Road".

We were all very anxious to have a first glimpse of the upper reaches of the Khumbu glacier. Having seen numerous photographs and having studied the map we knew that a gap in the mountain through which the glacier came down should be to our right. We peered through our binoculars time and again but could not make out where the glacier descended into the valley. The false crest of Nuptse was so well merged with the western shoulder of Everest that even with the binoculars it was impossible to locate the gap. One of us even observed that we were perhaps in the wrong valley. At last we came upon a spot from where our first hurdle stared us in the face. Nuptse and the western shoulder stood apart and a definitely demarcated passage was visible. Da Namgyal who had been scanning the entire face of the mountain carefully with a pair of binoculars remarked that he had never seen the glacier in such a broken condition before.

So engrossed were we looking at the mountain that we did not realise we were only a hundred yards from our Base Camp. Our attention to the proximity of our destination was drawn by the shouting and whistling of some Sherpas who had seen us.

विघ्नैर्मुहुर्मुहुरपि प्रतिहन्यमानाः प्रारब्धमुत्तमगुणा न परित्यजन्ति ।

Though confronted by obstacles the strong-minded never give up the task undertaken.

BHARTRIHARI

IX

FIRST BIG HURDLE—THE ICE-FALL

We were greeted by Keki and some Sherpas who came to meet us outside the camp. They had all been badly sunburnt and were hardly recognisable. Keki said that he was not feeling very well that morning but the other members of the No. I Party, Ang Temba, Kohli, Jungalwala and Bhagwanani were on the mountain.

Keki showed me round the Base Camp which was located where the Khumbu glacier bent sharply to the south-west after flowing down the steep gradient between Nuptse and the western shoulder. The tents were put up on a surface moraine and some of them seemed to be wedged between sharp-edged stones and boulders. Some pinnacles of blue ice protruding through the moraine showed that there was a hard ice-crust under the debris.

He explained that the party had arrived there on the 6th of April, but were unable to put in any appreciable amount of work on account of the heavy snowfall during the first four days. On the 10th April, after a very arduous day, Ang Temba, Kohli and five Sherpas, followed by Keki, were able to achieve the most creditable feat of establishing Camp I, which was two-thirds of the way up on the ice-fall, in one day.

Perhaps it would not be out of place if I described here, briefly, the approaches to the summit, and the obstacles the mountain had placed between the peak and the climbers. On reaching the Base Camp, Everest was not even visible. The gateway leading to it was formed by Nuptse to the right and the western shoulder of Everest to the left. Between these two massive bastions lay the very broken section of the Khumbu glacier, which was to be our first hurdle and which was the only approach to the mountain.

A mountaineer is conscious of the "aliveness" of a glacier. It emanates from a snow-field high above the snow-line which feeds the glacier. This mass of ice slides down the mountain slopes and descends into the warmer valleys below where it melts and disappears. When this frozen river of ice tumbles over a very steep gradient, the enormous pressure to which the ice is subjected causes it to break up. In its downward plunge the solid mass of ice is converted into a chaotic looking conglomeration of seracs or ice-towers rising up to 50 feet or more, vertical ridges or deep chasms. This is what makes the ice-fall tricky and dangerous.

While Keki was talking to me I could not keep my eyes off the awe-inspiring cascade of ice with all its horrifying hazards. We knew that the ice was constantly moving and even as we looked at it, it was changing imperceptibly. Through this maze of colossal humps, fissures, steep walls and toppling blocks of ice, which was nearly half a mile wide, the climbers had to find a route to the top. The approaches from either side of the glacier, near Nuptse and the western shoulder, looked comparatively easier, but these approaches had to be avoided because of the danger of avalanches which hurtled down many times a day. Hence the route had to be as near the centre as possible even though the movement and consequent shifting of ice was likely to be the greatest there.

It looked difficult enough to find our way through a stationary labyrinth, cold and erratic, but it required much greater skill and effort as the ice was constantly shifting. The climbers would have to mark the route with coloured flags and keep repairing and altering the track to cope with the changes that the ice-fall produced every day.

The Khumbu ice-fall has been eloquently described by previous expeditions as the most dreaded hurdle. To negotiate this, mountaineering technique of the highest order, particularly of snow and ice craft, was absolutely essential. It called for hard work, perseverance, guts and determination from practically every member of the team, including the Sherpas, because over this hazardous route we had to transport nearly two tons of equipment and stores for the camps at higher altitudes.

After the spearhead of No. I Party had established Camp I, Jungalwala, with some Sherpas, improved the route and made

it secure for high-altitude Sherpa porters coming up with loads. This entailed fixing log bridges on crevasses which were too wide to jump across, finding deviations on the route to avoid dangerous sections, carving handholds and steps on the steeper gradients and marking the route with coloured flags of which we had more than 250 with us. After doing a good day's work No. I Party slept at Camp I on the 10th April. The members of the Party had every reason to be satisfied with their effort.

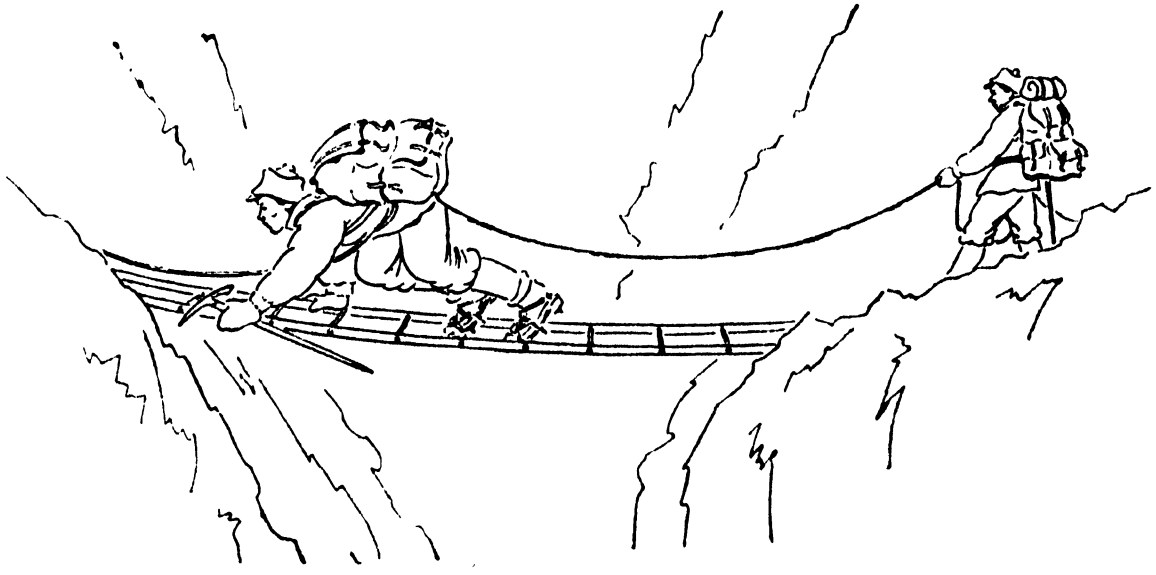
Next morning Ang Temba and Kohli started early to reconnoitre the route to Camp II and in spite of the increasing dangers and more formidable obstacles, they seemed to make good progress. They had taken with them four or five Sherpas who carried aluminium ladders, logs of wood, rope and wire ladders, manila rope, and ice pitons to drive into the hard ice surface for fixing the rope lines. They had to climb up almost vertical ice faces which required the skill of an acrobat. Working in turn Kohli and Ang Temba carved out a staircase and handholds with their ice-axes to traverse along the side of steep ridges. Quite often when they could not bridge a wide gap, they went down into the chasm to look for possible detours. There were monstrous ice blocks over-hanging the route so precariously perched that it seemed they would topple over any minute. These they either broke with their ice-axes or by-passed. At the end of about five hours' hard work the small party had used up all the ladders, logs and other equipment to bridge the obstacles, and just then they reached a point from where they could see the top shelf of the ice-fall.

Here they halted to rest and to survey the situation. It was not possible for them to assess the exact nature of the terrain between there and the Western Cwm but they felt that it should not take them more than two or three hours to reach the head of the ice-fall. The remainder of the task, they said, should be left to be done by Jungalwala's party who, as members of the first ice-fall team, must also have a share of the glory. Leaving a high-altitude tent behind they returned to Camp I where they briefed Jungalwala about the next day's work. The aim was to complete the route through the ice-fall and establish Camp II before handing over to the No. II Party. Leaving Jungalwala and Bhagwanani in Camp I, Ang Temba and Kohli returned to the Base Camp where they narrated the details of their two days' work.

Next morning Da Namgyal and Kumar, both of whom were fast climbers, decided to go in advance as a reconnaissance party to assess the task. They were followed by Vohra and Misra and 11 Sherpas who carried stores, equipment, tents and composite packages of rations for higher camps.

Keki had sent a wireless message to Jungalwala and Bhagwanani the night before that he and Phursumba, his Sherpa *sathi*, would go up to Camp I that morning to help them establish Camp II. Accordingly, Keki and Phursumba also joined Da Namgyal and his party and left early in the morning for Camp I.

After all the climbers and Sherpas had left, I sat outside my tent watching their progress. Twenty odd men had left the Base Camp that morning and through a pair of binoculars I could see them toiling uphill. Very soon they became mere phantoms. It was not possible to recognise them, but they were clearly silhouetted against the white background of ice.



I could see a whole string of men moving in single file like black ants on oversized sugar cubes. Then suddenly they all stopped and almost at once I heard a dull thud and saw a huge slab of ice peel off an overhang on the western shoulder. It came crashing down with a thunderous clatter. As the blocks of ice gathered momentum they were pulverised and poured down like fluid from one ledge to the other. As I sat there awed by this spectacle, I had forgotten about the climbers. Looking slightly to the right, however, I saw them standing motionless at the same spot. To my relief a few seconds later they resumed their journey.

Later in the morning four or five black objects were seen moving fairly fast well above where Camp I was supposed to be. I guessed that it was Jungalwala's group, which was hurrying up to finish its task before No. II Party arrived on the scene. Keki could not have joined them because his party was still short of Camp I.

I spent the afternoon generally in reorganising the Base Camp and planning for the work on the mountain. All the members and Sherpas who had left that morning were due to return to the Base Camp before dusk. I was writing my planning note in my tent when Kippa, one of the mess servants, came running and asked me to come to the Mess tent. According to him there were 50 candles burning in the Mess tent and all the other members were waiting for me. I wondered what they could be celebrating with such extravagance. A little later I was surprised to find the Mess tent lavishly illuminated with numerous candles. As I entered, the boys burst out into a chorus, singing "happy birthday to you". I suddenly remembered that it was my 42nd birthday. The quartermaster had even got the cook to prepare a birthday cake. I was very much touched by their thoughtfulness. After clapping and felicitations I was asked to blow out the 42 candles, which were held in six empty fruit tins. Within minutes of my blowing off the candles, the whole cake disappeared.

The ceremony over, I was anxious to know the progress of the day's work. Jungalwala, who was now back, told us how he and Bhagwanani lay in their sleeping bags that morning waiting for Keki and Phursumba to join them. He thought the No. II Party would come after Keki, but was surprised to hear a couple of Sherpas arrive before 8 a.m. to announce that No. II Party was not very far behind. Jungalwala and Bhagwanani leapt out of their sleeping bags and after dressing quickly, they left with their Sherpas for the top of the ice-fall. They even skipped their breakfast because they did not want No. II Party to take over an incomplete task.

After reaching the high-altitude tent left by Ang Temba and Kohli, Jungalwala looked for a possible route beyond. He noticed that the ice there was in bad shape. Instead of smaller crevasses which could be jumped across or bridged, there were gaping bergschrunds (large crevasses) separating the upper lip of the glacier from the confused mass of ice on the steeper section of

the ice-fall. After going down to a ledge in the chasm he jumped across a narrow crevasse and climbed up a steep ridge to discover that there were many more such obstacles beyond. Disappointed at not being able to complete the work which he had set out to do, he wisely waited for more mature advice and help and let Kumar and Da Namgyal catch up with him. According to Da Namgyal the condition of the ice only confirmed his doubts about the state of the glacier. He did not think it would take very long to get into the Western Cwm but it was clear that some real hard work would have to be done before they could make Camp II. After completing the reconnaissance for the next day's work, Da Namgyal and Kumar returned with No. I Party to the Base Camp.

Unable to catch up with Jungalwala, Keki had climbed some distance beyond Camp I and returned to the Base Camp after taking many photographs. It was a fine day for photography. Vohra and Misra, who were with the slower ferry party of eleven Sherpas, dumped their loads at Camp I and returned to the Base Camp the same evening.

After dinner we discussed our plan of action for the next few days. No. II Party's primary task was to flag the route through the ice-fall, improve various bridges, secure the ladders and, if possible, find out detours round the precarious sections. They also had to blow up a number of dangerous seracs to make the route safe for the Sherpas who would ferry the loads to the Western Cwm.

Lakpa, my Sherpa *sathi*, and I left for Camp I after 10 on the morning of the 13th April. After slow progress over the loose stones of the moraine, we soon stepped on ice and followed a faint track turning and twisting through a forest of weird looking ice pinnacles. We stopped a number of times to admire these miniature mountains carved out of the glacier ice by wind, sun and water. We jumped across many small glacial rivulets gurgling downhill through the ice. As we walked under over-hanging blocks of ice we noticed as many as a dozen icicles tapering down in a row. I could never resist the temptation of running the spike of my ice-axe along these brittle rods of ice which would break away from the solid mass as soon as they came in contact with the ice-axe and would fall one after another with a musical sound.

After walking for nearly three quarters of a mile we reached an open stretch beyond which was the ice-fall. On a rocky island in the midst of this expansive ice-field we sat down to strap crampons to our boots. These steel spikes were necessary now because we were soon going to start climbing on the ice. As we rose to rope up we saw two big avalanches coming down one after the other. The first one had started from the southern shoulder of Pumori, but the second one seemed to be heading straight towards us from the Lho La saddle, between Lingtren and the western shoulder. However, it stopped quite some distance from where we were.

As we drew near the ice-fall we were able to see its magnitude and chaotic condition. We went through a number of gullies and climbed steep slopes. The marker flags which had been put up only two or three days ago seemed to have shifted in some cases. One or two of them were deep in crevasses where they had landed after a shift of the ice. The sun shone fiercely and both Lakpa and I had to take off our jerseys. The glare was intense and we were perspiring profusely. We crossed nearly forty crevasses of various sizes. Most of these could be jumped across, but there were eight or nine which were bridged with logs of wood or ladders. In a number of places there were vertical ice walls studded with rope or wire ladders. At one place we had to cross a wide crevasse and then climb a steep face on the far side. There were no footholds on the ice wall on which a rope ladder had been firmly fixed from the top of the wall. As I stepped on the rope ladder, it swung directly above the abyss and hit the wall. After that the climb was quite easy, but it was a frightening experience.

As we plodded up-hill, we tried to improve the track by cutting steps, improving bridges across crevasses and putting up additional marker flags.

I found myself very tense while crossing some of the more difficult obstacles, but my companion, Lakpa, who was a veteran of many Himalayan expeditions, seemed to take the journey in his stride. Not long after we had started, we came across a wide crevasse which was not bridged. It could be jumped across and since I was leading I told Lakpa to secure my jump properly with the rope. After I had landed on the other side I looked back and found to my horror that Lakpa was holding the

rope in a very casual manner. It was now his turn to cross the crevasse and before he jumped I took the correct stance and put the rope round my body according to the correct belaying technique. From then onwards I found it necessary to teach Lakpa various methods of belaying as we went up. Finding me correcting his faults too frequently, Lakpa laughed and said that the "Burra Sahab" was frightened for himself, and that was why he was so anxious to teach him!

It took us nearly three hours to reach Camp I where we found Da Namgyal, Misra and a few Sherpas waiting for us. Camp I was situated in a sheltered spot between two parallel ice ridges about thirty feet apart. Except for a small area on which four tents had been pitched, the ice was criss-crossed with a number of crevasses all round. One ugly-looking crevasse was barely five yards from the tent in which I was going to sleep. The general atmosphere was very peaceful and quiet except for the intermittent noise of avalanches and stones falling from Nuptse and the western shoulder.

That afternoon I sent a message to Kumar at the Base Camp on our 'walkie talkie' set advising him to improve the route, including blowing up of some dangerous ice-towers.

In this Camp we had two conventional Meade tents which could accommodate two men each, and two tents made by Jamet, a French firm. The Jamet tents were about twenty five feet long, five feet wide, and about four and a half feet high at the centre. The outer fly which was made of strong and fine mesh nylon was dark blue in colour. These tents were designed to withstand strong winds, and looked like a couple of submarines that had just surfaced. The inner fly was made of very soft white nylon and had a tarpaulin groundsheet stitched to it. Each of these tents could house four men comfortably and there was room for rucksacks and a compartment for cooking in the centre.

After a dinner consisting of chicken soup, tinned curried meat, cheese, biscuits, followed by tinned pineapple and coffee, we got into our sleeping bags to write our diaries and listen to the radio. Misra caught the last few sentences of the news bulletin in Gujarati from the All India Radio. None of us knew Gujarati well but we could understand enough of the broadcast to gather that "the Advance Party of the Indian Mount Everest Expedition has

established Camp I at 19,200 feet and that all members are well and safe". We were all thrilled to hear this.

It was my first day in a camp on the ice-fall. I had expected it to be quite cold and had, therefore, overclothed myself. I was wearing a pair of knitted woollen socks over my stockings and my feet were enclosed in a pair of clumsy-looking but very warm feather camp boots. I had on a string vest, a flannel shirt, a thick woollen jersey, over which I wore a feather jacket. A feather-filled hood was attached to the jacket. Although we were surrounded by ice and were actually sleeping on the glacier, I found the tent too warm and had to take some of my clothes off.

On the mountain the outside temperature drops suddenly after sunset. Therefore, we retired to the warmth of our cosy tents fairly early although we did not go to sleep. After our meals we normally wrote letters and our diaries and listened to the radio until we went to sleep, which was seldom later than eight o'clock.

The following day Da Namgyal left very early with some Sherpas. Misra, Lakpa and I had decided to leave at eight after breakfast. The most tedious and time-consuming part of preparing a meal on the mountain was to melt ice or snow into water. The three of us were sitting round two primus stoves inside one of the Jamet tents and were waiting for the water to boil, when one of us made an awkward movement and toppled the stove on which a saucepan of water had been placed. One tries not to lose one's temper in the mountain; all the same a couple of muffled curses were audible over the hissing noise of the water coming in contact with the hot metal of the stove. We had to start melting the snow all over again, and this seemingly small incident delayed our departure by more than one hour.

After a frugal breakfast of cornflakes and milk, biscuits, cheese and tea, we started for the climb to the top of the ice-fall. Before leaving we had filled our plastic water bottles with lime juice, water and glucose, and each one of us carried a small thermos flask filled with tea. It took us nearly three hours to reach the farthest point upto which a proper route had already been opened. We were then almost on level with the lower end of the narrow valley between the Everest massif and Nuptse, but we could see a number of dark linear shadows which we found were large bergschrunds. The Nuptse wall rose almost

vertically to our right and the western shoulder to our left looked just as massive.

At about three o'clock, Misra and I were sitting on a high ice ridge and I was trying to establish our fixed-time communication on the wireless set with the Base Camp when I saw Misra suddenly jump up with a start. I took my earphones off and looked at him. He looked surprised and upset and was pointing towards his feet and mumbling something about the ridge going down. Just then I became conscious of the movement of the ice underneath us. It was a most uncomfortable feeling because the whole ridge appeared to be sinking. We also heard a grinding, subterranean noise and could feel the vibration under our feet. A few seconds later we saw a serac about 25 yards away crash down across our route. All this lasted only a few seconds and then everything was still again. We were both very frightened but our friend Lakpa did not lose his smile. He felt intrigued and amused at our discomfiture and kept sitting on the ridge completely unconcerned!

We had got used to the noise of the avalanches, the howling wind and falling stones, but the groaning of the ice-fall was something new. It reminded me of the Quetta earthquake in 1935 when, as a young boy, I had a similar uncomfortable feeling of helplessness.

A few minutes later Da Namgyal and his party joined us. He modestly informed me that he had put up a couple of tents at the site of Camp II, but that there was still considerable work to be done before the route could be called safe.

Quite happy at the progress of the day's work we returned to Camp I where we found Kumar, Vohra and Gopal waiting for us. They were all very excited to hear about the progress made at Camp II. Kumar then made a report on his party's activities. On the way to Camp I they had found it necessary to change the route at many places because of new crevasses opening up, and had blown up two seracs with plastic explosives to render a dangerous stretch safe for the Sherpas. Kumar reported that the route was now safe even for inexperienced Sherpas carrying heavy loads.

On the morning of the 15th April I returned to the Base Camp after briefing No. II Party regarding their advance. The

ferry plan had to be put into operation straightway to keep up the momentum of our progress.

Although it was my second day on the ice-fall, I was beginning to be familiar with its dangerous features and felt easier on the return journey. I was not surprised that Lakpa, with his experience of numerous expeditions, took the incident on the ice ridge the day before as a joke.

When I reached the Base Camp, I found three or four persons bunched round somebody lying on the ground outside the big Mess tent. Das, our doctor, was leaning over and the Sherpa Sardar was calling out to some Sherpas to come. On reaching the Mess tent I was told that Rai, the Liaison Officer of the Government of Nepal, had suddenly taken ill. He was all right the night before, but in the morning he complained of a severe headache and was extremely restless. Even before the doctor could come he had become unconscious. Das gave him blood plasma and oxygen as well as a couple of injections. I could see the sense of urgency in Das's eyes, but he was quite unruffled and told me that he had to move the patient to a lower altitude without delay. I was, however, very worried and said that everything else must take second place and Rai's safety was our first concern.

Within a few minutes Rai was put on an improvised stretcher and carried down to Labuje by the Sherpas. 'Khalifa' Grewal accompanied the party and carried a wireless set with him. Movement over the moraine was difficult because in addition to carrying the awkward load of an improvised stretcher, the Sherpas had to carry an oxygen bottle alongside, because the patient had to be fed with oxygen all the time. We were all very anxious but the confidence with which Das handled the case was praiseworthy and did a great deal to raise our morale. We were relieved when a wireless message came through a couple of hours later, that Rai had come round though he was still weak. Das, who gave the good tidings himself, said confidently that the patient was out of danger. It was then that Das told me that Rai was suffering from an acute failure of acclimatisation.

When I started from Camp I for the Base Camp, I had left the No. II Party busy organising its equipment and stores for its move to Camp II. The activities of the party were graphically described by Kumar who wrote in his diary:

"15th April—Place: Camp II—I have never been happier in my life than I am now. Here I am, sitting in Camp II, at 20,000 feet where the ice-fall ends. Over there I can see from left to right, Everest, the South Col and Lhotse. Everest is right above me and it looks as if I could run up and come down in a few hours. One might think I am showing symptoms of altitude insanity. I know it is because of Everest's mightiness and its magnitude.

"Although I am sitting at 20,000 feet and incidentally this would be the highest camp I have ever slept in, I am not feeling cold at all. In fact it is quite warm, even in the evening at seven, and I am wearing only a warm shirt.

"Lhotse is right in front of us, looking very important. Da Namgyal has just pointed out the Yellow Band, the Geneva Spur as well as the route followed by the British Expedition in 1953.

"I consider it a great privilege to be one of the first to spend the night under the shadow of Everest. I hope I am able to sleep because I am too excited.

"Before we sat down to dinner, Da Namgyal went outside his tent and stood looking at Everest for some time with folded hands. After mumbling a prayer he threw a biscuit towards 'Chomolungma' as an offering. I was really moved by his reverence for this great mountain. We had a good dinner, but I was not very hungry. Is it the altitude or excitement? I felt envious of the two Sherpas who were tucking in large quantities of *Tsampa* made from roasted barley.

"Now, looking at Everest I am becoming more and more confident that we will make it. Even at 20,000 feet I am not feeling the ill-effects of the altitude. I spent a couple of hours looking round and identifying many peaks. Pumori right below us in the shape of a symmetrical cone—unclimbed and challenging. But man will climb it one day. Further back Da Namgyal pointed out Cho-Oyu, which looked quite easy from where we were, but I have never been there. It has so far been climbed only twice.

"Tomorrow we have to find a route through the very badly broken and crevassed surface of the Cwm. I understand this is the Welsh way of spelling the word 'Coomb',

pronounced 'Coom'. It means an enclosed valley on the flank of a hill. These crevasses are big and we cannot afford to bridge every one of them.

"Oh yes, in my excitement about Everest I forgot to mention the journey from Camp I to II. Although Camp II was formally established yesterday, the route still had to be made safe. We had ten Sherpas with us carrying bridging material and tents. I had to carry my own equipment which weighed at least forty pounds. As we went up we found that the Sherpas who had come to dump the equipment the day before had left it nearly half a mile short of the selected site, and we had to carry the equipment ourselves. My share of the extra load was a ladder, which weighed a little more than ten pounds.

"The day before yesterday we had put up temporary bridges with logs. One of them had already fallen, as the crevasse had widened. It took us one whole hour to bridge one crevasse which was sixteen feet wide. After that we made two more bridges. If one starts bridging all the crevasses it will take a whole forest of timber. Up to three-foot wide crevasses we just jumped. We had to put up about ten fixed ropes and three or more rope ladders before we Came to Camp II. We reached the Camp at 3 o'clock in the afternoon and after enjoying the scenery for a couple of hours sat down to fix the flags on bamboo poles and sort out the equipment."

चित्रार्पितारम्भ इवावतस्थे।

Nature around looked almost a painted picture.

KALIDASA

X

THE WESTERN CWM

In our initial plan we had decided to establish a Rest Camp at Labuje which was at a height of 16,400 feet. This was stocked with rations, a radio set and reading material and two or three comfortable tents. The doctors felt that the climbers, after working on the mountain for some time, would recoup their energy much quicker if they lived for a few days at a lower altitude than the Base Camp. The first people to return to the Rest Camp were Rai, who had become ill, the doctor and other members of the escort party. The No. I Party followed them soon afterwards.

After my trip on the ice-fall I planned to go to Labuje for a couple of days. Before leaving I impressed on those present at the Base Camp to make use of the good weather to ferry as many loads as possible up to Camp II. Vohra had left for Camp II with a ferry party that morning. Other parties were to be escorted by Rajendra Vikram and later by Keki, Jungalwala and Grewal, when they returned from Labuje.

On my way down with Misra and Lakpa, we found 'Khalifa' Grewal sitting alone on a moraine ridge. He was very pleased to see us for he had lost his way and did not know which direction to take. The snow had melted during the previous two or three days and the landscape had changed considerably. Grewal gave us news about Rai who had recovered quickly after reaching Labuje. According to him the doctor did not feel that Rai should come up to the Base Camp any more. Instead he had advised his return to Namche Bazar after he was fit enough to walk.

After a nearly three and a half hours' journey we reached Labuje where Keki, Jungalwala, Ang Temba and others were waiting for us for lunch. The height did seem to make a

difference to our appetites. We noticed we did not seem to feel satisfied with what they gave us for lunch. Not long after the meal we had a heavy tea, and thanks to Kohli who was the quartermaster, we had a really sumptuous dinner. At the Base Camp and beyond, sleep used to be a little disturbed, but the first night at Labuje we all slept very well indeed and got up unusually late the next morning. Keki, Bhagwanani and Jungalwala who were due to go back to the Base Camp that day were already having their breakfast when I came out of my tent, bleary eyed, into the bright sunshine. They had spent three days resting and looked very fresh.

We spent the day basking in the sun—reading, writing, listening to the radio and relaxing.

On the afternoon of the 18th April, Kumar and Vohra arrived from the Base Camp for a spell of rest. We had no wireless communication with the Base Camp, so we were quite anxious to get up-to-date news about their progress on the mountain. Misra thrust a mug of tea into Kumar's hand and we sat down in the sun to hear his story.

On the 15th April Da Namgyal and Kumar had slept at Camp II. Next morning they left after an early breakfast. It was a clear day, but the morning wind made it very chilly. They had hardly gone a few yards when they were confronted with a big crevasse which ran right across their line of advance. They turned left towards the western shoulder in the hope of finding a suitable place where they could cross, but discovered that the crevasse was getting wider and wider. They had no option but to return towards Nuptse, although they did not like the thought very much, because, not long before, they had seen a few ice avalanches come down its vertical face. Fortunately, they did not have to go too near the danger area when they found a snow bridge which afforded a reasonable crossing place. However, they made a mental note that the place had to be bridged.

After crossing the first crevasse they had not even gone fifty yards when they came across other big crevasses. They were all the time conscious of the danger on both sides of the Cwm, and tried to keep to the centre of the basin. Although they could see a possible crevasse-free route to the right, below the Nuptse wall, they instinctively kept away from it. Instead, they

searched for a route in the centre and further to the left, but were ultimately forced to come back to the hazardous right flank.

As Kumar described it: "Several times we came to big crevasses and every time we were determined to find a crossing place in the centre or slightly to the left, but every time we had to come back to the zone of Nuptse's barrage".

The risk had to be taken for the first five hundred yards. According to Kumar, if they had persisted in trying to make a route along the centre of the Cwm, they would have had to spend many days laying at least thirty bridges. The gradient in this section was not very steep and there was danger of many concealed crevasses. They had to probe cautiously with their ice-axes as they moved slowly forward. After they had gone about half a mile the glacier appeared to be less broken. The surface was undulating, but in the diffused light it looked absolutely flat. Another eight hundred yards and there were no more crevasses. However, this being the first time on this stretch, they had to go slowly, feeling for hidden danger spots.

After a steady march up the gentle slope for two hours, they reached the site of the British Expedition's Camp IV. They decided to site our Camp III a little beyond this spot in a sheltered hollow, where they pitched a tent and dumped some stores.

Camp III was established on the 16th April at a height of 21,200 feet. This was to develop into quite a place. It became the Advance Base Camp—a firm base for work beyond. Kumar and Da Namgyal knew that they had to give the green signal to start the transportation of rations, equipment, tentage and oxygen for which a plan had already been made.

Camp III was their target for the day, but they were so encouraged with the day's work that they decided to go ahead and carry out a reconnaissance for Camp IV. Kumar said that it was his idea to go up but later when he found the journey very exhausting he repented having made the suggestion. They had finished the water and coffee which they had brought with them, and were feeling parched and dehydrated in the intense heat. But they kept climbing until they reached a place immediately below Lhotse Face. This was the site of the Camp of earlier expeditions. From here they could see the south-east ridge of Everest from the South Col to the south summit. They had not brought any extra tent. However, they marked the site

with a flag and started on the down-hill journey towards Camp III and Camp II.

Some Sherpas had told us earlier that the Swiss expedition of 1956 had left nearly 40 boxes of food and some oxygen cylinders in the area of their Advance Base Camp. During the return journey Da Namgyal and Kumar spent nearly half an hour looking for these treasures, but they could not find any trace of the food or the equipment.

By this time they were feeling very tired and Kumar had half a mind to stay in Camp III but they had brought no food or cooking apparatus with them. Even if they had a tent, staying in that Camp was out of the question and they had to plod their weary way back to Camp II. "I was literally dragging myself," said Kumar, "but was consoled by the thought that I was not the only one who was tired. The others also looked exhausted."

Both climbers and Sherpas found the return journey very tiresome as the snow had become soft and they sank knee-deep as they plodded down to Camp II. Also, having negotiated many big bergschrunds that morning, they were inclined to treat the smaller crevasses and cracks in the ice with contempt. It was probably partly due to fatigue and partly familiarity with the scene, that Kumar carelessly stepped on a snow bridge and fell into a crevasse. Fortunately he had Da Namgyal and another sturdy Sherpa on the rope, who, in spite of themselves being exhausted, hauled him out quickly.

On arrival at Camp II they were met by Vohra who had brought up the rations, equipment and additional tentage from the Base Camp that morning. Da Namgyal and Kumar had initially planned to return to the Base Camp the same day, but after their very fatiguing trip they decided to sleep in Camp II. Kumar, however, gave Vohra the impression that they had changed their plans in order to stay with him that night.

During the return journey to the Base Camp the next day, they met Sonam and Gombu of Party III, who were going up to continue the work from where No. II Party had left off. Kumar said they were in high spirits and even talked of reaching the South Col if the weather held out.

After narrating the story of No. II Party's work on the mountain, Kumar gave us news about the Base Camp. Apparently, till then, the ferry plan had not made good progress. That evening All India

Radio broadcast news of the Expedition having established Camp III after negotiating the ice-fall.

Kohli, Misra, Das and Lakpa returned with me to the Base Camp on the morning of the 19th April. Our arrival at the Base Camp was heralded by an unprecedented number of avalanches which came down from a ridge to the right of Pumori. Some of these were the biggest we had seen and came down with a frightening roar. All cameras including Gopal's 16 mm. cine went into action, and Rajendra Vikram recorded the sound effect with a running commentary on the progress of each avalanche.

Keki and Sohan, who had accompanied a ferry that morning, intended to reach a big flat ridge below Camp II where the Sherpas had dumped their loads before returning to the Base Camp. When they returned that afternoon we found that Keki did not look at all well. Das gave him a thorough check-up and declared that there was nothing seriously wrong with him. Keki was suffering from a nasty cold and general debility. He also had a bad cough and his pulse was rapid, but his chest was clear. His general condition was not good, so the doctor gave him some medicine and advised three days' rest.

As the Sherpas were leaving I checked up their loads and found that while most of them were carrying the correct loads as well as their personal equipment, food and water, there were some who had left their wind-proof suits and water bottles behind in order to reduce their load. On my previous visit to Camp I, I had noticed that some of them were in the habit of leaving their essential clothing at the foot of the ice-fall. They had been told that they must take plenty of fluids but they considered this as the Burra Sahab's fad and generally avoided taking this precaution. I made it quite clear to them that as the Leader of the Expedition I was responsible for their health and I expected them to follow my instructions regarding eating and drinking and the use of clothing and equipment. I told them that I would be very severe if I found any Sherpa disregarding my instructions. They seemed to be quite impressed with what I said. The Sherpa Sardar, Passang Phuter, was asked to see that every Sherpa, whether he was thirsty or not, drank a mug of water before he left for the mountain. By way of a practical demonstration I made them file past their cook-house where they were served a mug of water each. This seemed to amuse them quite a lot, but everyone drank the water before he

left, perhaps more to humour me than because they felt that they needed it. By and large our Sherpas were a tough lot. They used to be engaged on carrying loads for six days without a break, after which they were given a day's rest. Their diet was: morning—a cup of tea; breakfast—a sort of paste called *Chimpi*, made with *Tsampa* and cheese and tea; lunch—tinned fish or meat, salted biscuits, butter, jam and *Tsampa*. They carried a bottle of water with them and often had hot tea at Camp I. When they returned from duty, they had a hot supper consisting of rice, *chapatis* with yak meat or mutton, curried vegetables, etc.

At the end of the Expedition they were allowed to retain more than ninety per cent of their clothing and equipment which they could sell for four or five hundred rupees depending on how well they looked after it.

Generally the Sherpas could be trusted with money and valuables. When we left Jaynagar they had with them more than one hundred thousand rupees in Nepalese currency belonging to the Expedition. Five or six Sherpas carried sealed plastic bags tied round their necks each containing twenty thousand rupees. We found that our money was quite safe with them, yet the Sherpas saw no harm in helping themselves to extra food if they could manage it. An enamel mug was one of the items they did not seem to be able to resist. We had more than two mugs for each member, but we had already reached a stage where some of the members had none at all. Thondup the cook told us that the "mug disease" was common to all expeditions. Sir John Hunt's expedition had started from Kathmandu with a hundred per cent reserve of mugs, but by the time it reached the Base Camp only enough for half their requirements were left.

That evening I had a conference with the members during which I talked to them about giving personal attention to all items of stores and equipment required by them on the mountain. I also touched upon the subject of human relationship not only between themselves but also in their dealings with the Sherpas. Generally the Sherpas were not a complaining type of people. If simple principles of man-management were observed, they would do anything for their comrades, but they could be provoked quite easily if they felt that the members were not being fair to them.

That same day Gopal and Bhagwanani left for Camp III. Gopal had to take some movie pictures of the work on the ice-fall and the Western Cwm. As the movement beyond Camps II and III was going to increase, it was felt that a doctor was necessary at Camp III, which was our Advance Base Camp. Bhagwanani,

who was chosen for this, took with him two or three boxes of medicines. Rajendra Vikram accompanied him. Actually, he was a member of No. III Party but was unable to go up with Sonam, Gombu and Chowdhury. He hoped that after reaching the Advance Base Camp he would be able to check up on the oxygen apparatus for use on Lhotse Face and beyond.

We had not been able to establish good wireless communication betwen the Base Camp and the forward teams. We could get through from the Base Camp to Camps I and II, and, again

from Camp II to the forward camps, but, owing to some technical difficulties, through communication between the Base Camp and Camp III was not possible. We decided to lay a telephone line between Camps II and III, and when the pressure of work on the mountain increased, we planned to have a member at Camp II to relay the messages.

No. III Party were able to send us a report on their progress through letters brought by the Sherpas who went up with the loads. On the 21st April Gombu and Sonam returned to the Base Camp and gave me a report on the work done in the Cwm and on Lhotse Face. The report said:

17th April — Sonam, Gombu and Chowdhury left Base Camp and that evening Chowdhury stayed at Camp I, while Sonam and Gombu went up to Camp II.

18th April — Chowdhury escorted some loaded Sherpas to Camp II and Sonam and Gombu carried 60 lbs. of stores and rations each with a team of Sherpas to Camp II. This was the first team to sleep in Camp III.

19th April — At Camp II Chowdhury controlled the transhipment of loads from the Base Camp to Camp III. Sonam, Gombu and a few Sherpas went up to Camp IV where, after leaving their heavy loads, they moved forward to look for a route to Camp V. Before leaving they had seen a route, marked on the map, which was taken by the Swiss Expedition of 1956, but they found it impossible to take because of very big crevasses. Therefore, they worked their way slightly to the right and carried out a reconnaissance for about six hundred feet beyond Camp IV. After a fairly tiring day they returned to Camp IV which by then had two French tents and one Meade. It was a cloudy day and the wind was strong. They had found the foot of Lhotse Face quite cold. The temperature that night was minus eighteen degrees centigrade.

20th April — Chowdhury led a team of loaded Sherpas to Camp III and Sonam and Gombu worked their way towards Camp V supported by some Sherpas. They found that they had to cut steps most of the way and had to fix three rope lines with ice pitons which were quite difficult to drive into the hard ice. They also found a hundred feet of manila rope line left by the Swiss Expedition. They

made use of this rope for their own fixed line. They hoped to establish Camp V that day, but the wind was very strong and the weather was deteriorating fast. Therefore, after dumping a tent, a composite package of rations and a nylon rope, they returned to Camp IV quite exhausted.

They had hoped to keep going up on the 21st April, but the wind became stronger and the weather turned quite bad. They had been four days on the mountain and had slept four nights at Camp IV, which was at a height of 22,400 feet. They were a little disappointed at not being able to establish Camp V, but in accordance with our plan had to return to Labuje next morning for a well-deserved rest. Ang Temba and Jungalwala had gone with a small party to take over the work where No. III Party had left off.

The momentum of our advance during the first ten days after reaching the Base Camp was spectacular and rapid. Our initial push resembled a military operation in which a dashing tank commander drives deep towards his objective without worrying about the administrative tail. In their eagerness to get on, Parties I, II and III had moved very fast and we had very nearly reached Camp V. Our forward elements had also taken an unduly large number of Sherpas to support them in maintaining the momentum of advance. In this process our resources in manpower were stretched to the maximum. I felt that it was essential to make a systematic plan for stocking up our Advance Base Camp (Camp III) with tents, food, oxygen and other technical equipment before we forged further ahead.

The ferry plan was divided into two main phases. The first phase consisted of shifting nearly two tons of stores from the Base Camp to the Advance Base Camp. The second, which had to overlap the first to a certain extent, entailed lifting a load of three quarters of a ton from the Advance Base Camp to the camps beyond.

Keki Bunshah and Grewal were made responsible for the first phase of the ferry plan, during which stores had first to be carried from the Base Camp through the treacherous ice-fall to Camp II and then to the Advance Base Camp (Camp III).

Though the route had been properly established there were numerous difficulties which the climbers and Sherpas encountered over the first part of the journey. Quite often, the ferry party

would arrive at a particular point on the route to find that a portion of the track had disappeared overnight. Where there was a ridge it had to be climbed with the help of a rope ladder, while a big crevasse would have to be bridged or by-passed along a diversion.

One day one of the young Sherpas working in the kitchen volunteered to join a ferry. It was his first trip on the ice-fall. While crossing a log bridge he looked down and saw the dark yawning abyss below. He lost his nerve and fell into the crevasse but fortunately his companions were able to rescue him. He came out unhurt, but very badly shaken. The following day when I asked him if he would like to go on another ferry, he gallantly said, "Certainly. How can a Sherpa say 'no' to this?"

In addition to the hazards of the route which kept me on tenterhooks most of the time, we found that in the initial stages the Sherpas could not carry a full load to Camp II in one instalment, and we had to resort to dumping the loads a few hundred yards short of the Camp. The section between this point and Camp II was full of many hazards and it was not thought safe to expose the Sherpas to the dangers at the fag-end of their up-hill journey when they were really tired. Later, the route was improved and, by reducing the loads slightly, we were able to get the ferries to go straight from the Base Camp to Camp II, and return the same day. This was the most trying and hazardous work the Sherpas had to do till then.

While the main effort at that stage was diverted towards the lift from the Base Camp to Camp II, it was found necessary to keep a gentle trickle of stores moving forward beyond Camp II.

After finalising the ferry plan I decided to go up to the Advance Base Camp in order to supervise the progress of stockpiling as well as work on Lhotse Face.

On the morning of the 22nd April, when I was about to leave the Base Camp, I found that Lakpa was not looking too well. According to the doctor he had some stomach upset and was advised to stay behind. But Lakpa was all ready to accompany me to Camp III. When I told him that he should rest, he shook his head and said, "I go where Burra Sahab goes".

I couldn't possibly take him in that condition, and when the relief Sherpa *sathi*, Ang Kami, came, Lakpa had tears in his eyes.

During my journey up to Camp I with Misra, Da Namgyal and five Sherpas, I found that the ice-fall had considerably altered

since my last visit a few days earlier. There were many new crevasses where there were none before and just before Camp I a whole ice ridge had submerged at least fifty to a hundred feet and in the process had so badly broken up the surface that the place could hardly be recognised. In fact, all along the route the general landscape seemed to have changed. We decided to stay at Camp I because Da Namgyal and party had to repair the route near the camp.

On the morning of the 23rd April we left for Camp II. On the way there were three ice towers leaning at a dangerous incline over our route. I passed a message on the wireless to Kumar to establish his headquarters at Camp I and improve the track by blowing up some of these seracs. About midday we reached a place short of Camp II where there were about thirty loads dumped by the lower ferries. Da Namgyal looked very anxious as he examined the ridge on which we were standing near the loads. He said the loads were lying on a portion of the ice ridge which was about to collapse. Before moving forward, therefore, we shifted the loads to a safer place. On the way it started snowing and visibility was poor as we trudged along the dangerous portion of the route to Camp II, where we arrived almost in a blizzard.

On the 24th April, Ang Temba returned with a few Sherpas from the Lhotse Face. He had a sullen look and did not talk much. With some difficulty I was able to get him to tell me that he and his party had made the route beyond Camp IV safe, but they were not able to make much headway because of bad weather. On account of the fierce wind he suspected that one of the Sherpas had minor frostbite on the finger. He and his party looked quite disappointed at not having established Camp V.

After staying two nights at Camp II and leaving Misra behind to implement the ferry plan, I left for the Advance Base Camp with Da Namgyal and Kohli. The journey was not very difficult but I noticed that distances on snowfields were very deceptive. Some people coming towards us looked quite near in the beginning but it seemed to take a long time before we met.

I learnt that Gopal, the photographer, was going back because he had trouble with his throat.

Jungalwala, Bhagwanani and Rajendra Vikram were at Camp III when we arrived there. They told us that the wind had been very strong on Lhotse Face.

"What's for lunch?" I asked as I entered the big Mess tent.

Throwing his arms in the air in a flamboyant manner Jungalwala cried out, "Same, Sir. Fish, fish, fish. Every composite ration box has fish. No sausages or anything".

I told him to bring the box of 'compo' which I had picked up at Camp II and brought in my rucksack. "Open it and I am sure you will find a tin of sausages in it". Jungalwala opened it and sure enough there was a tin of sausages in the box.

Jungalwala smiled, "I didn't know they had brought special 'compo' boxes for the Leader".

When I came out of the tent after lunch I could see from the driven snow and white plumes from the peaks above that the wind was very strong beyond 22,000 feet. We could see Camp IV and Jungalwala pointed out the route to Camp V.

The next day I returned to Camp II where Misra was in charge of the transhipment of loads from lower ferries to Camp III. During my down-hill journey from Camp II to the Base Camp, I let my Sherpa *sathi* go ahead of me because I was comparatively lightly loaded and could belay him during steep descents. We noticed that one of the smaller crevasses had widened and my Sherpa *sathi* was just able to jump across. When it was my turn to jump over I pretended to be a little frightened and shouted across to my *sathi* that it was a little difficult. He stood at the belay, smiling at me. As I jumped, he tugged hard at the rope so that when I landed on the other side I was pulled right over and fell awkwardly on my face. The Sherpa stood there grinning and expected me to express my gratitude for having saved my life and was quite surprised to get a dirty look from me.

On arrival at the Base Camp on the 27th April, Rao informed me that the western disturbance, which had already arrived in the Everest region, was expected to get worse. He felt that the wind on Lhotse Face would be in the region of seventy to eighty miles per hour. This was later confirmed by that evening's weather forecast broadcast by the All India Radio.

It was evident to us that we could not make much headway on Lhotse while the strong wind and bad weather lasted. In any case, conditions up to the Advance Base Camp were not too bad and we were able to make use of the time in stockpiling at Camp III. Our advance had definitely been slowed down by the weather.

but the unspectacular work and drudgery of ferrying loads up to higher camps went on day in and day out.

On the 29th April, Grewal and Keki went up to Camp I on their way to the Advance Base Camp. Since most of the work of organising the dispatch of loads to Camp II had been finished they went to take over similar work at the Advance Base Camp. Chowdhury left the same morning for Camp II and was placed in charge of the oxygen as Rajendra Vikram had already come down to the Base Camp.

About this time we received a message from Mr. Sarin in which he asked for daily progress reports because, according to him, there was a popular demand for more information, and he had to issue more frequent press releases. He also mentioned that the annual meeting of the Himalayan Mountaineering Institute was held on the 28th April, and that the Prime Minister, Mr. Nehru, Dr. B. C. Roy and the others present had shown keen interest in our progress and had asked him to send their good wishes to us. They were happy to know that every member of the Expedition was in good spirits.

I cannot imagine any place less suitable to choose than the high mountains, wherein to display the mastery of mankind.

JULIUS KUGY

XI

SECOND BIG HURDLE—LHOTSE FACE

THE Advance Base Camp was situated at the far end of the Cwm and from there it looked a comparatively easy walk to Camp IV, which was located in the lower regions of the Lhotse glacier. It was clear that on reaching Camp IV the climber would find himself enclosed by steep faces on three sides. Barring the advance was the great Lhotse feature, difficult enough to try out the endurance, technical skill and determination of the most experienced climbers. This obstacle had to be overcome before the broad depression between Lhotse and Everest, called the South Col, could be reached. Earlier expeditions had also found that, in addition to the problems of hard work and technique, two other factors made progress agonisingly slow over this stretch. The first was the effect of the altitude which started to tell on the climbers and Sherpas alike; and the other was the strong south-westerly winds of over 50 to 60 miles per hour which kept blowing relentlessly over the Lhotse Face most of the time. The Lhotse feature with its rocky, black, turretted tops had hardly any snow on its upper reaches. Lower down, the glacier descended to the right half of the Face and poured into the Western Cwm. This has been described by Sir John Hunt as the "Glaciated Slope", which consists of a number of ridges separated by crevasses and almost vertical ice-walls.

On the left half of the Lhotse Face runs a rocky ridge called the 'Geneva Spur' from the South Col diagonally to the right in the direction of the Western Cwm. The name was given to this ridge by the 1952 Swiss Expedition most of whose members were from Geneva, and in which Tenzing and Lambert made a heroic attempt on Everest and climbed up to just over 28,000 feet.

The famous Yellow Band, which has also been mentioned as a very prominent landmark both by Hunt and Eggler in their books, consisted of limestone slabs and skirted across the Face from the lower end of the Geneva Spur rising to the right until it reached the Lhotse glacier where it disappeared. The Yellow Band appeared again to the right of the Lhotse glacier and continued to stretch across the Nuptse wall.

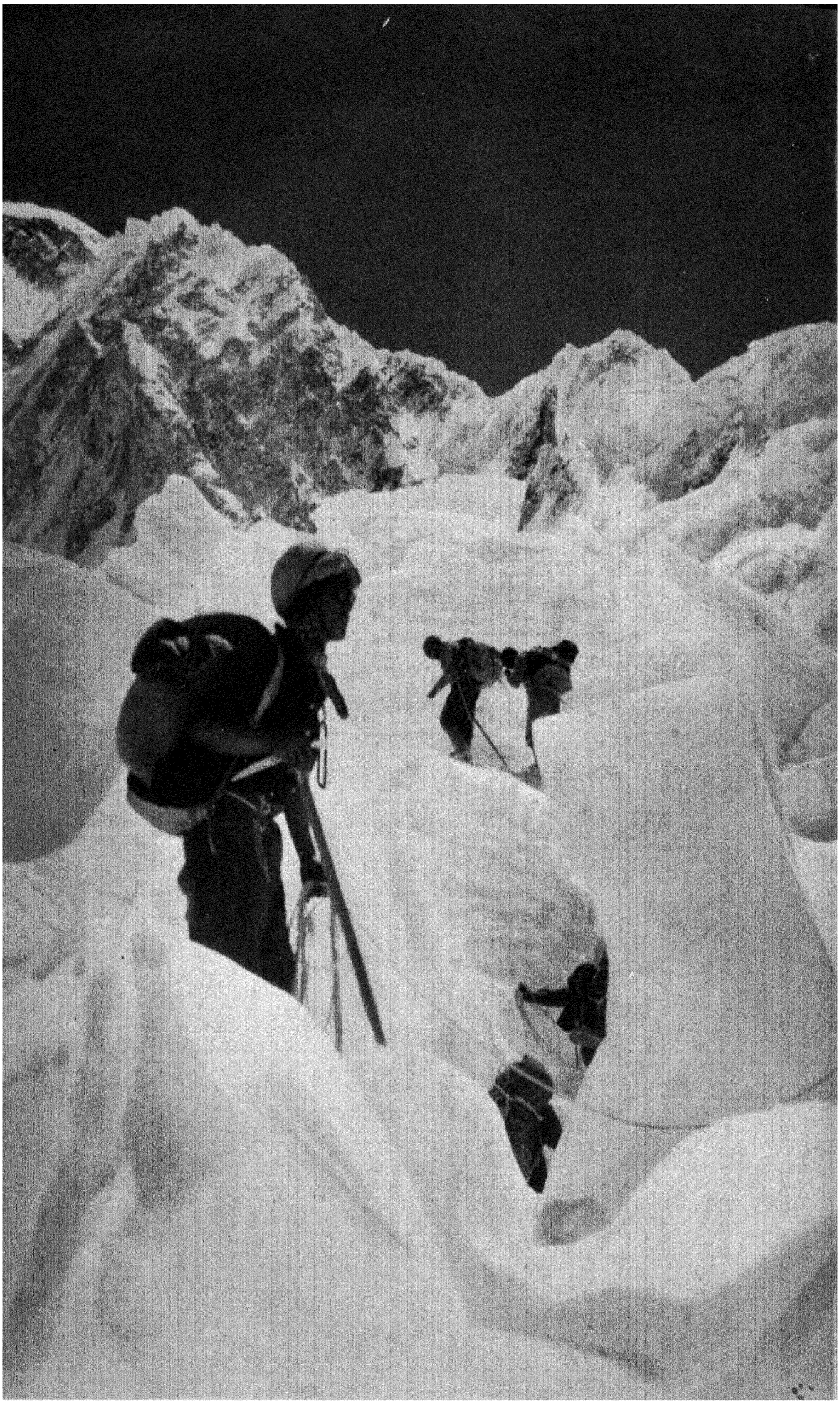
Various routes from the Cwm to the South Col were explored by different expeditions, but the most practical, particularly for the loaded Sherpas, was along the Lhotse glacier part of the way, and then to the left across the Yellow Band on a contour towards the Geneva Spur. The route then ran straight up the slope until it reached a point slightly higher than the South Col where it crossed the Spur and descended into the Col. This alignment took the climber along vertical walls on the Lhotse glacier and later over the glassy hard ice of Lhotse Face.

From the description of Lhotse Face given by Hunt and Eggler they had found a number of stretches with hard snow in which steps could be kicked with boots, but this year, owing to a mild winter, practically the whole Face was devoid of any snow, and we experienced a granite hard surface with a bluish tinge. The climbers had to spend days cutting steps, perched precariously on the dangerous slopes.

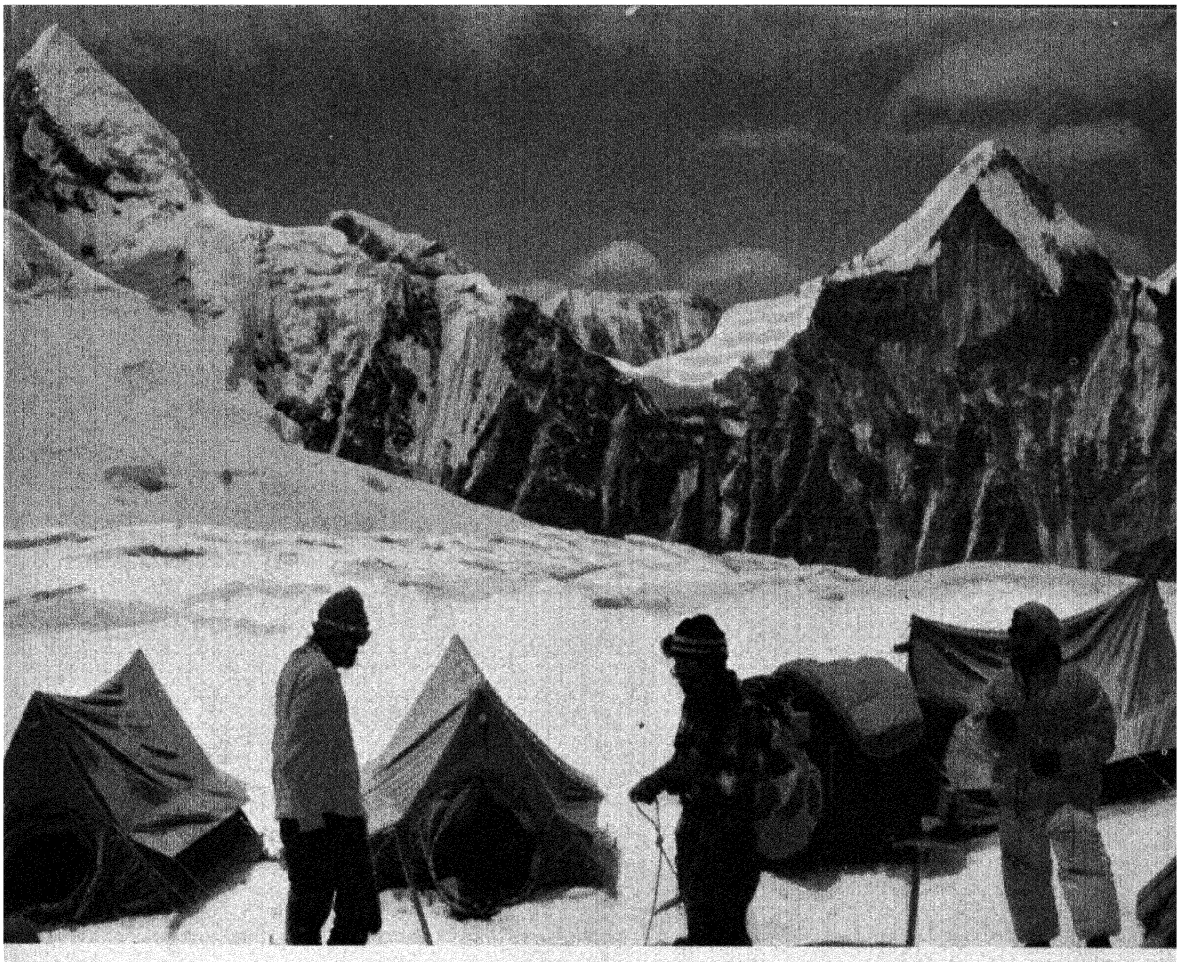
Kohli and Da Namgyal returned to the Base Camp on the 30th evening. Kohli looked a little tired and Da Namgyal had severe stomach trouble. He had been working in cold and fierce winds on the Lhotse Face, and unfortunately fell victim to the ill effects of wind chill and anoxemia. He should have used oxygen for this work, but being a veteran he thought the oxygen equipment would be cumbersome for his work and omitted to use it. He had, however, succeeded in establishing Camp V on the 28th April and had put up a Meade tent on a fairly safe platform which he had to carve out of the ice.

Da Namgyal told me that he was given oxygen at Camp III on his way down from Lhotse Face. That night when he went to sleep with the gas mask on he dreamt that somebody had shifted the mask from his face and had put it on a woman, who was lying next to him. He got up looking for the mask and the woman, only to find that the mask was still on his face. This

The Khumbu ice-fall above Camp I

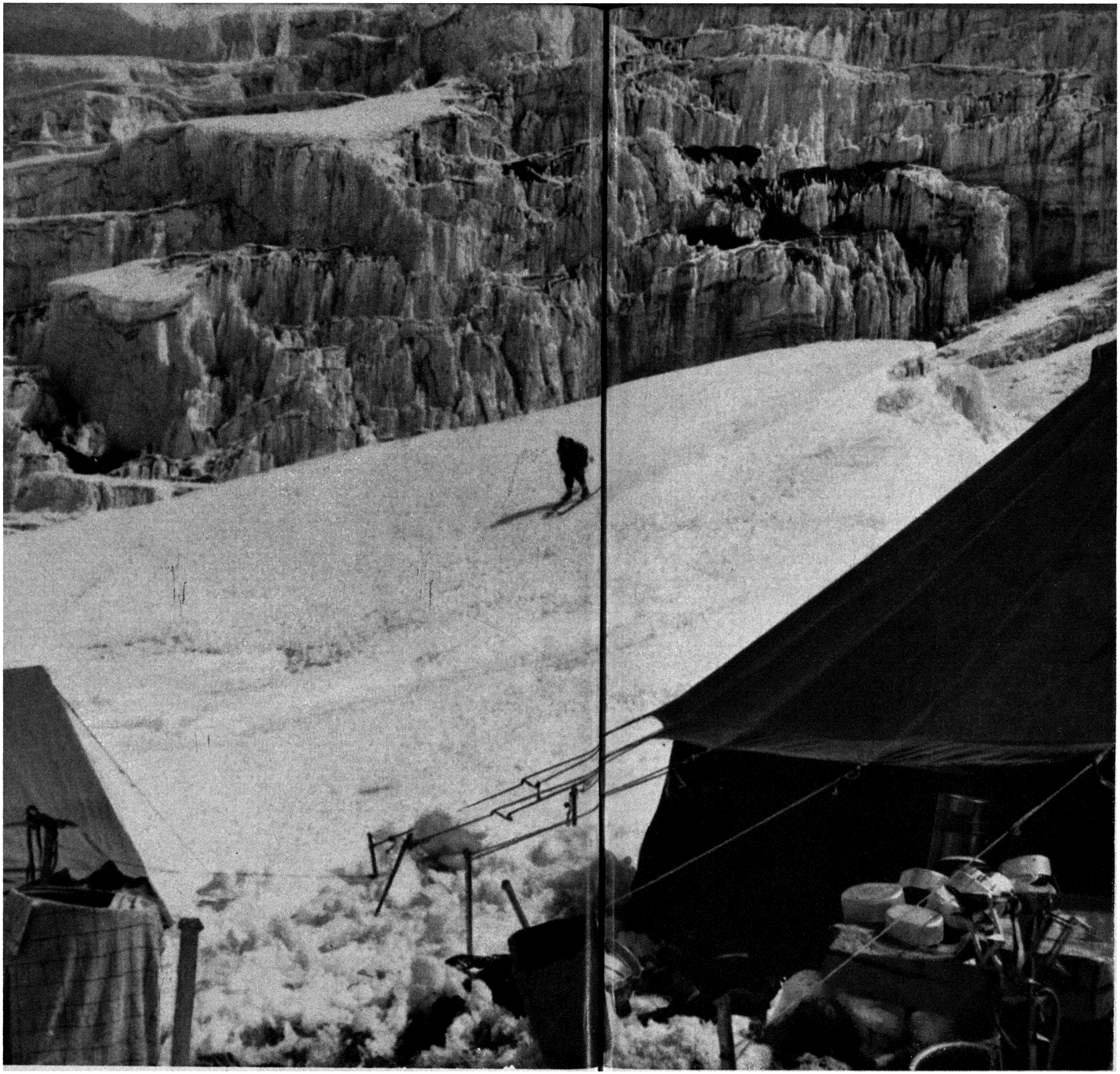


A ferry of load-carrying Sherpas on the ice-fall

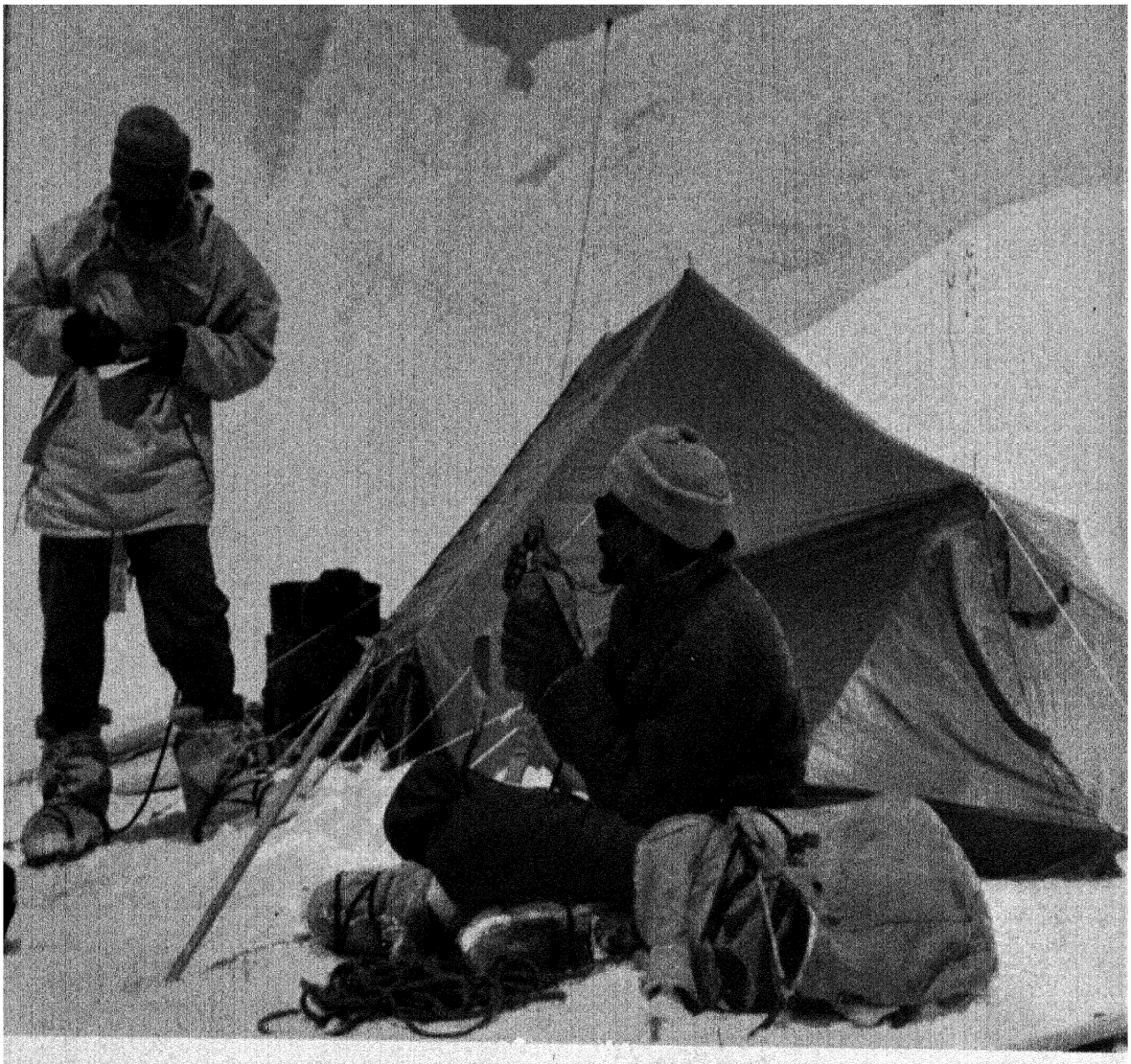


A party of climbers ready to set out from Camp III

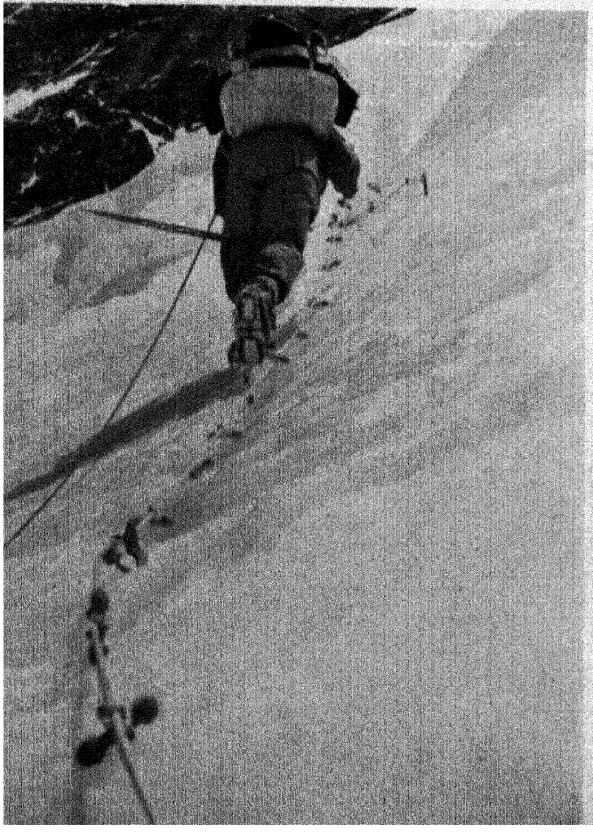
A view of the Western Cwm



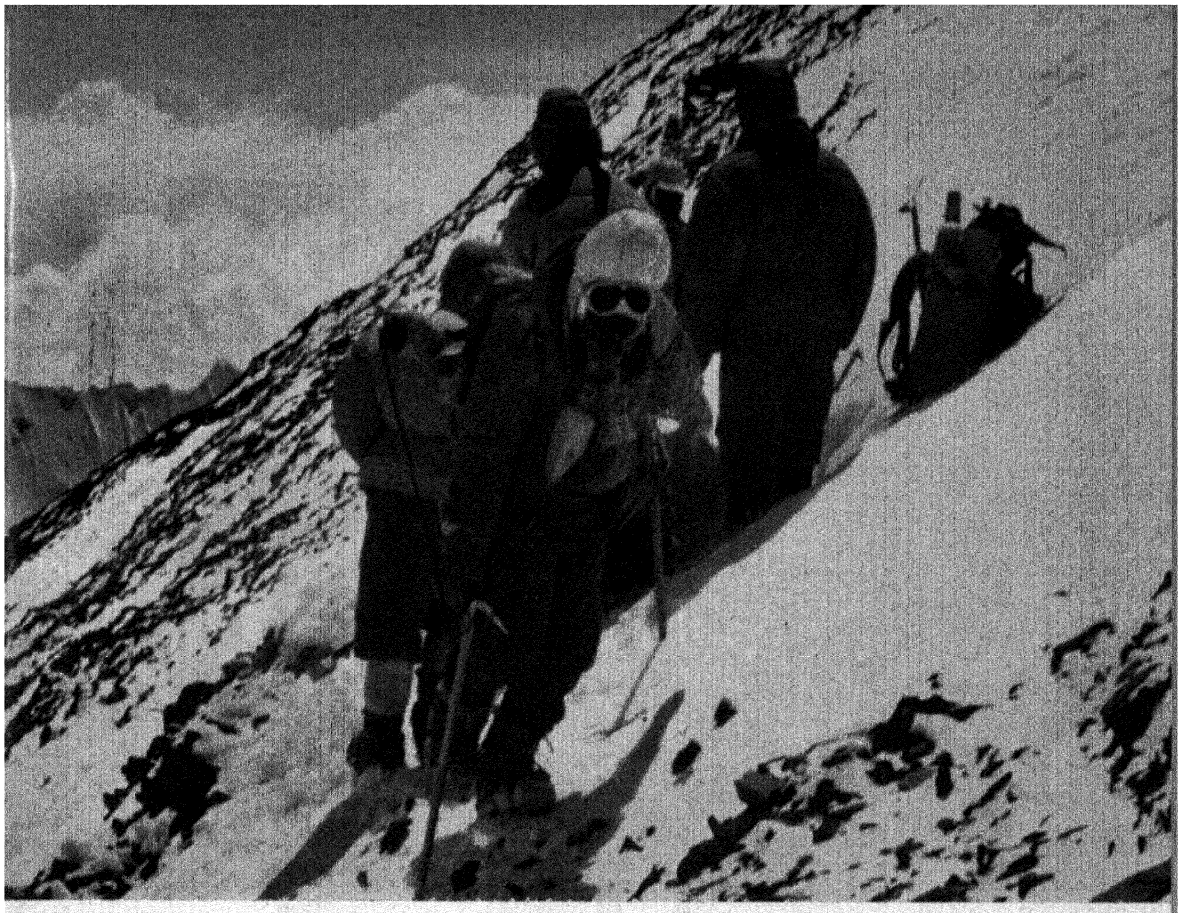
Skiing on the glacier at the Advance Base Camp



Climbers in Camp V calling the Advance Base Camp on the "walkie talkie" set

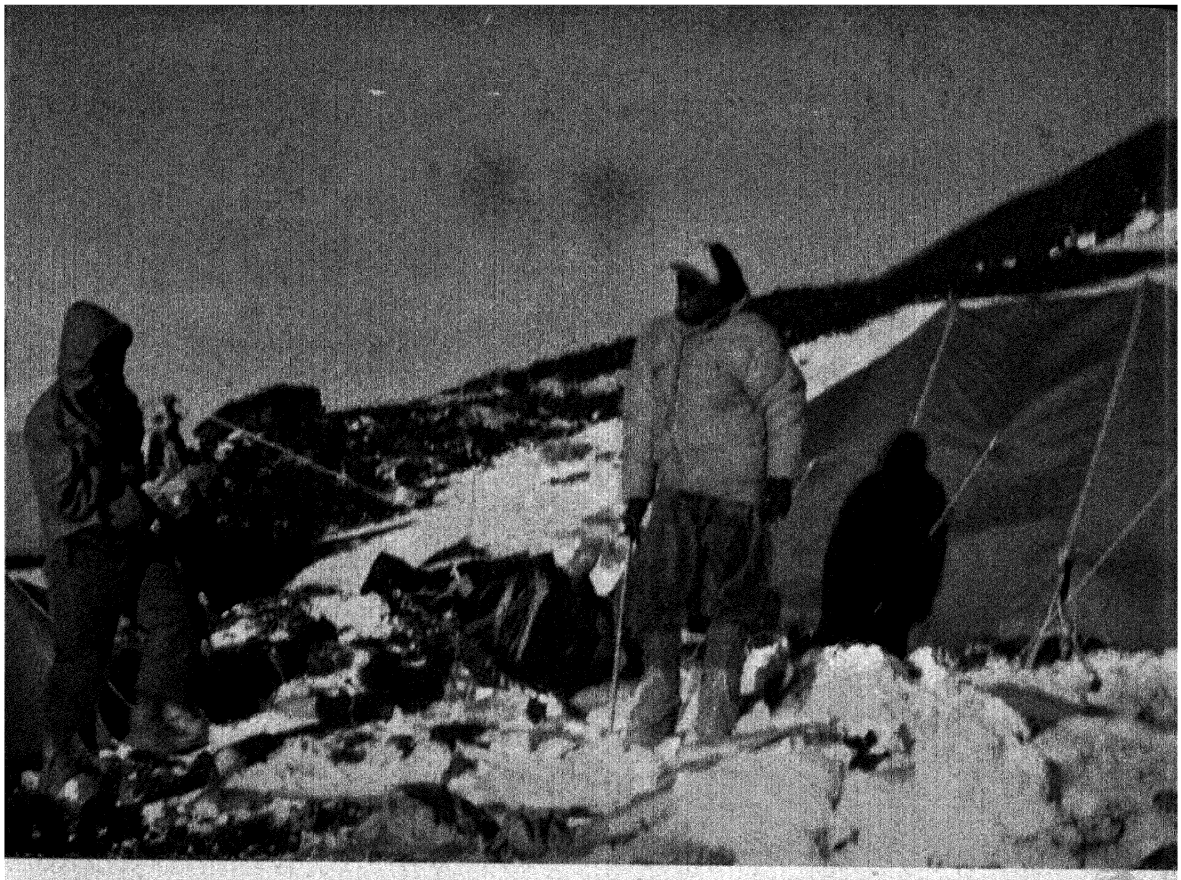


A fixed rope-line on the Lhotse Face



On the way to the South Col

A climber coming down the Lhotse Face



Camp on the South Col

A dead "Steppe Eagle", one of the three found on the South Col

happened to him about four or five times during the night, and at about four in the morning he got fed up and took the mask off and turned off the oxygen supply. The doctor explained that he was suffering from hallucinations, which was not an uncommon experience at high altitudes.

There were only a dozen loads left at the Base Camp to be transported to Camp II. The track below Camp I had, however, deteriorated considerably as the movement of the ice was getting faster, and Ang Temba, Sonam, Misra and Jungalwala were asked to go the next day to repair the route.

The acclimatisation carried out by us earlier was a great help in our performance on the mountain. Up to the Advance Base Camp, which was at an altitude of 21,200 feet, very few members or Sherpas suffered from mountain sickness, loss of appetite or insomnia. However, after 22,000 feet there is no permanent acclimatisation possible, and as soon as our climbers and Sherpas started living beyond this height, the ill-effects of altitude began to be felt for the first time.

Those who had to do intense physical exertion like cutting steps at 23,000 to 24,000 feet without oxygen were the worst affected. Extreme cold and chilling winds also claimed their own victims. Accordingly, after the 20th April the Base Camp started receiving casualties of minor cold effects and other ailments caused by lack of oxygen. While two or three patients, one suffering from a mild frostbite and Da Namgyal, who had intestinal trouble, were slow to recover, most of the people returned to normal health in two or three days after reaching the Base Camp.

The Lhotse Face proved to be a much harder nut to crack than we had imagined. This was mainly due to three factors: firstly, the exposed nature of the ice-face on Lhotse due to lack of snowfall during the winter; secondly, the western disturbances resulting in very strong winds while our party was working between Camp IV and Camp V; and lastly, the reluctance of the climbers to use oxygen upto Camp V. Ang Temba and Da Namgyal returned to the Base Camp quite exhausted. Kumar took over from Da Namgyal on the Lhotse Face, but after reaching Camp V he could not do much as he was suffering from altitude sickness. On the return journey he improved the route between Camp IV and Camp V and arrived at the Base Camp on the 4th May, after having been without food for nearly three days. He looked weak and slightly demoralised, but he possessed wonderful resilience; his strength, morale and the sparkle in his eyes returned within twenty-four hours of his reaching the Base Camp.

It was noticeable that the Lhotse Face was affecting the morale of most of the members. Our meteorological officer, Rao, however, promised good weather during the next week and we hoped that conditions for opening the route would be better.

The South Col was on everyone's lips now. While this important landmark was going to be the springboard for our final attempt on Everest, Lhotse Face was not going to be easy.

In reaching Camp V the climbers had shown remarkable enthusiasm, energy and determination. They had shown excellent ice-craft in cutting steps along the first half of the Lhotse Face and fixing rope lines. In some cases they had paid the penalty of over-enthusiasm and under-estimation of the weather conditions. We still held the Lhotse Face in awe.

Beyond Camp V we had to negotiate a steep traverse and a slippery couloir or ice-gully to reach the Yellow Band. After this, the approach to the top of the Geneva Spur appeared to be easy, provided snow conditions were good, but it was difficult to assess the exact nature of the terrain from the Western Cwm. Our fittest climbers and Sherpas had discovered that the slightest adverse weather conditions and the smallest obstacle at that altitude posed severe problems. It was, however, essential to open the route to the South Col. At the same time, I was anxious not to tire my summiters as well as their supporting Sherpas, and decisions regarding the deployment of man-power became very difficult.

On the 30th April, Kohli and Da Namgyal were on their way back from the Lhotse Face. Kumar had already taken over from them. Gombu came to see me early that morning as he was going with a strong band of Sherpas to work beyond Camp V. Winds were still very strong at altitudes over 24,000 feet and I warned Gombu to use oxygen at Camp V and beyond and not to stay on the mountain for more than three days. I had by then come to the conclusion that I could only minimise the exposure of the best climbers to severe conditions, but it was not possible to keep them in cotton-wool for the final ascent. When Gombu said goodbye to me he appeared to be confident that he would be able to overcome the technical obstacles to the South Col and pave the way for our dumping operations for the final effort.

We had entered the crucial month of May, and, according to the meteorological forecast, the 1st of May was the last day of the week when the influence of the western disturbance in the Everest region would be over. It had been slightly cloudy that day, but towards the evening the sky was overcast. The Sherpa ferry from Camp I brought news that the wind was not too strong in the Cwm. On the 2nd May Keki returned from the Advance Base Camp after visiting Camp IV. He reported that the stocking-up of the higher Camps was not very satisfactory. Fortunately, Misra, Jungalwala and Nanda had already been asked to go to the higher camps to supervise the ferries.

I had planned to give a pep-talk to the party of climbers and Sherpas before they left for higher ferries on the 3rd of May but when I got up in the morning I found to my horror that I had

lost my voice completely. I had had some throat trouble for a few days. Actually throat trouble had taken almost an epidemic form for some days. It had started with some Sherpas and Jungalwala, Keki, Gopal and Sonam Gyatso were the other victims before I got the infection. I was particularly anxious about the condition of my throat because I had to go up to the Advance Base Camp to control the higher ferries as well as to make the final ascent plans. But the doctor would not even let me think of going up for the next two days. I knew I should have been up front then, but in the mountains one cannot take too many chances with one's health. I had to accept the doctor's advice because I knew if I went up in that condition I might become a liability rather than a help.

I utilised my forced stay at the Base Camp for making the programme for shifting the stores and equipment to the higher camps. Sonam Girmi, the assistant Sardar, with twelve Sherpas was to go to Camp II. We had worked out a schedule for moving all stores from Camp II to Camp III in three days, and then Sonam Girmi and the Sherpas would move up to Camp III. They hoped to shift all the loads required for Camps IV, V and VI and finally Camp VII, from the Advance Base Camp to Camp IV in the next three or four days. We hoped that by then the route to the South Col would have been opened. According to our estimates it would take five days to stock up the South Col with two ferries, one from Camp IV to Camp V and the other operating between Camps V and VI. But all our plans depended on the weather being good. The Sherpa Sardar, Passang Phutar, was to go down from Camp II to the Base Camp and was made responsible for escorting small ferries from the Base Camp and supervising repairs to the track through the ice-fall.

Gombu returned from the Lhotse Face on the afternoon of the 5th May. He told us that he had reached Camp V on the 2nd May and on the 3rd May he had made the route across the couloir and the Yellow Band, and worked his way up to the edge of the Geneva Spur. He felt that he could have reached the South Col if he had more time because, according to him, the rest of the route was comparatively easier. But, it was already late in the afternoon and besides he had developed a minor fault in his oxygen apparatus which he felt must be rectified. He had also used up every bit of the 2,500 feet of manila rope we had taken up for the Lhotse Face as well as the few sections of the rope

used by the Swiss Expedition which he had found in the area. We had not estimated such a large requirement of rope, but the glassy ice-face of Lhotse had to be made safe with rope lines all the way.

The weather generally continued to be fair and I asked Keki and Rajendra Vikram to move up to the Advance Base Camp on the 7th morning to be in charge of the high ferries and the oxygen. The doctor promised to let me go up on the 8th.

The following is an extract from the entry in my diary of the 6th May:

> **"Base Camp—6th May, 1960:** The day dawned bright and clear. Another excellent day to be on the mountain and forge ahead as far up as possible. Is it the pre-monsoon lull? From the weather forecast, the wind velocities are supposed to be very high at higher altitudes but there were no snow plumes from the higher peaks today. Occasionally I saw clouds pillaring up which indicated that the wind was not very strong. If it is really the lull we must take advantage of it. But the route to the South Col is not yet open. Vohra and Chowdhury have gone up today to follow up on Gombu's work. Misra from Camp II informed me on the wireless set that he had seen four people moving up the Geneva Spur this morning. We all hoped that Chowdhury and Vohra, two of the youngest members of the team, would reach the South Col today but another message in the evening indicated that the party was seen returning to Camp V before they had reached the South Col. That means that the route to the South Col is not open even today. Jungalwala and Ang Temba are going up tomorrow and I do hope they are able to complete the task, but that will take at least two days more. In the meantime, the ferrying of stores up to Camp V must continue. Keki and Rajendra Vikram leave for the Advance Base Camp tomorrow and I the day after".

Keki and Rajendra Vikram left for the Advance Base Camp on the 7th morning. Raj Vikram stayed the night at Camp I but Keki was able to reach Camp II from where he sent a message that the route had gone bad again and needed immediate attention. This was nothing new. We had got quite used to this.

I postponed my departure to the Advance Base Camp because I had not yet had any definite news about the South Col.

I also wanted to get the weekly weather forecast which was promised two or three days later. The wind was still very strong higher up.

On the 8th May 'Chow,' Vohra and Grewal returned to the Base Camp. They narrated the story of their attempt to reach the South Col.

They had left Camp III on the 4th May and after sleeping the night at Camp IV they reached Camp V on the 5th May. As the route had already been opened and they did not have to cut steps or undergo similar physical exertion, they decided to make the ascent up to Camp V without oxygen. The two young climbers did the journey in two and a half hours and felt quite fit at the end of it, but, that night, two out of their three Sherpas fell ill with a bad throat, cough and headache. Next morning they wanted to start at seven but the Sherpas did not seem to be in a fit condition to go up. They gave the Sherpas medicine, tea and food and waited for the sun to come up. After two hours the Sherpas appeared to have recovered and they started. They improved the route as they went along by cutting more steps and fastening two sections of rope on the Yellow Band.

They climbed nearly three hours slowly in fairly strong wind. At about 1.30 in the afternoon one of the Sherpas complained of a choking sensation in his throat. He had just drunk cold water out of his water bottle. He was suffering from slight throat trouble and the cold water aggravated the symptoms. Another Sherpa also looked worn out. They decided to return. Their altimeter read 25,000 feet when they turned back. It was a creditable achievement for these young climbers; they had only 1000 feet to climb to the South Col, but had to return on account of the condition of their Sherpa comrades.

The western disturbance having passed the Everest area, the wind velocity on the 9th May was expected to be 40 to 45 miles per hour at 25,000 feet as against 60 to 65 miles per hour, which we had so far experienced. That afternoon we received a wireless message from Camp II to say that Ang Temba and Jungalwala with five Sherpas were seen very near the top of the Geneva Spur.

The 9th May was a significant date; the 1956 Swiss Expedition had reached the South Col on this date. Had we also reached the South Col? The wind did not appear very strong. Was it just the end of the western disturbance or the beginning of the lull? It was difficult to say at this stage, but we expected the

weekly weather forecast any day. Such were my thoughts that afternoon. The mail runner arrived and amongst the many letters he brought there was a post card from Sir John Hunt who again wished us the best of luck and, above all, good weather. There was no news from the higher camps; perhaps Ang Temba and Jungalwala had forgotten to take the wireless set with them. In any case, that night I went to bed in a very optimistic frame of mind.

Tuesday the 10th May, 1960, dawned bright and sunny, a beautiful morning. The daily weather forecast indicated a wind velocity of 40 to 50 miles per hour at 30,000 feet, otherwise the weather was expected to be fair to cloudy, with chances of a snow-shower during the evening or night. We also received the much awaited weekly forecast which read: "Trough in westerlies now over west Persian Gulf, may affect weather Everest region towards middle of week. Westerly wind may weaken temporarily about middle of week, but monsoon lull unlikely during week".

This was not a very promising forecast, particularly because there was no definite indication of the lull. There were also no signs of the monsoon. The pre-monsoon lull might be too short when it came or there might be no lull at all. Therefore, we had to be ready poised at the Advance Base Camp to take advantage of the opportunity when it came.

The South Col was after all reached on the 9th May, the date on which the Swiss reached this important landmark. Ang Temba and Jungalwala who returned to the Base Camp with nine Sherpas told us the story of their remarkable feat of endurance. They had left the Advance Base Camp on the 7th afternoon and after sleeping the night at Camp IV they reached Camp V on the 8th May where they stayed for the night. They must have been in very good condition because they started from Camp V to the South Col without oxygen. The six Sherpas who accompanied them carried a tent, some oxygen bottles and some 'compo' rations. According to Jungalwala the wind was strong at the Col, but the party stayed there for over half an hour before starting on its return journey to Camp V. They found thirteen French oxygen cylinders lying stacked neatly in a row. There were numerous other cylinders, gas masks, regulators, remains of high-altitude tents and odds and ends abandoned by previous expeditions.

Ang Temba brought back with him a small black leather-bound diary. From the name and address in the diary we found that it belonged to Doctor Hans Grimm, a member of the 1956 Swiss Expedition. Inside the diary was a photograph of an attractive young girl about 13 or 14 years old and two currency notes, one of 100 Swiss Francs and the other of 100 Lire. The last entry in the diary was dated the 18th May, but as it was in German we could not make out what Doctor Grimm had written.

Jungalwala and Ang Temba spent the night of the 9th May at Camp V and after leaving it on the 10th morning they were in the Base Camp the same afternoon at four. Their performance showed how fit they were. We all complimented them on the good work done by them, but I could not help giving them a ticking-off for not using oxygen while going to Camp VI and for not checking up if the thirteen oxygen cylinders they saw at the South Col were still charged or empty.

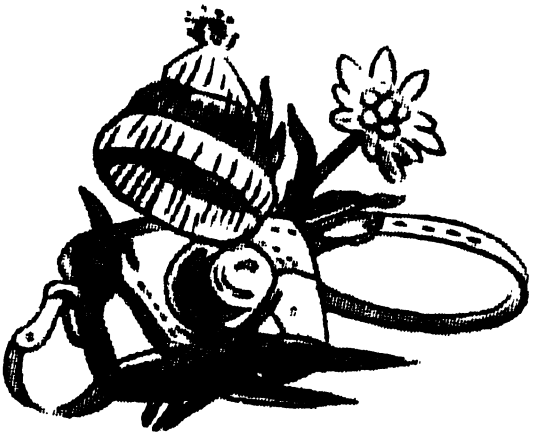
All the parties going up had been instructed to take the manometer with them to check the pressure in the cylinders if they found any. Dr. Marmet, the oxygen expert of the Swiss Expedition, had written to us that we could expect some fully charged cylinders on the Lhotse Face and the South Col. Anyway, our second big hurdle was over. The obstacles of the Lhotse Face had been surmounted and the time had come to build up the last take-off position and draw up the final plan. Our prayers for being spared strong winds during the ascent to the peak had to be redoubled now.

The moment appeared to be very auspicious for action. We had noticed a definite drop in the wind velocity, and the route to the South Col had been opened. The doctor had declared me "fighting fit" a couple of days earlier, and I was feeling very well indeed. I, therefore, decided to leave on the 11th morning with 'Chow,' Sonam, Kohli and the photographer. The remaining climbing members, Kumar, Vohra and Gombu, were to follow a day later. Ang Temba and Jungalwala were to rest two or three days at the Base Camp before going up.

That evening I had to make a difficult decision about Da Namgyal. Since his return from the Lhotse Face a week ago he had been resting and was under treatment. He still had a pain in the stomach, and was quite weak. I did not think he

would pick up sufficient strength to be able to join the summit team. It made me very sad to have to tell Da Namgyal that he would have to remain behind on account of his health. Quiet, modest and undemonstrative, Da Namgyal showed no emotion on his face. His exclusion was, however, a bit of a blow to me also. In technique, discretion and experience he was head and shoulders above anyone in the team and inspired confidence in everyone. But, he could not go up. I knew he was feeling bad and there was no other alternative. He might be able to make himself useful a little later in a supporting role. Das was still trying to cure him and being an optimist he felt miracles were possible. I hoped he was right.

That night there was great jubilation in the Base Camp. Both Jungalwala and Ang Temba looked remarkably fit in spite of the very arduous climbs they had done. The big Mess tent was overcrowded at dinner time and a number of members were hurriedly scribbling letters as the mail runner was due to leave early next morning. The loud voice of Jungalwala could be heard over the din, as he spun his yarns. Everyone was greatly interested in the photograph of Miss Grimm which had been lying for four years at the South Col. Miss Grimm must be quite a girl now!



पतितोऽपि कराघातैरुत्पतत्येव कन्दुकः।
प्रायेण साधुवृत्तानामस्थायिन्यो विपत्तयः॥

Though beat down by the hand, the ball springs up again; the right men have mishaps only for a while.

BHARTRIHARI

XII

THE DREADED SOUTH COL

SONAM, 'Chow', Kohli, Gopal and my Sherpa *sathi* Lakpa accompanied me to the Advance Base Camp on the 11th May. The ice-fall had changed a lot at many places and in some sections it could hardly be recognised. While stretches of ice had either sagged or crumbled or avalanched, many seracs had tumbled down throwing varying sized ice-blocks across our path. We had to alter the route from time to time to meet the changing situation, and we knew that this process would continue until we made the final attempt and the last man had come off the ice-fall. We could only pray that at the time of the upheaval, avalanche, or sinking or falling of ice, there would be no Sherpa or climber in the area. Sir John Hunt in his book has mentioned his agony about this particular feature, and I dare say I seemed to have got many more grey hairs worrying about the safe return of our daily ferries.

We reached Camp II fairly early in the afternoon. Nanda had spent four days in Camps II and III laying telephone cables between the two Camps. This was perhaps the highest successful telephone link ever established. On arrival at Camp III, I talked on the telephone to Rajendra Vikram. He gave me the latest news and informed me that Keki and Misra had gone to Camp IV that morning. I had been told by the doctor that Keki should be advised not to go beyond Camp IV. Rajendra Vikram promised to convey the message to Keki on the wireless set which he did, but apparently the message was not understood by

Keki or he gave it the 'blind eye', and went to Camp V the next day.

That evening Sonam produced his favourite dish *thukpa*, made of rice and minced meat with plenty of chillies. Everybody liked it very much.

We listened to the news and music on the small transistor set, when one of us noticed the moon rising slowly behind the Lhotse feature. We all stood outside our Jamet tent. At first it was a thin arc but very soon we could see the moon move visibly to the right of Lhotse. We felt as if we were standing silently in the dark inside a cathedral and someone was coming up from behind the organ holding a candle. As the moon was clear of Lhotse's turrets, its first rays fell on Everest which appeared to emerge from the darkness quite unnoticed. There it stood majestically to our left, looking down into the valley—stolid, silent and challenging!

The moon looked like a massive white ball of liquid fire and its silvery light bathed the Cwm, giving a degree of mellowness to its rugged feature. The dark shadows of the crevasses which used to stand out in striking contrast against the smooth surface of the Cwm now seemed to blend harmoniously with the landscape. We stood there many minutes observing this unbelievably beautiful scene. I looked to my right and found Sonam staring at the moon in wrapt attention. I asked him what he thought of it. 'Very nice,' was his cryptic answer as he quickly bent down to enter the small tent which he was sharing with 'Chow'. Within seconds we could all hear him snoring. Sonam possessed a remarkable quality for a mountaineer—that of being able to sleep anywhere and at any time.

As I lay in my cosy sleeping bag I started thinking of various things. There were about eight or ten of us, including the Sherpas, in four tents on the lip of a gaping bergschrund, each man with his own ambition, his own hopes and his own problems, and each one of us mentally living in his own world and feeling important in his own way. Yet, how insignificant we were, lying under the shadow of giants like Nuptse, Lhotse and Everest. I remember Jungalwala arguing with someone and saying that the mountains had a way of 'sorting everyone out'.

I had occasion to observe many people in the mountains, from the very young and uninitiated to more experienced and

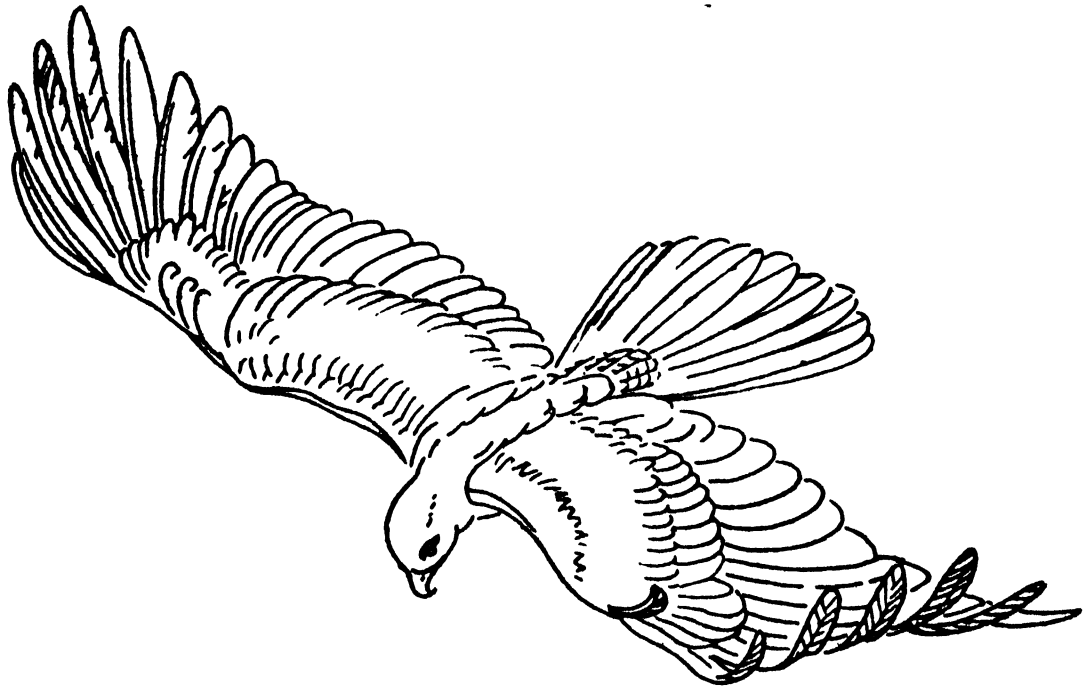
mature climbers. The younger climbers seem to take special delight in overcoming obstacles and facing dangers and hazards. In the beginning quite a good percentage of them are too bent on achievement and do not bother about others as long as they get there. Fortunately this does not last long. Maturity and experience mellow their attitude to mountaineering and although the love of getting into the limelight may remain a driving force for some time, they eventually learn that in this pursuit they are not permitted to take liberties with normal discipline. They cannot afford to be selfish as there is no room for exhibitionism or show of individual performance. Everyone has to work and share the glory as part of the team. They learn sometimes from their own bitter experience that no mistakes, however trivial, go unpunished, and the punishment can often be severe. The mountains are ruthless teachers!

A man can hide his inner self by putting on a cloak provided by so-called modern education—soft talk, polish, outward good-manners and an artificial smile. Thus, he can often fool even the cleverest people. But, in the mountains this camouflage mysteriously drops off and he stands naked in front of everyone. He cannot hide the awkward bulges and deformities in his mental make-up and character. What is more, he finds himself in front of a life-size mirror, as it were, and he can himself see what he really is. This realisation gives him a rude shock. If he has strength of character he does not try to hide his faults. Instead, he makes a sincere effort to overcome them, and in this he is helped by his companions, who in their turn, are perhaps undergoing a similar experience and are only too willing to take him into their fold. Thus, Mother Nature starts a cure, which, if followed earnestly, has a lasting effect.

Man derives incalculable pleasure from the mountains, and from the companionship of his comrades with whom he shares the discomforts and hazards. When tied with another climber on the rope he becomes an integral part of the team and at the time of tying the rope round his waist he does not think the rope is for his personal safety. He prays to God to give him the strength to come to the rescue of his companion, should the need arise. He returns to the world transformed into a new man.

While thinking of all this I dozed off to sleep. Next morning it was another day.

We left Camp II fairly late next day because we had to take stock of the stores and equipment at the Camp. The weather throughout the march from Camp II was quite good, but after we reached the Advance Base Camp it started snowing. I was anxious to find out the exact position regarding the stocking-up of the various Camps, but I could not get a clear appreciation of the situation. Kohli, Kumar and Keki were, therefore, detailed to go into the plan once again and to discuss it with me the next day. By the evening, however, I discovered that quite a number of loads of rations and fuel had been sent up, but instead of dumping the loads at higher camps and returning to the Advance Base Camp or even the lower camps, large parties had been permitted to stay at Camps IV and V, and they had eaten up the rations and consumed the fuel which they had carried.



On the evening of the 12th May we received the unwelcome news on the radio that the monsoon had reached the Laccadive Islands and was approaching fast towards Colombo. On the 13th morning I drafted an urgent message to Mr. Sarin in Delhi to find out from the Meteorological Department the exact position of the monsoon and when it was expected to reach the Everest region. There was not much time to lose if the monsoon had already been sighted over the Indian Ocean!

A small ferry party had gone from Camp V to the South Col the previous evening. They were somewhat slow in climbing and could not return to Camp V the same day. They had to bivouac between Camp V and the South Col, but were able to return safely the next day. There were, however, a couple of cases of chilblains and minor frostbite of the ears among members of the party.

I discussed the ferry plan and suggested some modifications. The situation was still fluid because I had not yet made out my final ascent plan. Since time was to be an important factor in the plan and we did not know exactly when the ascent could be made, it was not possible to go on any definite figures. However, I decided that Camps V and VI should be stocked up with oxygen, tentage and fuel.

Although the weather was not very favourable, Kumar and Kohli were asked to go up to Camp V the next day and escort ferries up to the South Col. I was particularly anxious to get Kumar used to the higher altitudes because his last trip to Camp V was not a very happy one. Both Kohli and Kumar were told to make use of oxygen. They were also told to find out the exact state of the oxygen cylinders left at the South Col by the Swiss Expedition.

They reached Camp V the same afternoon and reported on the transistor wireless set that they were taking the altitude very well and did not have to use oxygen either during their climb to Camp V or at Camp V itself. On the evening of the 13th May I received the following message from Mr. Sarin:

> "Your Exp/252 of today. I could not give an immediate answer as asked for because of necessity of reference to Poona Met office. Position is that in association with deep depression in the Arabian Sea south-west monsoon current has extended into east Arabian Sea south of latitude twelve degrees north. Expect advance of monsoon in the Arabian Sea will not be maintained after disappearance of the Arabian Sea depression. Monsoon so far not advanced into Bay of Bengal. See no indication of monsoon reaching Everest within next week. I understand under normal conditions unlikely repeat unlikely monsoon reach Everest region till beginning of June."

But there was no mention of the lull yet and on the 14th afternoon the weather deteriorated; by the evening it was

snowing heavily. It snowed and thundered practically the whole night. We were all very anxious about the party at Camp V. When we got up the next morning the whole Cwm appeared to have put on a new white cloak, and there was fresh, clean snow many inches deep covering practically every rock feature. The black patches on Lhotse also became white, and the Everest massif, which is normally black, also wore a white garb. Lhotse Face became dangerous on account of avalanche hazards on its steep slope.

Later in the morning we saw Kumar and Kohli starting for the South Col. It was not a good day to go up and I wished they had stayed on at Camp V. They must have found the going very heavy because a couple of hours later they were seen returning to Camp V. When we established contact with Camp V I asked Kumar and Kohli to return to the Advance Base Camp with all the Sherpas because there was likelihood of more snow and it would not be right to stay on Lhotse Face in that condition of the snow. While checking up the rations and stores at the Advance Base Camp we discovered that not only did we not have enough stocks at the higher camps, but the ration and fuel position at Camp III was getting serious. For instance, there was very little kerosene left. We sent an urgent message to the Base Camp with a returning ferry asking them to send up fresh stocks.

On the afternoon of the 15th Jungalwala and Da Namgyal arrived from the Base Camp. We were quite a big congregation at Camp III now. In view of the uncertain weather no useful work could be done by anyone, and, in the meantime, we were making serious dents in our rations at the Camp.

All this time the weather continued to be unkind. When was the lull coming? After considerable thought I had to take the painful decision of thinning out Camp III and sending as many people as possible down to the Base Camp. Gopal, who could not, in any case, take pictures on account of poor visibility, and Rajendra Vikram, together with a party of Sherpas, were asked to return to the Base Camp the next morning. A message was also passed not to send up anyone from the Base Camp to Camp III.

We still had a lot to do in the Cwm as well as on Lhotse Face. The track from Camp II to Camp IV had to be retraced because the strong wind had blown away most of the marker flags. Kumar and Kohli reported that conditions on Lhotse Face were bad,

as, in addition to obliterating the steps, the snow had actually buried the fixed lines almost throughout their length.

A couple of days after my arrival at the Advance Base Camp I started running a temperature and had a stomach upset. The doctor diagnosed this as an infection I must have caught at the Base Camp. After a day's treatment, however, my temperature came down to normal, but my stomach disorder continued. As I had lost my appetite I started getting weaker. The doctor said it was some intestinal trouble and suggested I should go down to the Base Camp. This was out of the question at the time, because certain crucial decisions had to be made and my place was at the Advance Base Camp. In fact, I had come to the camp to go to the South Col to support the summit teams. My condition, however, started deteriorating. On the 16th May Bhagwanani said that I must go back to the Base Camp. There was no other way to recover from the illness. Although I became very weak my head was quite clear and I could carry out the normal planning work. I, therefore, decided to stay on as long as I could. Although Da Namgyal had improved and had actually arrived at the Advance Base Camp he did not appear to be in a fit condition to be sent to the South Col. I had, therefore, to find someone else to be in charge of the supporting party at the South Col.

I decided that all members who were marking time at Camp III for good weather should reopen the route to Camp IV by ferrying essential loads up to the Camp. Sonam and Gombu were asked to go to Camp V and shift it a little higher to reduce the distance between that camp and the South Col, so that the parties going from Camp V to Camp VI could return to Camp V the same day.

The Sherpas who had been employed on higher ferries were asked to return to the Base Camp for rest to enable them to go up later in support of the summit teams. One party had left early in the morning. Gopal and Rajendra Vikram left after breakfast and a second party of Sherpas led by Gyalzen, a senior Sherpa, was to leave last. When Gyalzen came to say goodbye, I asked him to wait for three to four minutes. When he had waited for half an hour he started becoming impatient. I said goodbye to him and gave him a letter for the Base Camp. Gyalzen's party had not gone ten minutes when we heard a

thunderous clatter starting from the western shoulder of Everest. We came out quickly and saw that a very large mass of overhanging ice had broken off the shoulder and had hurtled down across the whole of the Cwm with the speed of an express train. Big, ugly looking pieces of ice clattered down with a frightening noise, dissolving into powdered snow-dust which rose from the surface in the form of white clouds. The avalanche travelled from one end of the Cwm to the other up to Nuptse wall. It was a frightening spectacle. Our thoughts went back to the parties which had left for Camp II. I ran back to the tent and contacted Camp II on the telephone. I was not quite sure if the line would still be working after the great devastation caused by the avalanche, but the cable had been buried deep under the avalanche, and I was able to make contact. A Sherpa who answered the telephone informed me that the first party had already arrived there. Bhagwanani said that he was able to see through the binoculars all members of the second and third parties silhouetted against the white cloud. We heaved a sigh of relief to learn that all members had escaped great disaster. That afternoon Gyalzen rang me up from Camp II and thanked me for delaying him because he felt that if he had gone earlier he might have been buried under the avalanche.

On the 17th May, when the doctor examined me, he was quite firm. He told me that I must go down. I was slightly hesitant but on account of my growing weakness I planned to leave on the 18th May. Another detailed report on the weather forecast with regard to the advance of the monsoon was expected any day. The daily weather report made no mention of it, but reported occasional snow-showers in the Everest area.

Before going down I had to make the final decision about the summit teams. So I called a meeting of all the members that afternoon. I recalled a similar scene described in Hunt's book when he announced his summit team. There was an air of suspense because I had not discussed the team with anyone till then. Although Da Namgyal had come up to the Advance Base Camp I had decided to leave him out of the summit teams. Initially, it was my intention to send three teams, but with Da Namgyal dropped out, I had to be content with only two. Unlike the previous two successful expeditions to Everest in which each team consisted of two persons I decided to send up three men to each

team. The first team consisted of Gombu, Sonam Gyatso and Kumar. Ang Temba, Kohli and Vohra were to follow a day later as the second team.

At that stage I could only announce the composition of the two parties; it was not possible to fix the date for the ascent. While the second party was told to be in a supporting role for the first in case of need, Jungalwala was selected to be in charge of the base at the South Col. I also made it clear to Ang Temba, Kohli and Vohra that in case there were not enough supplies or oxygen at Camp VI and beyond, the second attempt would be called off and only Vohra would stay with Jungalwala till the first summit team had returned safely. All of us were sorry for Da Namgyal who had to be left out, but I had already discussed this with him, and he was convinced that it was best for him not to go. However, as I was going down to the Base Camp I asked him to act as an adviser to the summit teams and to act on my behalf while they prepared at the Advance Base Camp.

All members of the team, except Gombu and Sonam who had to shift Camp V, were told to go down to the Base Camp for rest. It was planned that if we did not receive a definite indication of the lull within three days, the climbers would come up to the Advance Base Camp and start for the South Col as soon as the weather permitted. Kumar, Vohra and Kohli left for the Base Camp early on the 18th morning. I followed them with Misra and Lakpa a little later. Although I did not think it was necessary, Bhagwanani insisted on going down to Camp II with us in case I needed some medical attention. Before leaving Camp II for the Base Camp next morning I rang up the Advance Base Camp and left a message for Gombu and Sonam to come down to the Base Camp for rest as soon as they had finished their work on the Lhotse Face.

Keki and 'Chow' had gone to Camp IV with a ferry earlier and had carried some loads themselves. But the doctor advised me that Keki too should go down because he did not look too well. In any case, ferries to the higher camps were no longer possible on account of the bad weather and I had to withdraw a large proportion of men from the Western Cwm. By the time the exodus finished there were only about six or eight persons left in Camps II and III, including Da Namgyal, 'Chow' and Bhagwanani.

The weather was still very bad and it kept snowing all the way down to Camp II. It was not an ideal day to be on the mountain at all, leave alone going down the ice-fall. Normally I used to be the last one on the rope when going down. This time Misra and Lakpa insisted that I should remain in the middle with Lapka leading and Misra following me, watching almost every step I took. We had a long journey ahead and I had already been told that the ice-fall had deteriorated. There were more than a hundred obstacles of varied nature, some technically difficult, others quite dangerous; but all of them requiring good nerves and perfect balance. The journey over the ice-fall is exhausting under the best conditions, but I was very weak, the weather was bad and visibility was very poor. As we started, it began to snow heavily again. I had made up my mind not to give any impression of my personal misgivings to my companions, and pulling myself up I waved a cheery goodbye to the doctor, Da Namgyal and Jungalwala.

For the first two hundred yards from Camp II we had to traverse over flat terrain, and I found the going very tiring and heavy. Perhaps it was because of the fresh snow. Our first obstacle was a descent down a vertical wall below which there was a fathomless crevasse. This obstacle was made quite secure by fixed rope lines, but to negotiate it we had to take two steps down the vertical wall and then step across the gap to an ice-tower, which also had steps cut down its vertical face. The gap was too wide for a comfortable crossing. We had, therefore, to make ourselves secure and balance for some time before using the rope to pull ourselves across to the far side. On the ice-tower we had to hug the face with the help of the rope and go down carefully on to a narrow ice-ridge which also had dangerous looking crevasses on either side. I had gone over this stretch many times and had never thought of it as a difficult one. But it required more strength than I had to heave across. On arriving at this obstacle on this occasion, however, I consoled myself with the thought that on previous occasions I had carried a very heavy rucksack, but this time I had hardly any load, and also that I had less body-weight to heave. I took the descent in my stride, pretending that I was normal, and surprised myself and my companions by the ease with which I crossed it. Misra and Lakpa were very encouraged to see that after all I was not in such a

bad state. All the same, both had belayed me very well indeed and in fact were quite prepared to lower me, if necessary, like a sack of potatoes.

My performance over this obstacle renewed my confidence. However, I was surprised to see that soon I found the going heavy again. I was not quite sure if this was due to heavy snow conditions or my weakness. I asked Lakpa and Misra if they found the going difficult and they assured me that the snow was heavy. Slowly and steadily we plodded along until we came to another ice-wall down which we had to use a rope ladder. We descended a forty-foot ice-wall half on the rope ladder and the other half along a very steep and tricky traverse, holding precariously to a fixed rope line. After we had got over this hurdle I discovered that I seemed to be able to do the difficult portions more easily than the flat bits. Lakpa remarked that our journey would have been much quicker if the whole ice-fall consisted of crevasses, ice-walls, steep traverses and ladders.

We had been on the move more than three hours and were still about four hundred feet from the foot of the ice-fall. Lakpa and Misra had been very good companions and insisted on more halts than I would have liked to allow. Our progress therefore was very slow. We had left most of the difficult obstacles behind when I noticed that Lakpa had jumped a small crevasse. I looked back at Misra to make sure that there was enough slack on the rope before I jumped, but when I came near the crevasse and was about to jump, I could not understand why Lakpa need have jumped at all. The two lips of the crevasse were joined by what looked like a firm snow bridge on which there was a clear foot print of someone who had crossed it by stepping on the snow bridge. I was in no condition or mood to want to jump over crevasses unnecessarily and thought that Lakpa's act of leaping over was a bit of showing off. So I nonchalantly stepped on the snow bridge, which collapsed as soon as my weight fell on it. My heart sank as I felt myself going down into the crevasse. But my companions were alert; Misra saw me going down and even Lakpa sensed that something was wrong and both acted in a flash and belayed me firmly. I dangled for a few seconds in the dark abyss before I was heaved up unceremoniously by Lakpa and Misra on to firm ice. In the process of being pulled out, my body dislodged some icicles or frozen snow

which I could hear going down into the crevasse, bumping from side to side making a tinkling sound like falling glass, which sounded farther and farther away for several seconds, indicating the depth of the icy grave from which I had just been rescued.

I was badly shaken and lay helpless for a few moments. As I got up I apologised to my companions, particularly to Lakpa for doubting his judgement about the frailty of the snow bridge.

After resting for a while we went down slowly and were met by Dr. Das and others. Das gave me a thorough check-up and declared that there was nothing very much wrong with me except that I was badly dehydrated. He seemed to have anticipated the cause of my illness and had decided upon the treatment even before I came. Within minutes of my arrival he, along with 'Khalifa' and Kumar, contrived to hang a bottle of glucose from the pole of my tent to give me a pint of the fluid through an intravenous injection by the 'drip method'. He assured me that I would be fighting fit the next day. He shifted to my tent to keep an eye on me. I was obviously suffering from acute dehydration, because after Das had injected two or three bottles of the glucose into my system, I started feeling better. The doctor told me later that my condition could also be attributed to anxiety neurosis and emotional imbalance.

On the 19th May the weather took a turn for the worse. It had snowed heavily the night before and even at the Base Camp there was about three inches of fresh snow on the surface. There was also a strong wind blowing. I had asked for a whole week's forecast, particularly with reference to the approach of the monsoon and the possibility of a lull, but it had not yet been received. Rao made the inference from the daily broadcast that the monsoon would perhaps hit the Everest region in seven or eight days. This made us all very anxious because we wanted at least five days from Camp III to make an attempt on the peak and return to Camp III. We did not know when we could start because it was still snowing. However, Rao felt that we should get a break in the weather in the very near future. So, in spite of the indifferent conditions, I sent all members of the summit teams who were at the Base Camp to Camp III.

Gombu, Sonam, Jungalwala and Ang Temba were already at Camp III. Kumar, Kohli and Vohra came to say goodbye to me. I briefed them fully once again about the plan and stressed

the need for checking up the oxygen equipment very thoroughly before they left for the final ascent. In fact, they were to make it a habit to check the apparatus every time they moved out and when they arrived at a Camp. I requested Kumar to take with him a brass image given by my wife and a small woollen scarf which my second son wanted taken to the top of Everest. They left full of confidence and hope.

Nanda also came to see me a little later. I had asked him to go up to Camp II to ensure communication between the Base Camp and the higher camps. Sohan Singh, who had not climbed very high on the mountain yet, accompanied him. Despite his age, Sohan had the will and ambition to climb. However, I advised him not to strain himself too much.

Kohli and Kumar wanted to reach Camp III the same day. Both were good climbers and were fit and could have done the journey quite easily, but when they reached the large bergschrund before Camp II they found that the bridges on a couple of crevasses had collapsed and a whole belt of ice had sagged more than fifty feet. The ice-fall had changed so much that they could not even make out where the route was, and were confronted by a steep ice-wall. It took Kohli and Kumar four hours to make a fresh route. With their climbing proficiency they could have gone across quickly, but they had to make the route secure for the loaded Sherpas. Having been held up by this unexpected hurdle, they reached Camp II late in the evening and were not able to go to Camp III.

At Camp III, Da Namgyal and the other climbers had heard the day's weather forecast which indicated that the monsoon was not far from Everest. There was a little panic and disappointment at the Camp.

Before he left for Camp II, Nanda had arranged with the signallers to send out daily broadcasts on our bigger wireless transmitter for the benefit of the higher camps. I had particularly asked for this so that I could transmit my instructions which could be picked up on ordinary radio receivers of which there were two at the higher camps. This was, however, only a one-way traffic. The climbers at the higher camps could not have talked back to the Base Camp.

The weather cleared up later on the 20th morning and it was bright and sunny in the whole region. That evening Keki came down from the Advance Base Camp under medical advice. He was relieved to find that I had established a powerful wireless link to communicate with Da Namgyal. Keki looked very weak and pulled down, but he was quite cheerful.

On the 21st morning I received the over-all weather forecast for the week. According to it the monsoon was not due in the Everest area till the 2nd June. Although, knowing the local conditions, Rao was a little sceptical about the forecast, we were greatly heartened by this welcome news.

I sent Misra and a party of Sherpas to carry out repairs to the route on the ice-fall. Grewal went with him to join Nanda at Camp II. My *sathi*, Lakpa, was an experienced Sherpa and I sent him also to support the summit teams.

At ten o'clock that morning I sent my first personal message to all climbers and Sherpas of the summit teams. In this message I gave complete movement plans for the summit parties. Jungalwala and Da Namgyal were given clear instructions that they should not stay at the South Col more than two nights. I impressed on the members of the submit teams that their lives depended on oxygen and that they should not treat the apparatus lightly. Da Namgyal at Camp III and Nanda at Camp II were to work out the withdrawal plan as well. I also gave them the hopeful news that the monsoon was not expected until the 2nd June. I ended the message with these words: "I am sorry I am not with you, but in my thoughts and prayers I shall be with you every step you take towards the summit. May God be with you and bring you back successful and safe".

May our five senses be pure, and may the weather on the honourable mountain be fine.

JAPANESE PILGRIMS' MOTTO

XIII

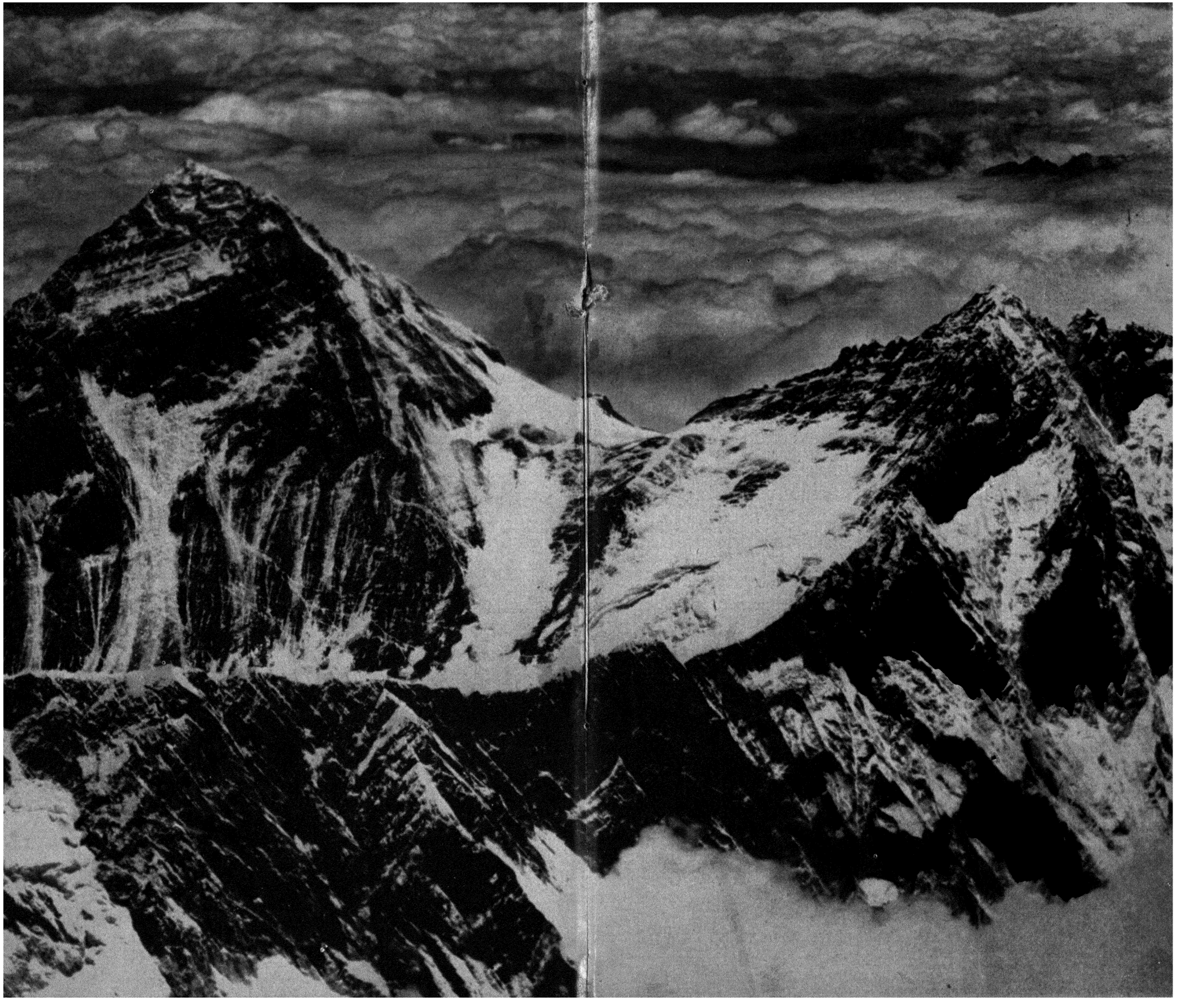
THE FINAL ATTEMPT

AFTER a heavy snow-fall the steeper slopes have to be avoided for the first two or three days. Therefore, although it had stopped snowing on the 20th, I had given instructions that the first party should not start till the 22nd May and, in order to save a day, they should go straight to Camp V. They were also told to use oxygen from Camp IV onwards.

The story of the next five days commencing on the 22nd is best told by Kumar and Kohli. For the 22nd May, Kumar had written in his diary:

> "At last the 'D' day, 22nd May, has come. There was great excitement in Camp III as we got ready to move, checking up oxygen masks, first-aid kits, cameras, spare film and numerous other items of equipment. We took with us a dozen boiled eggs, some *thupka*, Sonam's special pickles and *chutney*, one pound each of dried mutton and *gur* (unrefined sugar). Just before we left we switched on the radio for the Leader's message. His voice came through loud and clear as he said: 'For all members from the Leader. I would like to repeat the message from the Sponsoring Committee sent to you when we started from Jaynagar, which is, "Not only we, not only your relations and friends, but all India is watching your progress with interest". Secondly, have you checked your gas masks, oxygen cylinders and other personal equipment? Have you taken spare sets of bladder, tube and valves and masks? Have you taken matches with you...?'
>
> "The Leader reminded us of practically every item of equipment. Then he passed a message to all high-altitude Sherpas which said, 'Remember your promise to Tenzing to do your best. It is your Expedition. Do not let the parties

An aerial view of the Everest massif rising above the Khumbu Glacier flowing down its winding course



Everest towering above Lhotse Face, with Makalu peak (27,790 *feet*) *on the right*

Everest from the air with the South peak on the right and the Summit in the centre

be delayed. You must carry full loads up to the South Col and Camp VII. You have carried forty-five to fifty lbs. for other expeditions. We are counting on you as I am sure you will do your best. May God bless you.'

"Representing the Leader, Da Namgyal ceremoniously and with decorum handed over the flags—the Indian tricolour, the flag of Nepal, and the Expedition's pennant. Kohli gave me the Naval ensign. I already had my Kumaon Regimental flag with me. Sonam was carrying a yellow silken flag specially presented to him by the Dalai Lama with prayers written on it in Tibetan. Gombu carried the Ceremonial scarf given by Tenzing and some other articles of sentimental value. Amidst cries of good luck and its Sherpa version, *Tashi Dela*, Gombu, Sonam and I felt with nine of the finest high-altitude Sherpas. These cheerful, strapping young Sherpas were as excited as we were. Bhagwanani followed us after some time to station himself at Camp V for medical assistance, if required.

"It was a very bright, sunny day and on the snow we found it very hot. Our rucksacks weighed a little over 30 lbs., but the Sherpas carried a full load of nearly 50 lbs. We had all dressed up in our woollen clothes, but as we plodded slowly through the heavy snow we felt very hot and had to take off some of our clothes. It was so hot that Sonam was wearing only a cotton vest almost throughout the march. From Camp IV to Camp V we used oxygen at two litres per minute and found the climb very much easier. During our journey we saw the sites of many small avalanches which had come down on Lhotse Face.

"We arrived at the old site of Camp V at about 4.30 in the afternoon, feeling remarkably fit. Gombu remarked that if we were as fit at Camp VII as we were then we would have no difficulty in getting to the top. We decided to camp here as we knew there was not enough level ground for all our tents at the new site of Camp V. Here we also dug up nine oxygen cylinders out of the snow. Before taking them up we had to check up the pressure with the help of the manometer. All of a sudden there was a noise like a gun shot and I saw the manometer whizzing past my leg like a bullet. Sonam who was checking up the

pressure in a cylinder apparently hadn't tightened the manometer properly. The expression on his face was something to see.

"It was a perfectly calm evening. There was no wind or snow and Everest did not have its usual plume of driven snow, which showed that the wind velocity was low even at higher altitudes. The sunset was beautiful and as we admired the lovely view Sonam pointed out Cho-Oyu and talked about his Expedition in 1958. Pumori looked particularly beautiful from the Camp. After seeing the sun set behind Cho-Oyu, throwing golden beams across the sky, we went inside our tents. Before sleeping we made some soup and warmed the rice preparation Sonam had brought and ate it with chillies followed by lime-juice. Our supper tasted delicious."

At the Base Camp we had received news about the progress of the first party. On the morning of the 23rd I broadcast to the members a message from the President of India. The message read: 'We are all following your ascent to the world's highest peak with great interest. I wish and pray that your adventure may be crowned with full success.'

On the 23rd morning we received a report from Nanda that the first party had left Camp V for the South Col. The withdrawal of equipment and stores no longer required had already started. In the morning the weather was clear, but a little later low clouds began rising up from the valley. This made me a little anxious. Rao explained to me that the clouds were not likely to bring bad weather. In that morning's message I commented on the weather, in case the climbers higher up also had doubts about the clouds. I said: 'The weather is in our favour. The low-lying clouds that you might have seen this morning are no more than local night fog. You might see such clouds every morning but do not get anxious on that account. It will not snow, nor will the clouds bring bad weather. In fact they are your friends and will act as your umbrella, protecting you from the scorching sun. The wind velocity is low and is likely to decrease, but the temperature will be high. These clouds have nothing to do with the monsoon, so do not worry. Keep your chin up. Keep smiling and keep climbing. Keep your wits about you and keep your oxygen equipment intact, and with God's help you will make it.

I know you will not give in, but on a mountain like this extra grit is required. Remember India expects you to do your best.'

For the 23rd May, Kumar wrote in his diary:

"Woke up to a bright and clear morning at 5 a.m., and went out of my tent. It was a still morning with Pumori and Cho-Oyu standing out in the sky, cold and white. Camps III and II were under a sea of cloud, which hid the whole of the ice-fall and the lower valley. Woke up the Sherpas and my companions. Life started with the melting of snow and brewing of tea. Enquired about the health of the Sherpas and was glad to find that they were all fit. By the time we finished our breakfast and prepared to leave, it was 7.30 and the sun had come over the top of Lhotse and hit our camp. We put on our oxygen masks and switched on the supply at two litres per minute. The Sherpas were very heavily loaded now as they had to carry some extra loads from the camp. Sonam, Gombu and I carried two cylinders each in addition to our rucksacks, making a total load of over fifty lbs.

"Half an hour later we reached the new Camp V where Jungalwala and Chowdhury had arrived the night before. Jungalwala had seven Sherpas who were carrying loads to the South Col. He had sent two Sherpas in advance without loads to clear the track and the fixed rope lines which were buried under the snow.

"Chowdhury stayed behind at Camp V and we all resumed our journey at 9.30. The Sherpas had done a good job improving the route and we found no difficulty in crossing the big couloir soon after we left Camp V. It took us nearly an hour to get to the Yellow Band where we rested for some time. While we were resting, Gombu seemed to be looking for something in the rocks. A couple of minutes later he returned with a pair of binoculars, a piton hammer and some pitons which he had left behind during his previous visit to the Lhotse Face.

"After the Yellow Band we started going up a steep slope of mixed ice and snow. An hour's climb brought us to the upper slopes of the Geneva Spur and we continued our climb on rock. About twenty yards away from our route we saw the small winch which had been put up by the Swiss

Expedition in 1956 and three empty oxygen cylinders. After reaching the top of the Geneva Spur at 2 p.m. we went slowly down to the broad saddle of the South Col. During the downhill journey we switched off the oxygen supply. The saddle was littered with the junk abandoned by previous expeditions. There were oxygen cylinders, gas masks, some empty containers of food, tattered tents, tent poles, old air mattresses and Butane gas cylinders.

"At 2.30 we sent Jungalwala's Sherpas back to Camp V because they had a long journey in front of them. By now a strong wind had started blowing and it took us two hours to put up one French and one Meade tent. Jungalwala arrived with our Sherpas and they put up another French tent. We hopefully checked up the thirteen French oxygen cylinders of the Swiss Expedition which were stacked in a row, but to our disappointment found that they were empty. Then we took stock of our own oxygen cylinders. We had twenty-seven which were enough for the first summit party to carry out its task. We spent the afternoon taking movie and still photographs and checking up our stores and equipment. Jungalwala and I checked up the pressure of all our oxygen cylinders and prepared the loads for Camp VII, which included one assault Meade tent, three sleeping bags, two air mattresses, two Bluet gas burners with eight refills, some *sampa*, tea, sugar, lime-juice powder, powdered soup, chocolates, Sonam's *thupka*, Sonam's and Gombu's *chutney*, matches, biscuits, first-aid kit and twelve oxygen cylinders. The oxygen cylinders to be used by climbers and Sherpas for going up to Camp VII were kept separate. We also had three spare bladders, a few spare valves and regulators, piton hammers and rock pitons. By the time we collected a few more essential items we had seven Sherpa loads.

"After a supper consisting of soup, *sampa*, *thupka*, dried mutton, boiled eggs, lime-juice and tea, we went to bed at 9 p.m. The climbers used oxygen at the rate of one litre per minute during the night."

Kohli of the second summit team has given his story for the 23rd May as follows:

"At the Advance Base Camp we were watching the progress of the first party climbing steadily on the Lhotse Face. My companions and I were also busy making preparations for our move the next day. Our biggest problem was to get an adequate number of good Sherpas to support us. No. I Party had quite rightly had the first pick. The Leader thoughtfully sent some good Sherpas from the Base Camp, including his Sherpa *sathi*, Lakpa, who is a veteran of many expeditions. We received the Leader's messages to the members as well as the Sherpas. They were very inspiring indeed. We also received the President's message and a message from the Defence Minister, as well as the Minister for Scientific and Cultural Affairs. Broadcasting the messages from the Base Camp was a very good idea indeed. These messages inspired us with confidence."

I broadcast the following message to the climbers on the morning of the 24th May: 'This is the opportunity you were waiting for. You are very near your goal now. In fact you are already at the foot of goddess Chomolungma. Do not be careless about your equipment. Look after your gloves, your goggles and other equipment, particularly oxygen. Remember oxygen is the life-giver. Punishment is heavy if you are careless, but I am sure you have everything in order. Jungalwala, I hope you are listening on the transistor receiver I gave you. You must remember that you are the key-man now and have heavy responsibilities. Tomorrow is 'D' Day. We shall be waiting to hear the news from you. May God be with you and crown your historic effort with success.'

The 24th was a very fine morning. When Kumar's party woke up at 7, the sun had already been up for nearly two hours. The summit parties of both the British and Swiss Expeditions had to carry extra loads to Camp VII because they did not have a sufficient number of high-altitude Sherpas in a fit condition when they reached the South Col. Kumar's party had nine good Sherpas and there were loads for only seven. In fact it became a problem as to which seven to send to Camp VII. The party checked up the equipment once more and after breakfast left at about 10 a.m. with seven Sherpas, Sonam Girmi, Tashi, Pemba Sunder, Da Norbu, Ang Norbu, Phu Dorje, and Ang Nima. In addition to their own rucksacks the summit team carried two oxygen cylinders each and switched on the gas at four litres per minute. The Sherpas also used

oxygen from the South Col onwards. When they left, the weather was good and there was hardly any wind. From the far end of the Col they turned back to wave to Jungalwala and the others at Camp VI, and had a lovely view of Makalu, Lhotse and Nuptse.

Kumar has described the climb from the South Col in the following words:

"We recognised the couloir where Charles Evans and Bourdillon had slipped on their return journey after their attempt on the 26th May, 1953. Instead of going up the couloir we avoided it by climbing a slope to its left. When we reached a point on level with the top end of the couloir we traversed right on to the south-east ridge. We climbed slowly on the rocks on the ridge and had no difficulty with our oxygen apparatus. Somehow I did not find the climb at all difficult, but then I was having four litres of oxygen per minute which did make it easy. At one in the afternoon, Da Norbu, one of the seven Sherpas, stopped to point out the place where the Swiss Expedition of 1956 had put up their Camp VII. We saw the remains of the tent and an oxygen cylinder lying near it. But we continued to climb higher in order to reduce the distance between the peak and Camp VII. After climbing another fifty feet or so Gombu found a site for our tent and we decided to camp there. The height of this place according to the map and the altimeter was 27,600 feet. The Sherpas looked remarkably fit in spite of their arduous climb and heavy loads. They helped us in clearing away the snow and putting up the 'assault' Meade tent.

"Having brought everything we wanted to make our ascent to the top, our faithful Sherpas shook hands with each one of us in turn, wished us luck and started on their downhill journey to the South Col, waving to us as they climbed down. We watched them for some time, then turned to make ourselves safe and comfortable. The wind had started to blow by now. Although it was not very strong, Gombu felt it would be wiser to make the tent a little more secure. He cut a piece of nylon rope and anchored the tent by tying the rope to my ice-axe which was buried deep into the snow. At the other end he drove a piton into the rock and tied the tent to it. While Gombu was busy with the tent, I went inside and melted some snow on our gas stove to prepare some lime-juice. In the

meantime Sonam had started checking up the pressure of oxygen in the cylinders. After some time he made the alarming announcement that except six bottles all the others were leaking and that the pressure was very low. On hearing this I dashed out of the tent upsetting the melted snow in the process. I came outside and examined the manometer which Sonam was using to check the pressure of the gas. I found that the rubber washer was missing from near its nozzle. I found the washer lying on the ground which I replaced on the manometer and checked the gas pressure again. We were greatly relieved to find that the oxygen pressure in all the bottles was correct.

"After we had checked all our equipment and drunk some lime-juice, we stood outside and took many photographs. We had a lovely view and could see most of the peaks round Everest. Nuptse, Ama Dablam and Taweche, all of which used to tower above us, were now below us. Lhotse and Makalu did not look very high either. We stood outside talking for a long time. Here we were, three of us, perhaps on this date no other human beings at any point on this earth were higher than us. The thought gave us a great thrill. We were all feeling very fit and wondered what news we would have for our country the next day at that time. We also thought of all the effort that had gone into placing the three of us at that altitude. Nearly seven hundred porters, more than fifty Sherpas, twenty members and a few others had started from Jaynagar just for this day—to push a team of two or three up to the last camp with our minimum requirements of oxygen, air mattresses, sleeping bags, fuel, food and other essentials. It was up to us now to do our bit and justify the expense, the effort, the hard work put in by hundreds of people, and, above all, the trust placed in us by our Leader, the Sponsoring Committee and the nation. We should consider ourselves very lucky indeed and hoped to God that we would have the strength to fulfil the mission. The wind was a little strong, but that did not worry us because we had expected some wind at that altitude. All the same, both Gombu and Sonam remarked that they wished we would have good weather the following day.

"At about six in the evening we went inside the tent and had our supper which consisted of soup, some *sampa* and tea. Then we retired for the night. The tent was a bit too small

for the three of us but we did not mind. First, we assisted Gombu into his sleeping bag and pushed him to one side of the tent. Then Sonam helped me into my sleeping bag. Finally, when Sonam got in he had nobody to help him and could pull the sleeping bag only up to his thighs. But Sonam had a good eider-down jacket on and decided to do without the sleeping bag covering the top half of his body.

"I suggested to my companions that we might take a sleeping pill each in order to sleep comfortably but the idea was rejected by the other two because we wanted to make an early start and did not wish to be under the influence of any drugs which might keep us sleeping late. Lying on the floor of the tent we three resembled the first layer sardines at the bottom of a tin. The slightest movement of one disturbed the others. For some time we talked, and then wished each other goodnight, put on our masks and switched on the oxygen at one-and-a-half litres a minute. Sonam started using one of his half-finished cylinders of oxygen which finished after some time. He was too lazy to get up and bring another bottle and said he could do without oxygen when sleeping; and within seconds he was snoring. We dozed off and on and kept tossing, if such a thing was at all possible inside our sleeping bags, in order to find a more comfortable position. The hours seemed to drag on and the night appeared very long indeed.

"We had decided to get up at three in the morning to start at four. We were frequently disturbed by the violent flapping of the tent and the vibrating fabric sounded like a drum in crescendo. I was getting a little anxious about the wind, but at about two o'clock Sonam woke up to look at his watch and optimistically remarked that the wind would die down in the morning. As time passed I could see no evidence of the wind abating. It was only getting stronger and stronger. This disturbed my sleep quite a lot. Inside the tent our breath had frozen on the ceiling of the tent and there were tiny little icicles just above our faces. Occasionally the warm breath would melt some of the ice and a drop of very cold water would fall on the face."

Now let us see what Kohli has to say about his party on the 24th and 25th May:

"When we woke up it was an excellent day, clear and still. We had already checked and rechecked all our equipment many times the night before. However, we went through the ritual again, and after a hearty breakfast bade goodbye to Da Namgyal and the others at the Advance Base Camp. They were all outside and cheered us as we moved away.

"We reached Camp IV at 10.30 and picked up eighteen cylinders of oxygen from there. After resting for some time we reached the site of old Camp V at 2.30 p.m. The seven Sherpas who were to go up with us to the South Col stayed at this Camp, while Ang Temba, Vohra and I left for the new Camp V. For this short journey Ang Temba and I took oxygen at three litres per minute, but Vohra preferred to go without oxygen. When we arrived at the new Camp V we were greeted by Chowdhury and Bhagwanani and five Sherpas.

"It was a beautiful day and we sat outside our tents for some time admiring the scenery and watching the sunset. After a good dinner we went to bed at 9.30 p.m. We slept well at Camp V with oxygen at one litre per minute. Next morning (25th May) we left for the South Col at 8 a.m. with twelve Sherpas. Earlier in the morning the wind was not strong but by 10.30 the weather started deteriorating fast with the formation of clouds appearing from all directions. The wind also increased. Some time after midday, through an opening in the clouds, Vohra saw the three members of the first summit team coming down slowly. He could not make out exactly how high they were because visibility was very poor, but he felt they were nearly at 28,000 feet. We all wondered how they had fared.

"While we were sheltered by the Geneva Spur we did not feel the impact of the wind, but as soon as we reached the South Col at 1.30 p.m. we felt its force. It was almost like a storm. There was also snow falling at the time. We were given a good reception by Jungalwala and his party who were expecting us. After some tea and fruit from a few tins we sent seven of our Sherpas back and kept only five with us. Whenever the visibility improved we could see the first party climbing down very slowly. By 4 p.m. the wind was so strong at the Col that it was quite an effort to come out of the

tent. Da Norbu and Pemba Sunder went up to meet Gombu, Kumar and Sonam. They took some tea in thermos flasks with them.

"We were anxiously waiting for them. We had been told to rest as far as possible for our attempt, so we went out to meet the first party only after they had reached the South Col."

On the 25th May I was still tied to the Base Camp. Kirpa, one of the Mess boys, brought my mug of tea very early in the morning and announced that it was not a very good day. There were thick clouds on the mountain. Well, there was nothing I could do. I felt like a commander who after making his plans thoroughly had committed his troops to action and, therefore, could do little to influence it until the battle had stabilised. However, I sent the following message on our broadcast system to all climbers and Sherpas on the mountain: 'You must have received the inspiring message from our Rashtrapati and our Defence Minister. The whole country waits in suspense and all thoughts are directed towards you. May the prayers of the millions, including ours at the Base Camp, make your steps lighter and help you to reach the top and return safely.'

I lay in bed for some time and then tried to catch up with my work. I felt excited and distracted. To keep myself engaged I decided to write my diary, which was in arrears, from the notes I had kept.

I could not help thinking of our boys, plodding uphill in the rarified atmosphere on the heavily corniced south-east ridge of Everest. I was in mind and soul with them every step. I could picture the swinging of the ice-axe, and could almost hear the ringing noise made by chunks of ice sliding and rolling down the face three to four thousand feet. I could hear the noise of the oxygen gas as it escaped under high pressure from the cylinder into the bladder and then into the gas mask, the heavy breathing of Gombu, Kumar and Sonam and the rhythmic 'dub, dub' of the valves of the masks as they let in the rarified air and mixed it with pure, dry oxygen from the cylinder.

Occasionally, I could picture one of them taking off his mask to clear the valve. The moisture from the exhaled air in the mask cavity is liable to freeze some valves which must be cleared every now and then. I was, as it were, climbing with them, sitting in my tent without oxygen or special clothing and still very weak after

my illness. I could picture the climbers changing the lead in turns. Gombu and Sonam in dark sky-blue windprooof suits and Kumar in bright red. All of them wearing reindeer-hide boots specially made to measure for them. Kumar had my Gami camera, Sonam a sixteen mm. movie, rather heavy but Sonam was tough as an ox, Gombu had Tenzing's Leica. I even imagined them on the peak, taking pictures in turn.

Kumar had a small brass image of Shiva and Parvati which was thrust into my hand by Malu, my wife, as she said goodbye to me with tears in her eyes on the 4th March. 'May Shiva protect you. Look after yourself for us'. That goodbye scene—her *arati* to the gods, then to me, her offering me a coconut and a few other things with a continuous stream of tears from her big, beautiful eyes almost flooding the floor—the scene was only too vivid in my mind. I did not know whether the mountains had made me too emotional or it was due to physical and nervous stress. I soon pulled myself up. However, after each overflow of emotion of this nature I felt better.

So the morning went and it was time for lunch. From the Base Camp we were through to Camp II where Nanda himself manned the '88' wireless set. Nanda had done a very good job. He had a touch of dysentery but he was carrying on cheerfully. Om Prakash Vaid and Balakrishnan were also very devoted workers and were constantly on duty these days. This signal detachment has done me proud. There was the '88' wireless link between the Base Camp and Camp II, the telephone link between Camps II and III. But beyond this point communication was erratic. Wireless sets were there at the South Col with Jungalwala. Even the second party had taken some sets. But perhaps the batteries were down or it was too cold. It was also possible that at that altitude (26,000), there was hardly any inclination to try, experiment and persist to get through.

I had sent a message to Mr. Sarin and Inder Sain at the Indian Embassy in Kathmandu to keep the wireless links open until 9 p.m. on the 25th. Mr. Sarin had already thought this one out and even before I sent my message he had initiated a message to me to the effect that wireless stations in Delhi and Kathmandu had been ordered to 'stand to' round the clock.

In our turn we got through to Nanda at Camp II every few minutes. He could see seven men start from Camp VI in the late

afternoon. They were near Camp V. Perhaps they would bring the news. But they could only make Camp IV, beyond which no communication was possible. 'Khalifa' Grewal had written a note earlier to say that he was going to Camp IV with a set. Perhaps he could not make it. At about 7 p.m. Nanda said there was no possibility of getting any news until the next day because the seven Sherpas had left the South Col before the summit team could have returned to the South Col. So they would have no information about the summit team. Only when the climbers returned would we know something definite.

Great disappointment! We had all been on tenterhooks the whole day. So had poor Mr. Sarin and people in Kathmandu. Anyway, we could do nothing about it. I sent a message to Mr. Sarin to stand the wireless stations down till 8.30 the next morning. The A.I.R. broadcasts had mentioned that we were attempting the peak. Early to bed. A strong sleeping pill this time.

The extract below gives the experience of the first summit party on the 25th which for us was a fateful day:

> "When we got up at three we found that our feather-jacket collars were wet because of the icy water that had trickled down from the tent. We had melted enough snow before we had gone to bed and filled two thermos flasks with lime-juice. This was going to save time in the morning. The wind was very strong. We did not require much time to get ready because we had slept fully dressed and even had our boots on. We had not forgotten Hillary's boots which had frozen at this camp, and had taken nearly half an hour to thaw. I found my reindeer-hide boots quite comfortable inside my sleeping bag. By four we were ready to start, but the wind was much too strong. The sun was not up yet, so we waited in the hope that perhaps the wind would decrease later in the morning. We had finished our breakfast by six. We ate some *sampa*, drank the lime-juice and I also ate some sugar cubes. While we waited we melted some more snow to fill our flasks with more lime-juice for our journey to the peak. It was a strange coincidence that on the flask there was a picture of a mountain with the word Everest written on top.
>
> "At 6.30 in the morning the sun had already come up, but it hadn't warmed our tent much because the icicles were still there. The wind showed no sign of abating, so we went

out to have a look. It was a little misty on account of the drift snow. We decided that we must leave soon and kept hoping that the weather gods would be kinder later.

"We started putting our crampons on our boots. The leather straps were frozen and I must have pulled one of them a bit too hard, because it snapped. I had a thin nylon rope handy for such eventualities, so I was able to fasten my crampon without much difficulty.

"In spite of an uncomfortable and sleepless night we felt remarkably fit for the climb. We collected our masks, bladders and regulators and the components of the oxygen apparatus and adjusted the flow at four litres per minute. We checked our rucksacks again, fastened our oxygen bottles and finally at 7 o'clock we moved off with Gombu on the lead and Sonam, the third man on the rope. We had hardly gone a few feet when Gombu noticed the poles of a tent. Perhaps this was the site of Tenzing's and Lambert's camp in 1952. Because of the strong wind we kept away from the exposed ridge and moved to the left of it. After a few minutes' climb we sighted the British Camp IX and recognised the black oxygen cylinder. The wind was very strong and the wind-chill factor made the cold so intense that it seemed to pierce through the marrow of our bones. Fifteen minutes after we had started, my oxygen apparatus started giving trouble. I had brought a spare mask and a bladder and was able to change them without much difficulty, and we started moving up again.

"I was praying all the time for the weather to improve. Although we were straining hard to climb and it helped us to remain warm, still it was so cold that I felt myself shivering inside my clothes. After another fifteen minutes I felt a strain on the rope behind me. As I looked back I noticed that Sonam had stopped and I could see that the bladder of his oxygen apparatus was blown up like a balloon. Gombu and I went down to help him. I disconnected the bladder and found that the inlet valve of his mask was jammed with ice. I opened the valve and tried to clear it by blowing into it. But this had no effect, so I tried to scrape the ice with a matchstick. This also did not work. So, I used my knife and was able to remove a solid piece of ice which had jammed the valve. In the process, however, I broke the valve.

I had another valve in my rucksack and was able to replace the defective valve. All this had wasted half an hour. It was very nearly 8.30 when we moved off again.

"Sonam's oxygen apparatus had started working well but after half an hour Sonam again found difficulty in breathing. It was the same trouble again, but this time the ice was not so hard and I was able to remove it by using the knife carefully. Another ten minutes lost. We climbed up on mixed rock and ice for some distance; then after going over a bump we hit soft snow. We found the southern slope a bit too soft and sank knee deep in powdered snow and our progress became very slow.

"By 10 o'clock we found the wind raging even more fiercely than before. When we halted for a short rest we took photographs of Makalu, Lhotse and Nuptse. Up to this time, although the wind was quite strong, it was bearable. At 10.30 when we reached the crest of the ridge, our troubles began. The wind was now like a gale, and as we were on the crest it hit us with great ferocity. We had very fine powdered snow all round us and the wind blew the snow off the ridge into our faces. We also noticed odd clouds drifting past. The drift snow was like a dust storm in a desert and the clouds reduced our visibility further.

"We went over another bump and the conditions became worse. By now every step was agony. Gombu, who was leading, took only one or two steps at a time and in order to avoid the drift snow he tried to move sideways. He would frequently turn his face backward, protecting it from the fury of the wind and the snow by holding his arm up. The chilling wind and the snow lashed our faces like a knife. Our faces seemed to be completely frozen and numb. Dry, powdered snow would fill our goggles up through the small ventilation holes on the sides and we had to take our goggles off and clean them every five minutes or so.

"A little before 11.30 we were at the bottom of the slope leading to the south summit. During the past hour our progress was getting slower and slower and we were feeling somewhat despondent because of the gale pitted against us. Visibility was by now reduced almost to nil. At 11.30 a.m. Gombu sat down. Sonam and I also flopped

down behind him. We sat for about fifteen minutes, not talking or even looking at one another. In our minds we knew that further progress was impossible in the face of such strong winds and driving snow, but none of us wished to utter the thought. Then Gombu turned and with his hands gestured, 'What shall we do?' Sonam and I could do no more than repeat the gesture. We sat still for some time and then Gombu broke the silence and said it was impossible to go further in these conditions. After some consultation we decided that there was no option but to withdraw.

"We stopped and took a photograph of Gombu with the flags on his ice-axe, and another looking down the ridge. Then we started back with Sonam in the lead. Within a few minutes he wandered off the track. I had to pull the rope and direct him on to the track again. This was repeated six or seven times on the way down. Then, about half-an-hour after we had started down, Gombu's oxygen valve jammed. I opened the bladder and blew into it, but could not clear it. So I tried to unscrew it from the mask and in the process the metal clip holding the valve to the mask came off and could not be reclipped. The result was that Gombu could not use his oxygen mask and had to come down without it. Progress now was very slow, indeed!

"Sonam and I reduced the oxygen flow to two litres. Visibility and bad weather slowed down our progress almost to a crawl. Even then each one of us slipped a number of times and was held by the others. After a long struggle we arrived at Camp VII at 4.30 p.m. There Gombu changed his oxygen mask and bladder. Sonam who was very hungry and thirsty quietly slipped inside the tent and ate a good quantity of sugar and snow before he was discovered and restrained.

"We rested for half-an-hour. By now the clouds had become thicker, reducing visibility further. We looked down at the South Col, which was occasionally bathed in sunshine, through fleeting windows in the clouds; and resumed our downhill journey at 5 p.m. disappointed, fatigued and dehydrated. After crossing the couloir, Sonam's oxygen apparatus again jammed. He was, however, fed up and just

removed the mask and kept going. Since he was without oxygen, our progress was again slow. He rested more often and slipped twice but was held on the rope.

"Da Norbu and Pamba Sunder, two of the Sherpas who had seen us coming down, came to meet us about fifteen or twenty minutes' distance from Camp VI and brought two flasks of tea, which was very welcome. They asked us whether we had made the top. The expression on our faces gave them the answer. They enquired about our health and took our loads. We reached the South Col after 6.30 and were met by Jungalwala, Kohli, Vohra, Ang Temba and the Sherpas. We told them our tale. After drinking some mugs of liquid we went straight into our sleeping bags. Jungalwala came and put some food in our mouths as we were sleeping.

"At night Sonam and I felt pain in our hands. Next morning on removing our gloves we discovered that the tip of the middle finger of my left hand and all the finger tips on one of Sonam's hands were frost-bitten. This must have happened when we tried to repair the oxygen apparatus. We had been fully briefed by the doctors regarding first-aid for frost-bite, so we promptly took priscol tablets and applied priscol ointment on the affected fingers."

On the 26th morning Kumar briefed Kohli about the route to Camp VII and beyond and gave him what advice he could. The weather was still very bad. At 10.30 the first summit party accompanied by Jungalwala started for the downward journey. They used oxygen but Jungalwala climbed down without it. They arrived at Camp V at 2 p.m. and from there, on the wireless set, gave Nanda the news which was relayed to me at the Base.

We had anxiously waited for news the whole of the 25th. When we got up on the 26th morning we were sure we would hear something. There was, however, no word from the first summit party or anyone else. Contact with Nanda at Camp II and his efforts to get something from Camp V brought out nothing. Camp V had received no news.

At 1.30 p.m. we had just finished lunch when Om Prakash Vaid, the signaller, again went to the '88' set to get through to Nanda. Nanda was at that time through to Grewal and

Da Namgyal, both of whom were at Camp V. We felt that the first party must have reached Camp V. There was an air of suspense and expectancy. The atmosphere was tense with excitement. All members crowded round the '88' set. Gopal the photographer brought out his sixteen mm. movie camera. He took close-ups and distant shots of the waiting people, of a few Sherpas looking hopefully in the direction of the wireless set. Why are they taking such a long time to break the news? Nanda was talking to Camp V, therefore the Base Camp was told to shut up.

After some time Misra came quietly and sat near me and said slowly: "They have not made it. They reached 28,300 feet. Strong winds and blinding driven snow plus frozen oxygen bladders. They have got minor frost-bite. They returned to the South Col completely beaten after 6 p.m."

I froze where I sat. I could say nothing. I could ask nothing. A thick blanket of gloom had spread over the Camp. All faces looked drawn, haggard and tired. No one was prepared for the news. Nobody wanted to believe it. Sonam and the others had gone up with such confidence and their strength, vitality and optimism were so infectious. When one sees Sonam it is impossible to think of anything but success. Then, why did he fail? We had everything. Nothing was lacking. The climbers were in good condition. But the weather gods were angry with us. Strong winds, extreme cold, blinding snow, above all, freezing of the oxygen equipment. What could poor Sonam or Gombu or Kumar do?

I sat there for a few minutes absolutely stunned by the news. But then I realised my duty as the Leader. It was my duty to say a few encouraging words to the others. When I looked round I found that this was necessary. I said a few cheery words. "28,300 feet is no mean achievement. It is a sport. Whether we succeed or fail we should be satisfied with the effort." I spoke with as much conviction as I could command, but the words sounded a little hollow.

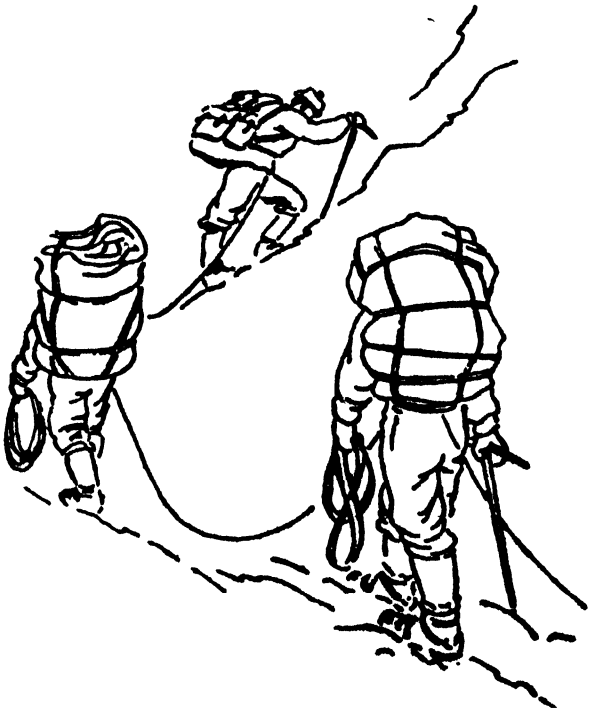
People in India were anxiously waiting for the news. Mr. Sarin had been sending signal after signal asking for it. I quickly drafted a signal to him giving the factual picture. I pointed out that the second party was at the South Col and could not move to Camp VII on account of bad weather and

strong winds. I wanted to go to my tent but decided against it. My place was with the boys who were very upset. Om Prakash, the signaller, was dejected. Gopal, Sohan, Keki, the doctor, Misra and Rajendra Vikram all looked sad and downcast. Rajendra Vikram asked me if I would record my feelings on the tape recorder.

Rajendra Vikram Singh — "This is Rajendra Vikram Singh at the Base Camp of Everest. We have just heard from Camp V on the afternoon of the 26th that the first summit party consisting of Sonam Gyatso, Nawang Gombu and Narinder Kumar, arrived at the Advance Base Camp after their heroic attempt on the world's highest summit yesterday. They started from Camp VII at seven in the morning and toiled up the south-east ridge against strong freezing winds. The snow whipped savagely against their faces and almost blinded them by getting into their goggles. Still they pushed on until at 28,300 feet even their oxygen apparatus froze up. They were forced to return to the South Col, which they reached late in the evening.

"Here at the Base Camp we were all buoyed up with hope and were confident that Chomolungma would permit us to lay our humble offerings at the summit, but that was not to be. Even our second summit party has been held up by very high winds at the South Col today, but we are all hoping and praying that Chomolungma, the goddess mother of the winds, will reward our devotion with a successful ascent on the 28th May.

"Our Leader, like all true mountaineers, has taken the news with philosophic calm and renewed determination. Could you please share your feelings with us, Brigadier Gyan Singh?"



Gyan Singh — "I am naturally disappointed at the news. So is everyone else because everyone hopes for success. But I am satisfied that

Gombu, Sonam and Kumar have made a gallant attempt and have done their best; and when you have done your best you cannot do any better. They were pitched against the elements, the weather was against them and on such a high mountain the weather certainly becomes the most predominant factor.

"This brave trio has climbed up to a height of 28,300 feet, only 700 feet short of the top—no mean achievement when done against such heavy odds! I am personally satisfied with the performance of the team and although, strictly speaking, it is the failure of the Expedition, I do not think the Expedition has failed in its aims.

"The second team which is now at the South Col was to leave for Camp V today but the weather is deteriorating hourly and they could not go. It will be a miracle if they are able to make an attempt. The monsoon seems to be on top of us. We have waited patiently for the pre-monsoon lull. The weather gods are not indulgent enough and, therefore, we have to return home with our *namaskar* to goddess Chomolungma. In any case, we have the satisfaction that our boys have reached a point which is higher than any other peak in the world except Everest itself."

Rajendra Vikram recorded the impressions of some of the other members. Everyone outwardly showed high spirits but in every case, like myself, they were burning inside.

I had to write a number of important letters as the mail runner was leaving the next morning, so I finished them quickly and went back to the Mess tent to be with the boys. They had not catered for a failure in their mental planning, so the shock was even greater. In the evening, A.I.R. announced the news. A.I.R. also broadcast a message from the Sponsoring Committee, which had not yet reached us. It read: "For Brig. Gyan Singh from Sarin. Received your message of today. Under such severe weather conditions the performance of first party has been magnificent. Win or lose our team has shown praiseworthy courage. We all hope and pray for success in second attempt and above all for your safe return."

सुखदुःखे समे कृत्वा लाभालाभौ जयाजयौ।

Treating alike pleasure and pain, gain and loss, victory and defeat.

BHAGAVADGITA

XIV

THE WITHDRAWAL

ALTHOUGH we had slept over the news one night, in my case drugged with a sleeping pill, we hadn't yet reconciled ourselves to it. We still did not wish to believe it. Our thoughts and a very faint ray of hope rested on the second team's attempt, but the weather had not shown any signs of improvement. I estimated the chances of success at one per cent and the more optimistic of us at five per cent. A miracle was required to bring about the appropriate conditions for climbing. Still some of us clutched on to that little ray of hope.

When we got up on the 27th morning even the last ray of hope vanished. It had snowed at night and the sky was completely overcast. The weather forecast broadcast by All India Radio promised no improvement. In the morning it started snowing heavily and our wishes and hopes for a second attempt turned into anxiety for the safe return of the second team and the Sherpas.

I sent a message on the wireless to Camp III to start the withdrawal at top speed. I also asked them to pass a message to the second team not to go further. We kept our fingers crossed for their safe descent over the Lhotse Face as there was a real risk of avalanches on account of the fresh snowfall.

The first summit team was due to return that afternoon. We had heard about the minor frostbite on Kumar's and Sonam's fingers. Practically everyone at the Base Camp was looking in the direction of the ice-fall the whole afternoon, waiting for Gombu, Kumar and Sonam. I allotted various tasks to the members in preparation for our return. This also helped to keep their minds occupied.

In the afternoon we received the following message from Mr. Humayun Kabir: "I would like to congratulate the Leader and the members of the Expedition for the courage, endurance and loyalty they have shown in their effort. The failure of the first summit team to reach the top after having got so near must have caused considerable disappointment. A mountain always poses a challenge and the Himalayan giants test man's quality to the utmost. Success is important, but even more important is the spirit of daring and fellowship which alone makes such attempts possible. I am sure that this temporary disappointment will act as a spur to fresh effort and our men will reach the top at the next attempt".

Gombu, Kumar and Sonam returned at five looking very thin, tired and dried up. They had spent many hours in the so-called deterioration zone beyond 22,000 feet, and one day of veritable hell. Everyone clustered round them when they arrived and shook hands with them. They looked very dejected and came to me in turn and told me in a heavy voice how sorry they were for not being able to make it.

Within a few minutes of their arrival we arranged to get their story and impressions transmitted over the wireless link. At Kathmandu the transmission was recorded on tape straight from the wireless receiver, to be flown to Delhi the next day for broadcast by All India Radio.

Nanda and Chowdhury returned from the higher camps that evening and brought news that Girmi, the assistant Sardar, was very ill. Our Sardar, Passang Phutar, had fallen off an ice-wall while repairing the route and had hurt his back badly. When the doctor saw him at the Base Camp he was not quite sure if it was a muscular sprain or a fracture. But Passang Phutar was soon up and about even though he complained of a pain in his back.

Das was kept very busy as the people returned from the higher camps, because practically everyone needed some medical attention.

I was relieved to hear that the second party was seen coming down to Camp V that afternoon.

It was snowing steadily on the morning of the 28th May. My first thoughts went to the Sherpas and climbers on the mountain. The weather was really atrocious and there were no

signs of improvement. The weather forecast mentioned unsettled conditions and depression in the north Bay which was an indication that worse weather was to follow. I had already passed a message that those who were sick or weak had to be given first priority for the return journey. The Sherpas should be used to help them down even if it meant leaving some equipment behind.

'Khalifa' Grewal, who had sent a message the evening before, painted a very grim picture of conditions in the Western Cwm. The going was very heavy because at every step they sank knee deep in fresh snow. Visibility was almost nil, and it was still snowing when he wrote that note. I sent a message that the 29th May was to be the last day on the mountain. I was particularly anxious about Girmi who, I was told, was in a very weak condition and had to be brought on the back of a Sherpa from Camp III to Camp II. Bhagwanani who accompanied him sent a note to say that they had floundered for hours in the Cwm because of poor visibility. The tracks were completely obliterated and the flags marking the route had been blown away or buried. The trip from Camp II to the Base Camp had become most hazardous; to bring a patient on a stretcher or even on a Sherpa's back appeared impossible.

That day we received a message from the Sponsoring Committee of the Expedition. It read: "We received news late last night that you were withdrawing. We would like you and the members of the Expedition to know how greatly we admire your efforts and that we warmly congratulate you on your achievements. We hope that you will not feel disappointed. No one knows better than you do how greatly success depends on the weather and in this you were not lucky. You have given mountaineering in our country a great fillip and we are very grateful to you. We hope you will all return in tip-top condition".

Another 'Sarin touch' and a very thoughtful one. When I read the message to the boys in the Mess tent they were very happy. Mr. Sarin was then the subject of discussion for nearly half an hour. Every family had written back in gratitude about Mr. Sarin's thougtful bi-weekly letters to them giving up-to-date information about our progress and welfare. Thanks to Mr. Sarin we never felt we were sitting in the wilderness and we knew that he had been subjected to considerable pressure of work on account of the Expedition. He had never kept us waiting for anything we

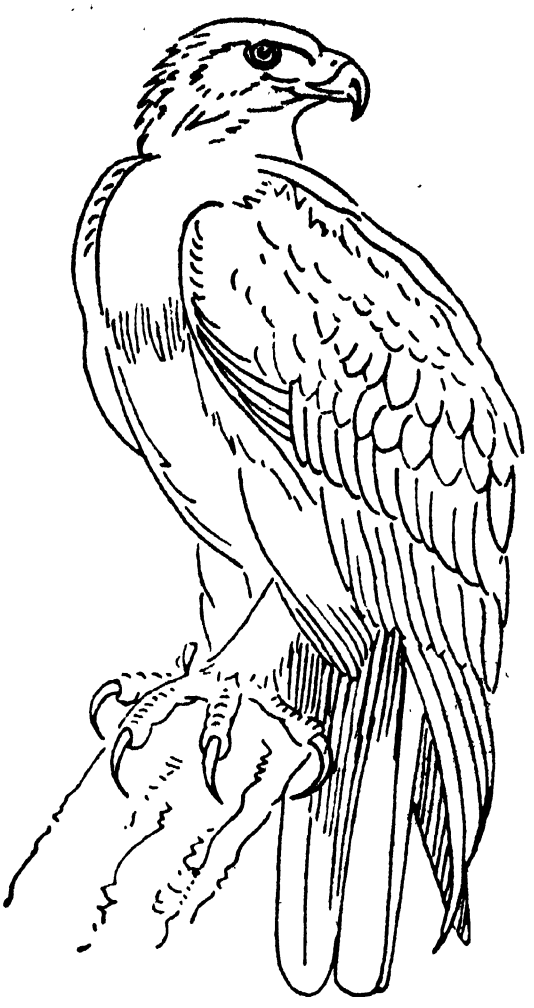
wanted. I doubt if any other expedition had been lucky enough to have such a guardian angel.

Kohli returned that evening looking very tired and dejected and told us that after having waited two nights at the South Col they found the weather even worse on the 27th morning. Throughout the night violent winds had blown powdered snow inside the tent. The clouds were very heavy and it was snowing steadily. They waited for a few hours hoping that the weather might improve, but it grew worse, so at 10 o'clock they decided to return. Ang Temba and Vohra stayed at Camp V, but Kohli unwisely decided to go with another Sherpa to the Advance Base Camp where he arrived very late in the evening.

Ever since the 24th May the Sherpas returning from Camp II ferried important items of equipment back to the Base Camp. Rao, who had been made responsible for packing the stores, was working overtime preparing lists, and crating stores and equipment.

The 29th May was the last day on mountain. The weather had denied us the peak, but we hoped that it would let our climbers and Sherpas return safely. It had not snowed at night and the morning was only slightly cloudy.

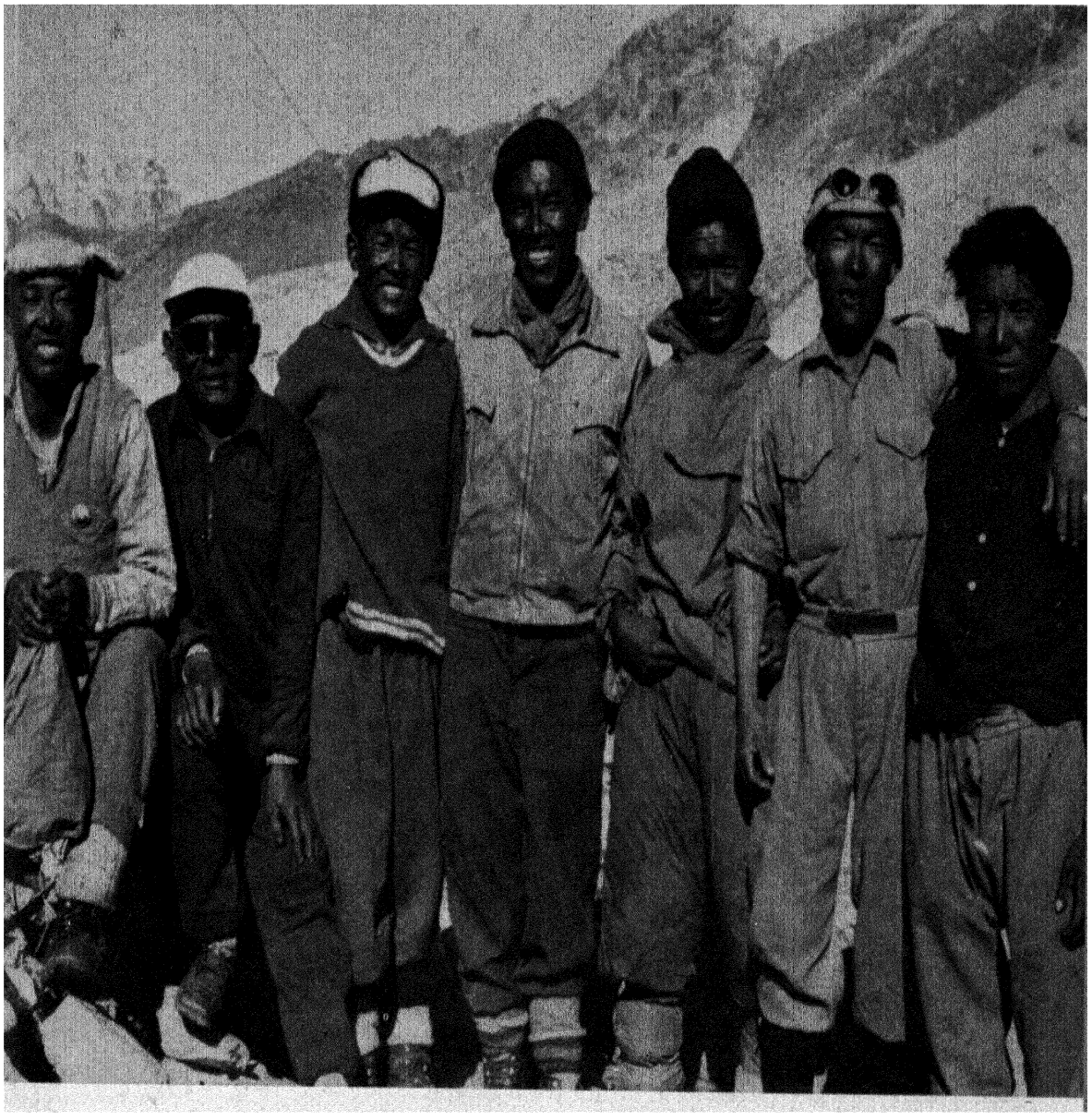
Apart from the summit teams, there were numerous other examples of praiseworthy devotion to duty, self-reliance and endurance by the members. Jungalwala had made two trips to the South Col, the first time without oxygen, and the second time he had stayed three nights. He displayed remarkable stamina and guts. Bhagwanani, our doctor, who had no previous experience of high-altitude climbing, went to Camp V (24,000 feet) twice to attend to patients and stayed for a long time in the Western Cwm giving medical cover to the Sherpas and members. Equally, Das had almost worn himself out attending to anyone who needed attention. Chowdhury, Grewal and Misra spent considerable time in the higher camps and bore with commendable patience the drudgery of escorting higher ferries and keeping the communications open. Da Namgyal, in spite of his illness, went twice to Camp V from the Advance Base Camp in his role as adviser to the summit teams. Gopal, the photographer, amazed me by his endurance and courage in going up to the Western Cwm to take photographs. Although he was quite steady on the ice, the wobbly way in which he came down scared me. Rao, our Meteorological Officer, was my constant adviser on weather conditions and gave



a reliable interpretation of the very accurate weather forecasts sent to us by the Meteorological Department three times a day through the courtesy of All India Radio. He was also a great help to me in administrative matters, and, although he had never been on mountain or ice before, he had the guts to go three quarters of the way up the ice-fall in order to take certain meteorological observations.

That evening, reclining on my sleeping bag, I shut my eyes and looked back at the amount of effort that had gone into the last eight months. I thought of the unstinted support from the Sponsoring Committee, round-the-clock work by our Ordnance Factories and other firms, the sacrifice and hard work of various members and all the work of hundreds of people that had made the Expedition possible. I recalled the advice and encouragement we had received from our Prime Minister. All these impressions flitted through my mind in a few seconds. As I opened my eyes again I looked at the equipment littered round my tent and wondered at the number of items that had to be procured for this great venture. I stared at the golden flames of the two slow-burning candles made by the children of the Blind Institute in New Delhi, and reflected thoughtfully on the paradoxical irony of the fact that, while the innocent children who made these candles were in perpetual darkness themselves, they, by their efforts, had brought light to others.

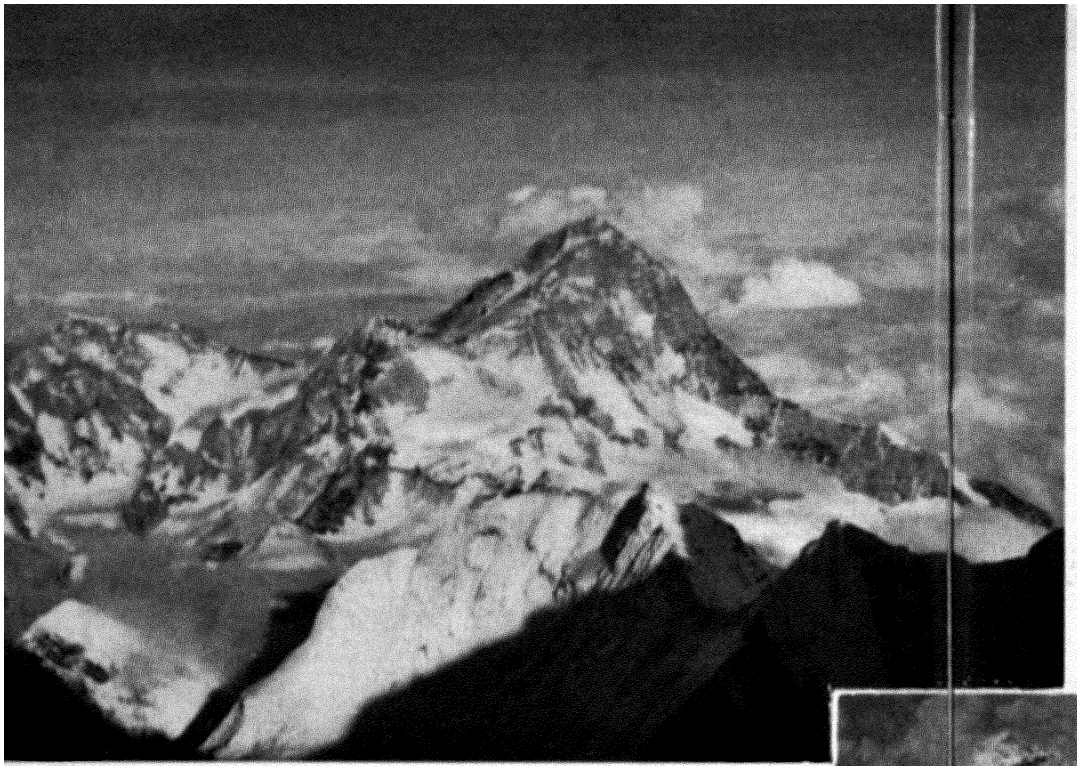
There were a number of encouraging messages that day from our Prime Minister, Mr. Jawaharlal Nehru, the Governor of West Bengal, Miss Padmaja Naidu, and the Chief Minister, Dr. B. C. Roy, and our Ambassador to Nepal. These messages read:



High-altitude Sherpas who supported the first Summit Party to Camp VII (27,600 *ft.*)

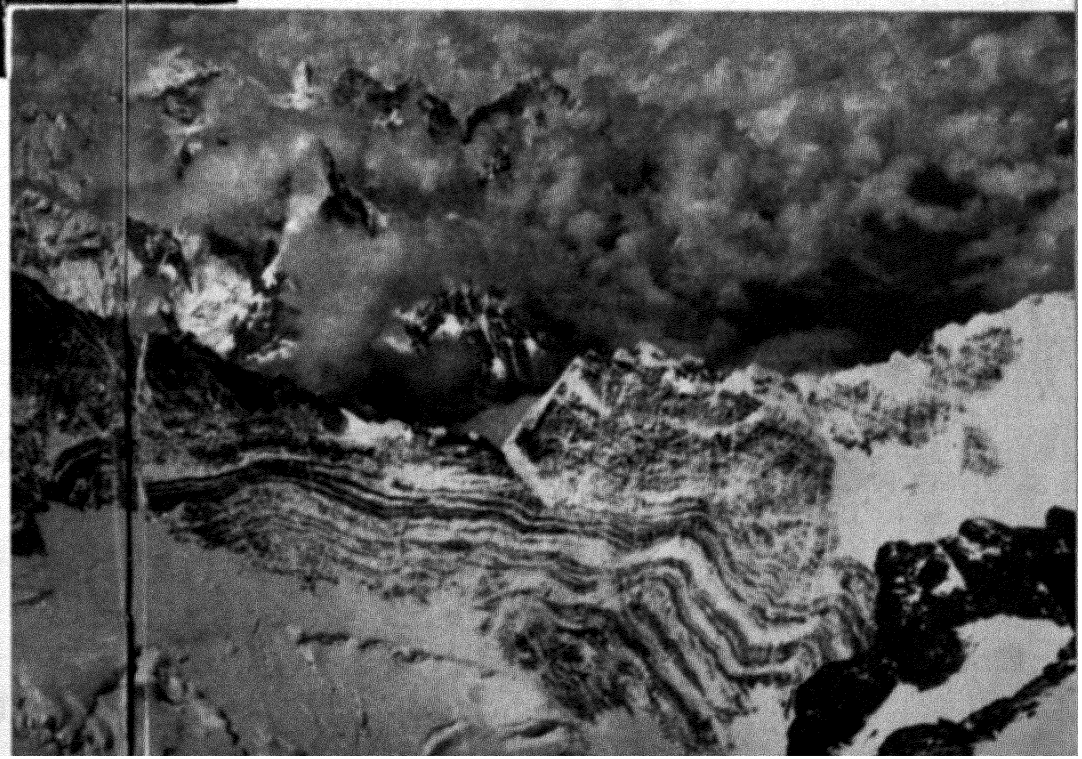
Two members of the Summit Party fixing oxygen masks at Camp VII

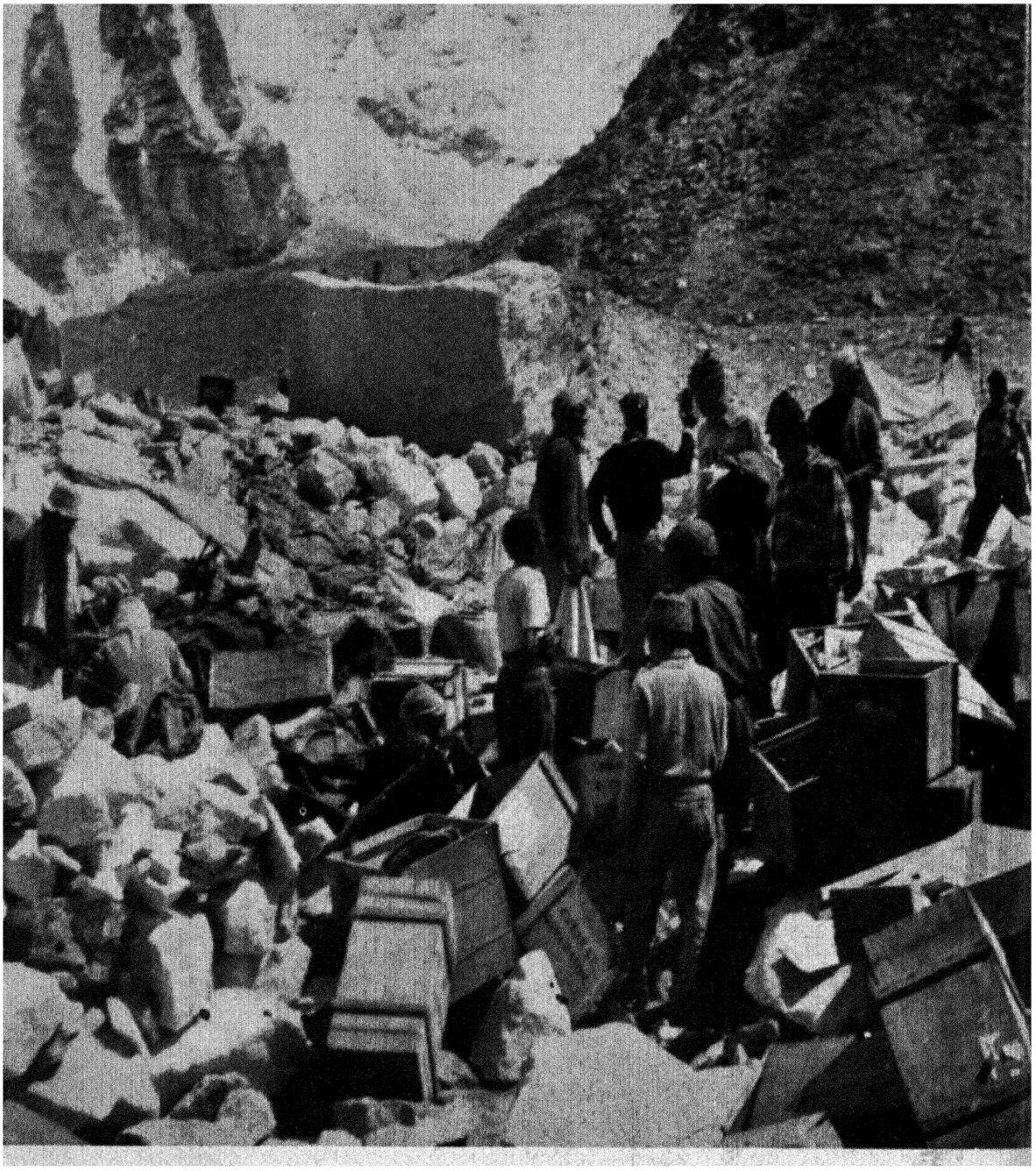
The Summit Party just before making the attempt on Everest



The majestic Makalu Peak as seen from Camp VII

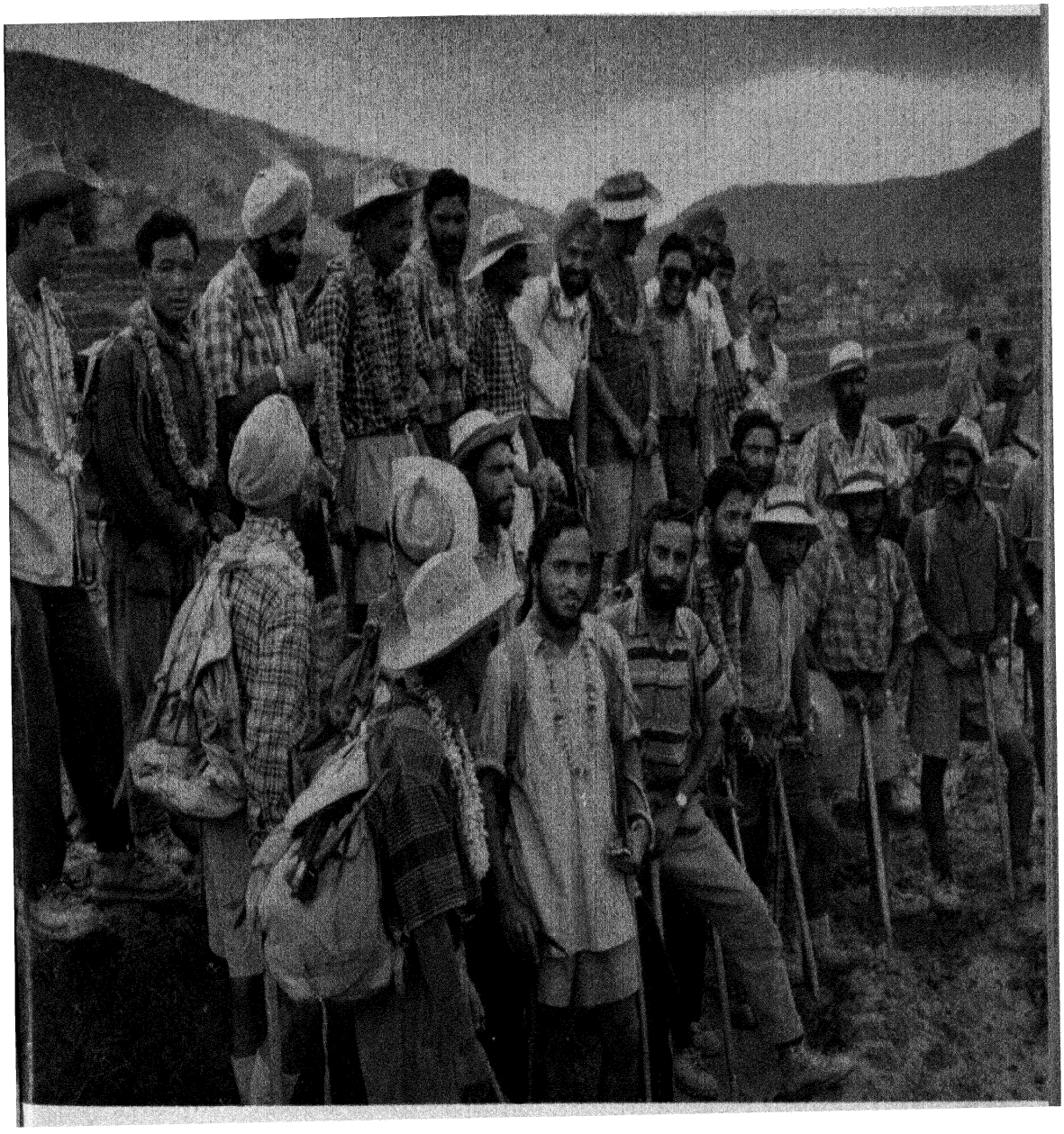
A view of the Nuptse Wall from Camp VII

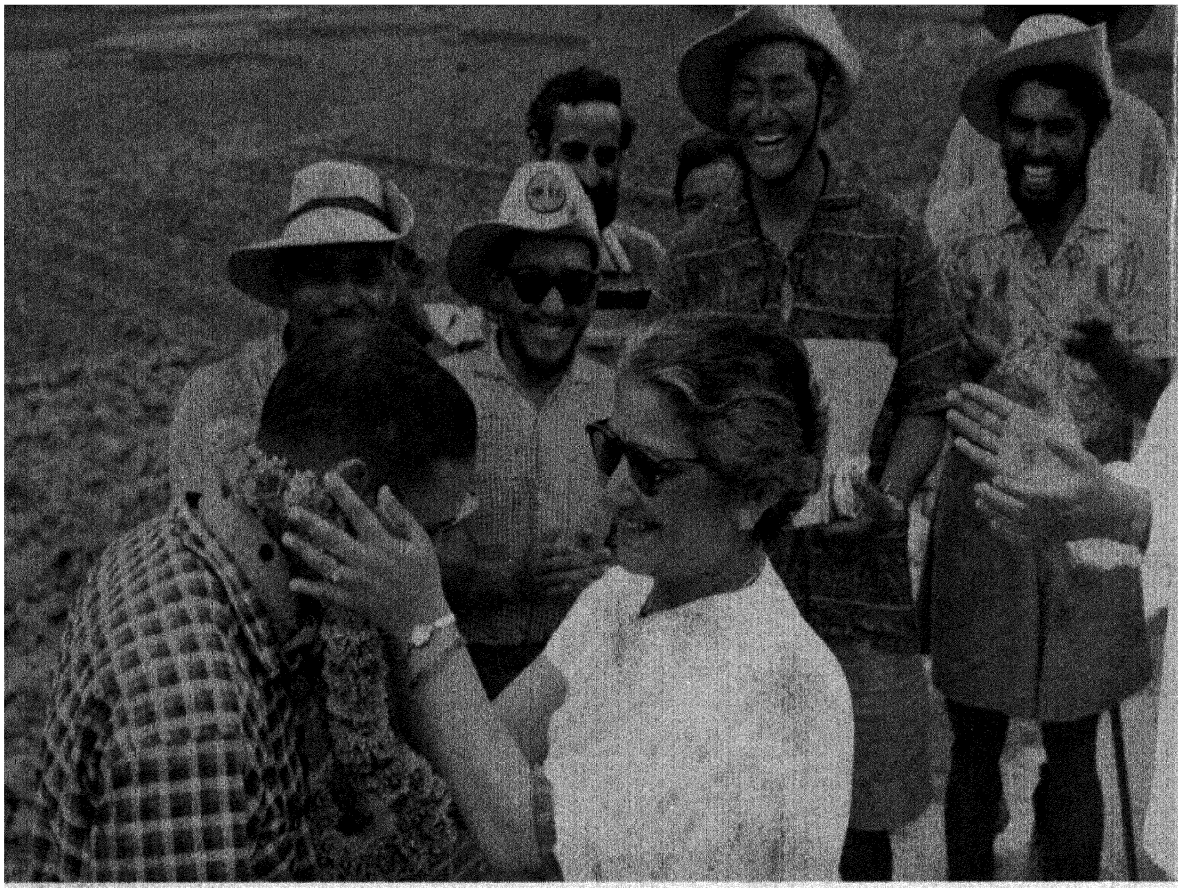




Packing equipment at the Base Camp for the return march

The team on its way back at Baneppa, 20 miles from Kathmandu





An affectionate welcome for the Leader from his wife

Back home, the team on arrival at Palam airport

From the Prime Minister: "For Brigadier Gyan Singh from Sarin. Prime Minister who is abroad and had been kept informed has sent the following message from Damascus. Quote. Your party must be disappointed at not having reached top of Everest when they were so very near. While this is natural after your great effort, I do not think there is any reason for discouragement. I think your party has done exceedingly well and showed great courage and endurance in the face of tremendous difficulties. That is the real test and in that you have succeeded. My congratulations to all of you. Indira Gandhi joins me in this message."

Joint message from the Governor of West Bengal and the Chief Minister, Dr. B. C. Roy: "While we share your disappointment at not reaching the summit, we are very proud of your heroic efforts and congratulate every member of the team."

From the Indian Ambassador to Nepal: "All members of the Indian Embassy join me in conveying our warmest admiration of the Expedition's magnificent effort under your leadership. Their achievement under adverse conditions has been truly outstanding. Looking forward to seeing you in Kathmandu. Let us know if we can do anything regarding supplies etc.—Dayal."

By five in the afternoon all men and Sherpas returned safely with as much equipment as they could bring. I was very happy to see that Girmi was down safely. He was taken in hand by Das straightway. Grewal brought down the rear party and here is an extract from his diary about the last day on the mountain:

> "29th May. It was a day of great activity at Camp III and Camp II. We were to make the last move down the ice-fall today with all the men and all possible equipment. Da Namgyal, with a party of fifteen Sherpas, reached Camp II from Camp III at about ten. Vohra and Ang Temba had also accompanied the party from Camp III.
>
> "We were lucky that the weather, which has been extremely bad for the last three days, unexpectedly improved today and we are confident that Sonam Girmi can be taken down safely. It is almost impossible to carry anybody through the ice-fall when it is in bad shape. Girmi showed great determination and courage in undertaking the trip without being carried, in spite of his unsatisfactory condition. He was accompanied by Bhagwanani and two strong Sherpas on one rope. Ang Temba, Vohra and myself remained with

them on another rope in case our help was required. Our movement was obviously very slow, but we made the Base Camp well in time before sunset.

"Everybody was down from the mountain safely. When I reached the camp as the last man of the party, the Leader and other members came forward and shook hands. All of us were naturally depressed by the failure of the Expedition, but our Leader's appearance revived confidence in all of us. After all, it is not the summit that matters so much, but the struggle for the summit; not the victory but the game itself."

In addition to the tents and other stores left at the South Col and Camp V a number of heavier items of equipment had to be abandoned in the Cwm. I was sorry to lose the equipment but the important thing was that all men were safely back from the mountain and in reasonably good health. The previous four days had been a period of great tension for me. Tenzing's words, "A really successful Expedition is one in which everybody comes back safely", were ringing in my ears and giving me solace.

On the 29th evening all our Sherpas and climbers once again came together at the Base Camp after very nearly eight weeks. The next two days were spent in feverish activity in packing, checking stores and equipment, preparing the plan for the return movement and paying off Sherpas who wanted to go home early.

We had planned to start on our return journey on the 1st June. The two hundred porters we wanted to take us back to Kathmandu arrived very early from Namche Bazar and the surrounding villages. Rao and the other members who were helping him had laid out the equipment clearly numbered, and had started allotting the loads to the porters. As the names of the porters had to be written down it was going to take some time. I, therefore, walked some distance away from the scene of activity and sat on a stone watching the ice-fall for the last time.

At last, the day to leave the Base Camp had come. We had been there very nearly two months. It had been a place for rest, for planning, of calm as well as of frantic activity. There we had waited for days for good weather, and there some of us had waited anxiously for news from the higher camps. Others had returned to the Base Camp after fatigue and exhaustion in order to recuperate and to return to the mountain. We had stared at the

ice-fall for hours and had seen it change daily. We had watched our ferries go up and had looked forward to their safe return every evening. We had witnessed with ecstasy the beautiful sunrise, and had often observed the snow and ice formations in moonlight. As the weather changed we had noticed the landscape visibly altering before our eyes. With all these intimate associations it was only natural that on leaving that place, howsoever rugged and uncomfortable, we should have felt a pang of separation.

Time is a great healer. I had already got used to the fact that we hadn't made the peak. I also began to feel that the first trio had made a gallant attempt and had done their best, and having done their best they could not have done any more. We had gone with no pretensions about our ability to reach the peak. We had gone to climb the mountain and, as far as we had gone, I thought we had climbed well. We had learnt to pitch our skill, our technique and our determination against physical obstacles. But, for the peak, the odds against us were too great. On a high mountain the weather is and will always remain the most decisive factor. I recalled what Frank Smythe, the famous British mountaineer and philosopher, had said of the moods of Everest: 'Everest on a sunny windless day can be almost agreeable to climb and if to this were added a sufficiency of oxygen to breathe, it would possibly be enjoyable. As it is, the lack of oxygen and the oft-recurring storms transfer it into a mountain that is implacably hostile and daring you to take a step forward—at your own peril'.

I was glad Gombu, Kumar and Sonam had taken the wise but difficult decision to return, and did not take suicidal risks, because mountaineering is a sport and there are certain safety limits which must not be transgressed. All veteran mountaineers have wisely said that risky mountaineering is bad mountaineering, and that in order to achieve his aim and reach the top a mountaineer is justified in taking only calculated risks. In any case, I consoled myself with the thought that our climbers had reached a point which was higher than any other mountain in the world, except Everest itself.

We said farewell to Chomolungma and departed with a promise to return and a prayer that next time the mother goddess of the winds would permit us full access!

Defeat is not failure so long as the will to try again persists. The true value of expeditions will not be found at any moment of victory or of defeat, but in the striving and the discovering, for which all men are made.

W. H. MURRAY

XV

THE ROAD BACK

OUR plans for the movement from the Base Camp had gone smoothly when an unexpected crisis occurred over the wages of the porters. I heard the noise of a large number of porters walking away from the loads. As I approached the stampeding men who were threatening to run away, I saw Jungalwala trying to restore peace with the men in his hoarse voice which was hardly audible above the din.

Rao told me that two ring-leaders had incited the porters and demanded more money than had been agreed upon for their round trip to Kathmandu and back to their homes. I intervened and asked Jungalwala and the others not to stop them and informed them that they could go away and that I was prepared to wait at the Base Camp another four days and recruit new men. When the porters heard this they stopped some distance away. Then Sonam and I went up to the two ring-leaders and told them that if we heard them inciting the others, we would have to hand them over to the police. As soon as the ring-leaders were quietened, the porters came back and agreed to carry the loads at the rates we had already fixed. The two ring-leaders had to go back to their villages without any loads.

On the 1st June we completed three stages of the outward journey and reached Phalong Karpo (14,500 feet) and on the 2nd June we reached Thyangboche Monastery. Our appetites improved as soon as we came to lower altitudes and we could now sleep without the help of sleeping pills.

On the way to Thyangboche, Keki, Das and I called at the Monastery at Pangboche and requested the Lama to show us

the scalp of the Yeti for which the Monastery seemed to be famous. On our Sardar's recommendation we had promised to leave a Petromax lamp for the Monastery. We received considerable attention from the Lamas, who also brought out the scalp. Das was not able to comment on the genuineness of the scalp, which consisted of a quarter-inch thick hide and was conical in shape, and slightly larger than the average human head. The hair on the outside of the scalp was like hog's bristles. The Lamas also showed us the skeleton of a hand supposed to be that of the Yeti. Keki took a number of pictures of the scalp as well as the skeleton. That was as near as we got to the "Abominable Snowman", although on our way out there were a number of attempts by local Sherpas to persuade us to go looking for the Yeti.

That afternoon at Thyangboche we were received by the Incarnation Lama. He had already heard about the result of our efforts and consoled us. He said: "This was your first attempt and you need not be disheartened at your failure to reach the peak. Tenzing had tried seven times before he reached the top. You have done well and climbed in spite of bad weather which was expected to be abnormal this year because there was very little snow-fall last winter. Your success lies in the fact that you have brought all climbers and Sherpas back safely and alive. I congratulate you and hope that you will succeed in your next attempt".

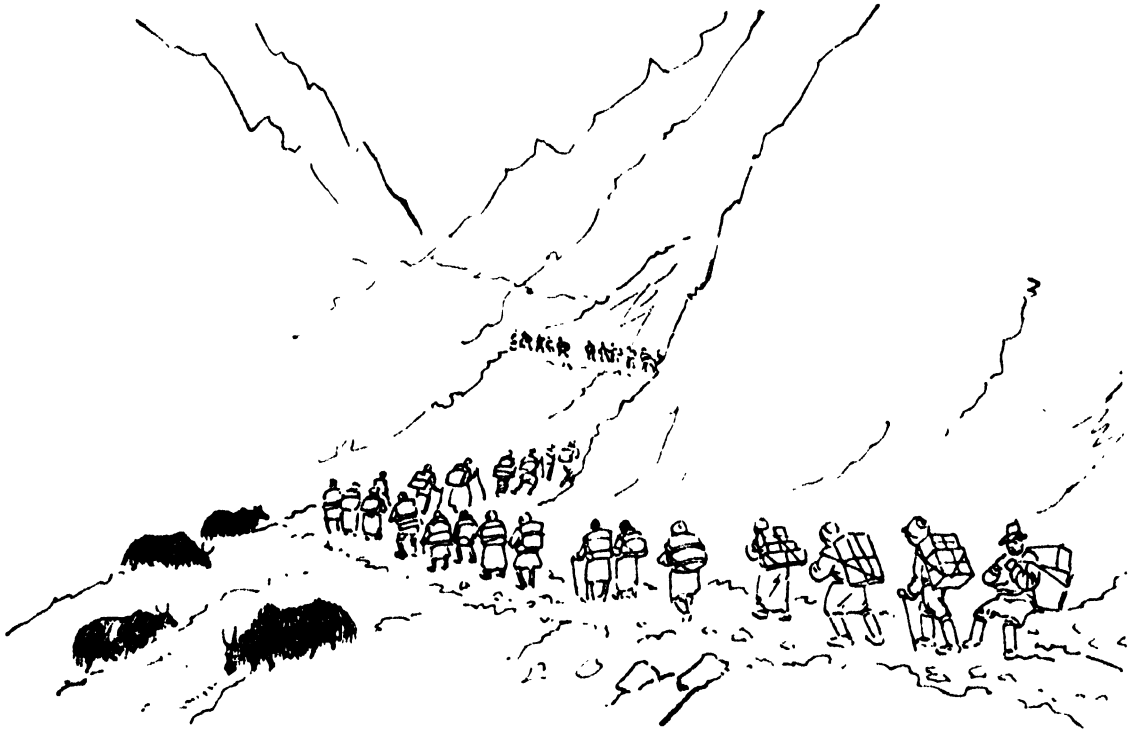
Later, during the conversation, while talking about the money spent on the Expedition, the young Lama, who was wise for his years, remarked: "Why worry about the money? Man earns money; money does not earn Man".

That evening he entertained us to dinner. Before taking his leave we offered him a small donation for the Monastery, consisting of some tinned food, a few simple medicines, a Petromax lamp and fifty-one candles. As we left he gave us a scarf each.

There was a small procession outside Namche Bazar when we reached there at about 10 o'clock the next day. A number of men and women came out and sat near the track, offering free *chhang* to the Sherpas and members of the Expedition. We called at nearly half a dozen houses before we said goodbye to the very friendly residents of this village.

Our return journey to Kathmandu was comparatively uneventful. We had been at lower altitudes for a few days and after good food and good sleep most of us had regained our strength and energy even though we still looked very thin.

Three or four days after we left Namche Bazar, I discovered that practical jokes amongst the members were on the increase. By now we knew one another very well and that was perhaps one of the reasons why some of the younger members were able to pick up on others who were sensitive to such jokes.



One elderly member of the party found one morning that his dentures, which he had placed in a mug of water the night before, as well as his spare set were missing. This nearly created a major incident. Large quantities of chicken had been cooked and the victim was particularly fond of it. He could not bear the idea of going without it. The dentures were eventually restored to the rightful owner together with some nicely done chicken! So all was well.

There were a number of quite stiff climbs but we were in such good training that we did not mind the ascents at all. In fact we feared the down-hill treks more. Our trip back was a real holiday because the quartermaster had made sure that we got good food. It was also pleasant once again to be in a world of colour and beautiful vegetation, after having spent two

months on the snows where, except for our bright coloured clothes, we were virtually starved of colour.

There were numerous messages exchanged between us, Kathmandu and Delhi regarding our programme in the two capitals. Our Ambassador in Kathmandu was good enough to say that we should not hesitate to ask if we wanted any help. He also very kindly arranged for transport to meet us at Banepa, nearly twenty miles from Kathmandu.

When we started on our homeward journey from the Base Camp, I was not quite sure how our failure would be taken in the country. We had spent very nearly six hundred thousand rupees and there was considerable publicity about the Expedition, particularly towards the end. We had sent regular messages giving our progress which must have appeared very spectacular because in our daily messages we had reported, not on the difficulties on the mountain, but our achievements. We had trained the public, as we had trained ourselves, to receive only one type of news, and that was about our successes.

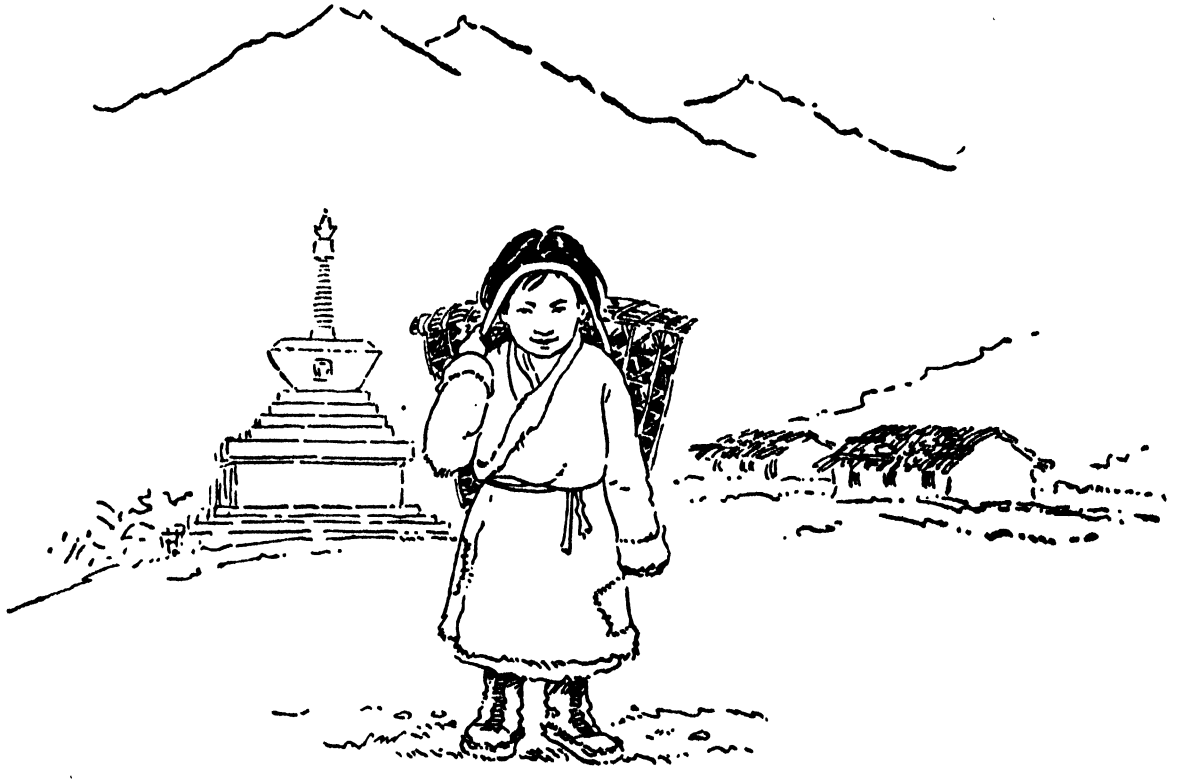
Then, unexpectedly, after building up hopes, the anti-climax came and we announced that we had been turned back by the weather. Under the circumstances it would have been quite understandable if the Press as well as the general public were dissatisfied with our attempt. But I think we had misjudged our people and our Press.

We were naturally anxious to get back and find out for ourselves how the news of our attempt had been received. Keki had received a letter from his father who had written to say that in addition to front page coverage, most of the important dailies had carried editorials on the Expedition after we had decided to withdraw.

A few days before we reached Kathmandu the mail runner brought some newspapers. Here we saw the first editorial in *The Times of India*, which read: ".....The team has given the finest account of itself even in the most trying of conditions. The members of the Expedition have shown that they have the stuff great mountaineers are made of: technical skill, determination, courage and discipline". I had written six articles for *The Times of India* regarding the progress of the Expedition. The paper had taken great interest in us and I felt that it had been very generous in its comments about us.

We arrived at Banepa on 17th June and were met by the staff of the Indian Embassy in Kathmandu, Press representatives and other friends. My wife, who had arrived in Kathmandu three or four days earlier, was at Banepa to receive us.

At Banepa we were given some more Press cuttings. Gopal brought to me a copy of *The Hindu*, which said: "...that the Indian Expedition to Everest had to be given up in the face of adverse weather, need not be a matter of gloom. The early setting-in of monsoon conditions was indeed unfortunate, but by reaching 28,300 feet of the treacherous climb, the Indian mountaineers have shown that they can strive after great things with all the grit, endurance and skill called for by the task. The Leader's decision to withdraw has been hailed as a wise, though difficult one in the light of the persistently bad weather".



The Statesman takes considerable interest in mountaineering activities and I was anxious to know what the paper had to say about us. The relevant issue of *The Statesman* was brought to me and its editorial read: ".....the Indian Expedition's courageous first attempt on the biggest of prizes, Everest, thwarted by abominable weather, will remain a proud chapter in the history

of man's encounter with mountains, whether or not the peak is eventually reached."

The Amrita Bazar Patrika, Hindustan Times, Indian Express, Leader and many other papers were good enough to write in a similar vein. We were all deeply touched by this approbation.

After paying off our porters and having been entertained to light refreshments on the roadside by the Embassy staff, we drove to the Indian Embassy where our Ambassador, Mr. Harishwar Dayal, and his wife entertained us to tea. The hospitality shown to us by our Ambassador and his staff and the rest of the Indian population was very touching. We had barely two days in Kathmandu, but these were hectic days full of engagements for dinner, lunch and 'At Homes'. On the 18th June I called at the Nepalese Foreign Office and also met the Prime Minister, Mr. Koirala, who evinced great interest in our adventure and wished us better luck in our next attempt. Before we left, we were entertained to dinner by the officers of the Indian Military Training Advisory Group. Here I was happy to meet and thank personally the detachment of the Signal Corps which had kept us in communication with Delhi throughout our three months' sojourn in the mountains.

On the 20th June we were given a warm send-off by the Ambassador and members of the Embassy staff, and the Indian Army Officers and their families.

The Air Force Dakota that flew the team from Kathmandu to Delhi touched down at Palam airport exactly at 1 p.m. We were all quite moved to see a crowd with bouquets and garlands waiting for us. Mr. N. R. Pillai, the Chairman of the Sponsoring Committee, and all the members of the Committee who were in Delhi, and our relations and friends were there to greet us. There were many scenes of happy reunion and an uninhibited display of emotion.

As soon as we landed each one of us was presented with an excellent brochure which Mr. Sarin had got out on the Expedition. This had up-to-date facts and information about the work of the Expedition and some very good photographs taken by the members. Mr. Sarin and all those connected with the production of this excellent booklet must have worked overtime to get all the information and photographs arranged and printed in such a short time.

The brochure covered all our activities, including the date of our arrival in Delhi!

Mr. Sarin also gave each one of us a slip of paper on which our engagements for the next few days were listed. We were then driven to the Central Vista Mess where the Sponsoring Committee entertained us to a very good lunch. Mr. Pillai, in his eloquent speech at the lunch, expressed appreciation on his own behalf, and on behalf of the Sponsoring Committee and the nation, of our endeavour to reach the top of Everest.

The next day there was a Press conference at Vigyan Bhavan which was attended by about fifty representatives of Indian and foreign newspapers. The Press correspondents asked some very interesting and searching questions about the Expedition. This kind of interest augured well for Indian mountaineering.

Many sympathetic people had called our attempt a "near success". While I did not regard our failure to reach the top as a failure in realising all our aims, we certainly had not reached the summit. It will be hypocritical to deny that the principal aim of most expeditions is to climb the peak, and in that we had not succeeded.

We had set ourselves two other aims which, in my view, were as important as the first, and in those we had succeeded. The first of these aims was to train young climbers on a high mountain which would give them prolonged experience in all aspects of high-altitude climbing. From this angle the Expedition was equivalent to four or five expeditions put together. Three of our climbers shared the honour with less than a dozen climbers in the world of having reached an altitude of 28,300 feet. On the 24th May, ten men of the Expedition, including seven Sherpas, had reached 27,600 feet, and four other climbers and thirty-three Sherpas had reached the South Col (26,000 feet). The experience and maturity as mountaineers acquired by our climbers must make some of them good leaders for future expeditions.

The second of these aims was to test Indian-made equipment under really severe conditions. Except the oxygen apparatus and a few other items, most of the equipment used on the Expedition was made by Indian Ordnance factories and other industries. It had stood the severe test well and, with slight improvements, should be as good as the best in the world. I was particularly

happy about this because the lack of equipment is one of the principal handicaps in the promotion of mountaineering in our country.

For the next three or four days we attended a number of parties, including a dinner given by the Ministry of Scientific Research and Cultural Affairs, which had financed the Expedition. The Defence Minister and General Thimayya, the Chief of the Army Staff, were 'At Home' to us.

Our last, and to us the most important, engagement was an 'At Home' at the Prime Minister, Mr. Nehru's house on the 24th June. The Prime Minister was very happy to meet us and asked us not to be disheartened by our failure to reach the peak. He said it was not the success or failure, but the experience we had brought back which mattered. He hoped we would have better luck next time.

The Vice-President, Dr. Radhakrishnan, also attended the function. He greeted us affectionately and had some very kind words to say about our attempt. He recited a verse from the Gita which he explained to us in these words:

"In his philosophical discourse to Arjuna, Lord Krishna had explained that five factors were essential for the accomplishment of all human actions. The seat of action and likewise the agent, the instruments of various sorts, the many kinds of efforts made by the first four, providence being the fifth. In all human actions, there is an unaccountable element which is called luck, destiny, fate or the force accumulated by the acts of one's past lives. It is called here *daiva*. The first four factors can be used by man as he wishes, but he has no control over *daiva*. Therefore, his duty is to do his best without any regard for the results. One undertakes a thing not because one hopes to succeed, but because one thinks it is right."

APPENDIX I

MOUNT EVEREST

Mount Everest, the highest point on earth, is situated at latitude 27° 59′ 16″N and longitude 86° 55′ 40″E.

Discovery and Name

The Himalayan peaks were first observed by surveyors between 1849-1855 from distant low-lying stations in the plains of India. The observers could not, however, give individual names to the innumerable peaks that they observed. The peaks now known as Mount Everest and Gauri Shanker were, therefore, originally designated as Peak XV and Peak XX respectively.

The observations of Peak XV (now called Mount Everest) were taken during November-December 1849 and January 1850 from six stations about 110 miles away from the mountain. These stations—Jarol, Mirzapur, Janjipati, Ladnia, Harpur and Minai—were separated from each other by approximately 20 miles and were situated at a height of about 230 feet above mean sea level. To make the stations intervisible for triangulation, towers (about 20 to 32 feet high) were built.

The actual rays from the triangulation to the peak were observed by Mr. J. O. Nicolson, using a 24-inch theodolite. In this connection, it is interesting to recall one of the instructions given to Mr. Nicolson. He was asked "to be in the observatory before sunrise and all prepared to commence horizontal angles as soon as it is light. The vertical angles may be taken from 8 to 10 a.m." Considering the season and the unhealthy tracts where the field parties had to camp, it must have been a difficult task.

The computations of the triangulations were carried out by many computers, including Mr. Radhanath Sikhdar and

Mr. Hennessey. By 1852 the computations were sufficiently advanced to indicate that the height of Peak XV was greater than that of any other known mountain. The computations were checked and revised and it was not till 1865 that the determination could be regarded as sufficiently reliable and final.

Meanwhile, considerable thought was given to the question of naming the peak. After an exhaustive enquiry, the then Surveyor General, Sir Andrew Waugh, with the concurrence of his deputy, Colonel Henry Thullier and the Chief Computer, Mr. Radhanath Sikhdar, and in consultation with the Royal Geographical Society of London, decided to name the peak after his distinguished predecessor, Sir George Everest, to commemorate his contribution to the geodetic survey of India.

Height

The heights computed from the original six observations of 1849-1850 varied from 28,990.4 to 29,026.1 feet, the mean being 29,002 feet. Though the maximum difference between the six values was only about 36 feet, the values suffered from appreciable systematic errors as the coefficients of refraction assumed were high, plumb line deflections were neglected and the datum was not properly fixed. The value of 29,002 feet, though often quoted, was therefore regarded as somewhat vague.

On the basis of six further observations made during 1880-1883 and 1902, Sir Sidney Burrard estimated in 1905 the height of Mount Everest to be 29,141 feet. Even though Sir Sidney assumed a more correct value for the coefficient of refraction, his estimate also is considered vague as the 'geoidal' rise was ignored.

More detailed observations were carried out by the Survey of India during 1952-1954. The computed heights varied from 29,022.8 to 29,038.7 feet, with a scatter of only about 16 feet. The weighted mean value of the height of Mount Everest works out to 29,028 ft.*

*Calculations, assuming an 'International Standard Atmosphere (ISA)' at a height of 29,028 feet, give the pressure ratio, density ratio (sea level conditions) and temperature at that height as 0.310 (0.27 to 0.36), 0.385 (0.375 to 0.385) and —42.4°C (—65°C to —6°C) respectively. Figures in brackets denote the rough extremes within which the values may lie. Obviously, the actual conditions at the top of the stupendous snow mass of Everest may be distinctly different.

(8,847.734 metres). To quote Mr. Gulatee: "The new value obtained is 29,028 feet which, it is hoped, is not likely to be in error by more than 10 feet."

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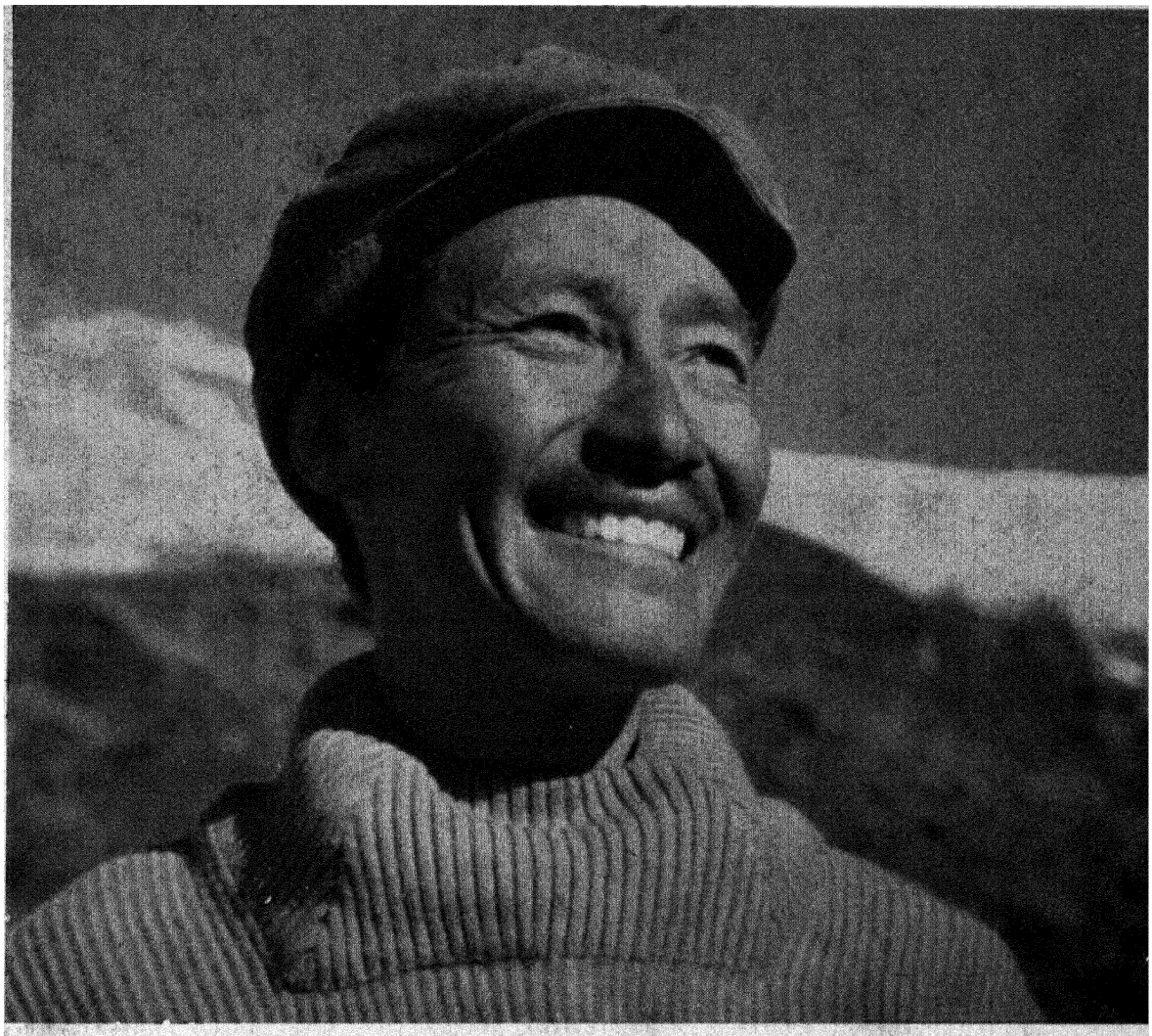

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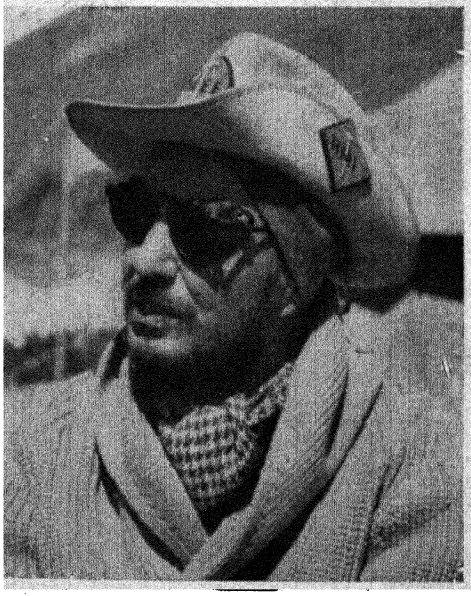
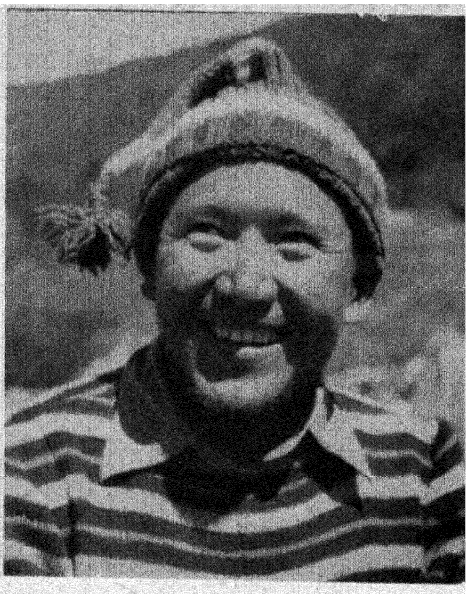


Gyan Singh
(Leader)

K. F. Bunshah
(Deputy Leader)

Chowdhury



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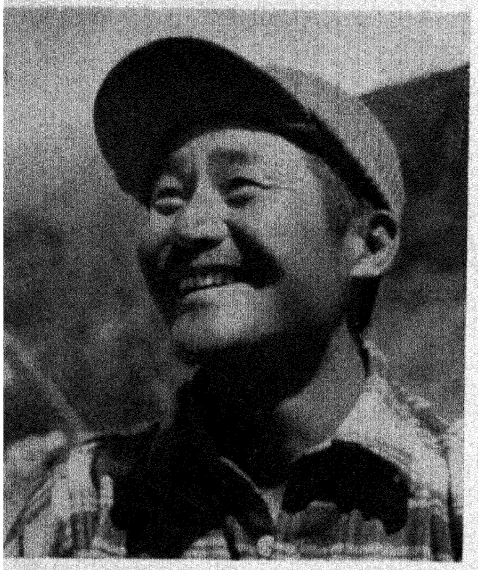

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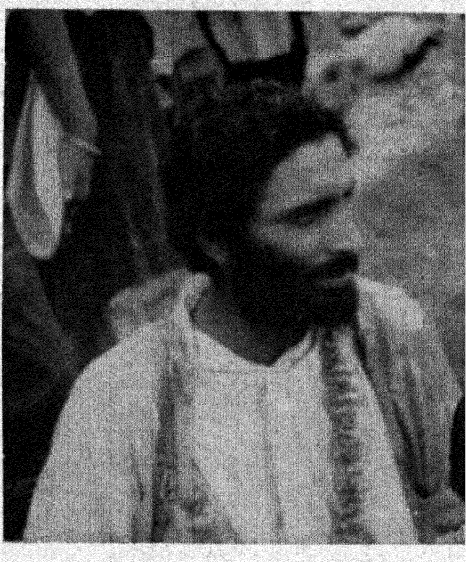

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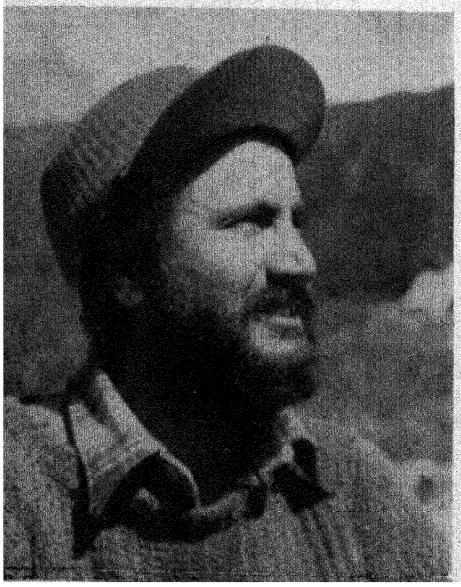

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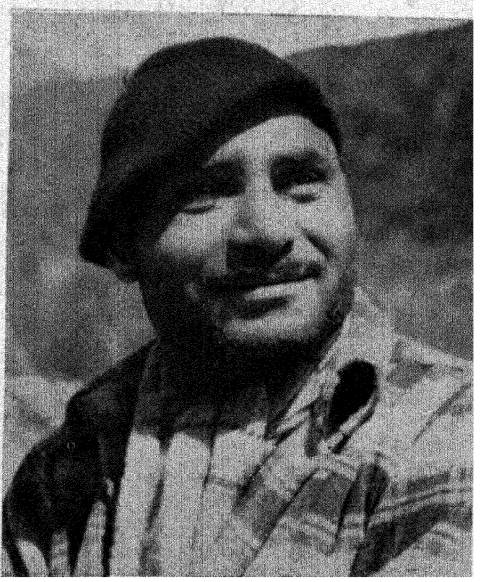

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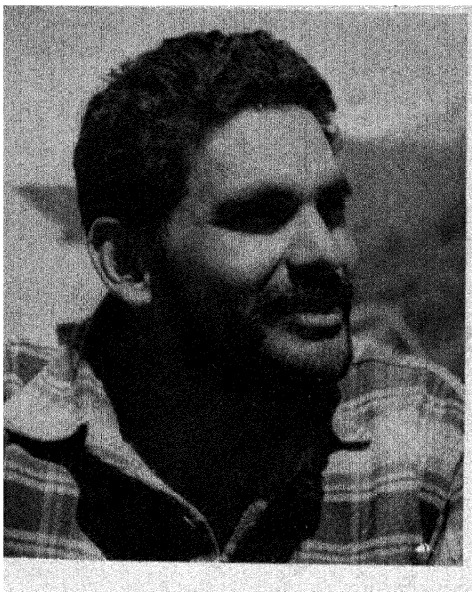

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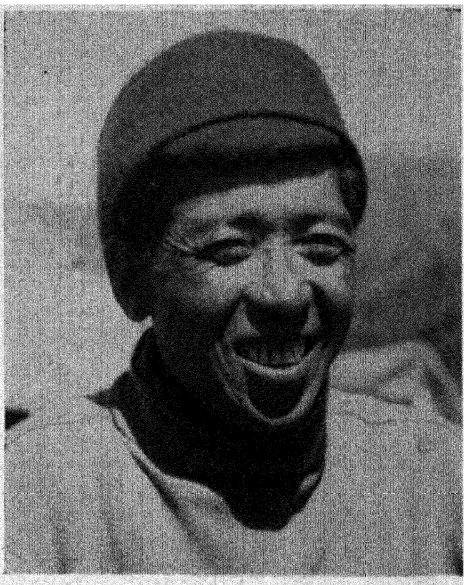

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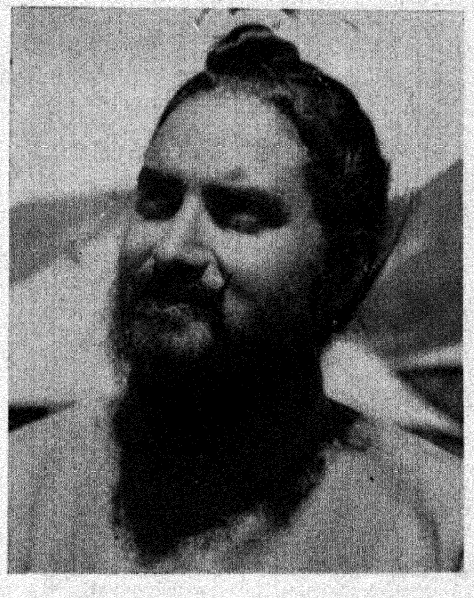
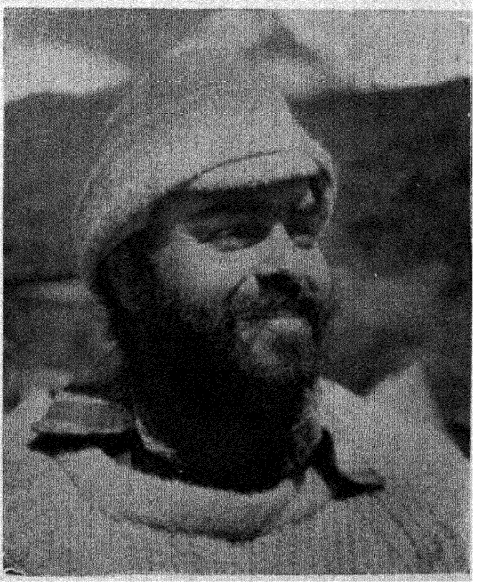


R. Vikram Singh

Ang Temba



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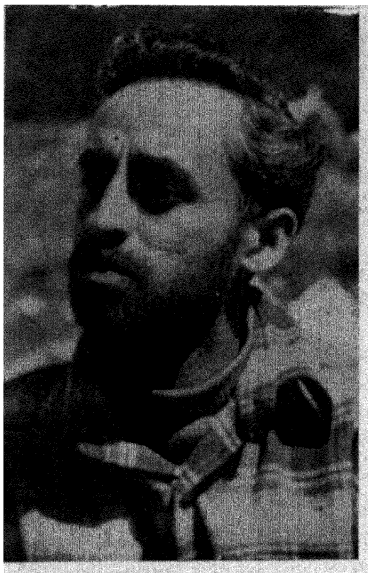

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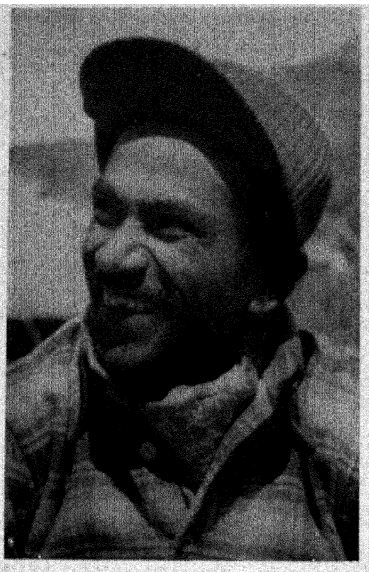

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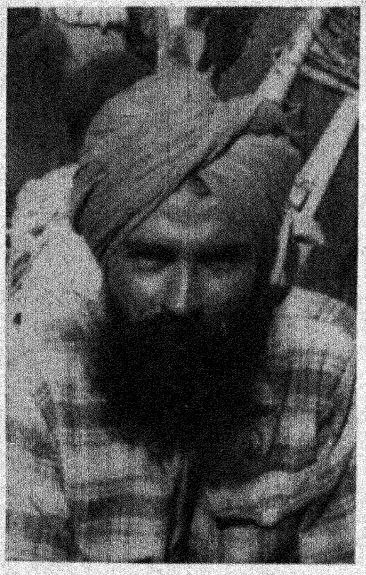
C. V. Gopal



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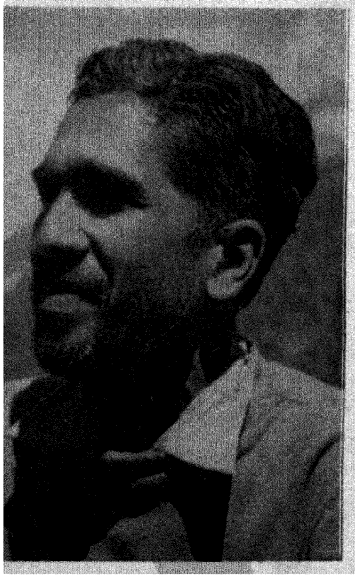

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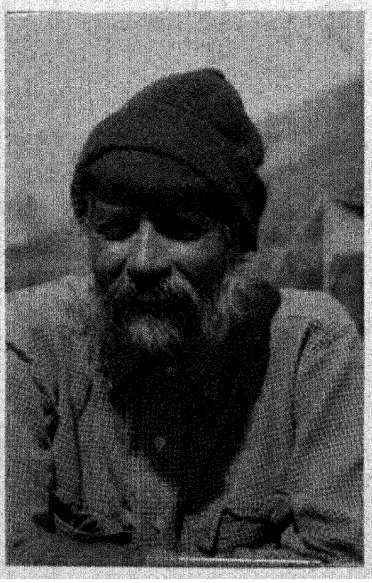

Sohan Singh

Dhanbir Rai

APPENDIX II

WHO'S WHO

BRIGADIER GYAN SINGH: Comes from the Ludhiana district in Punjab. Born in the Mainpuri district of U.P. on April 12, 1918. Educated in Lucknow and joined the 8 Cavalry in September 1936 as a *Sqwar*. Commissioned in the Regiment of Artillery in July 1940. Served almost throughout in the Kashmir operations, including the Zoji La operation, in command of a Field Regiment of Artillery. Climbed extensively during this period in connection with reconnaissance duties and other professional work. The appointments he has so far held are: Commandant of the Winter Warfare School; Assistant Commandant, School of Artillery; Commandant of a Regiment of Artillery; and Assistant Adjutant and Quartermaster-General of a Division.

In 1958 Brig. Gyan Singh joined the Himalayan Mountaineering Institute, Darjeeling, as Principal. During July-August 1959 he visited Europe, attending the International Mountaineers' Meet organised by the French National Mountaineering and Ski School in Chamonix and the Mountaineering Jubilee Week at Rosenlaui (Switzerland). He later visited mountaineering institutions in Austria, Germany, Belgium and England.

On being selected to lead the Expedition to Everest, Brig. Gyan Singh took out an Advance-cum-Pre-Everest Course to the Kabru glacier in October-November 1959. He was promoted Acting Brigadier in February 1960.

KEKI F. BUNSHAH: An Attorney of the Bombay High Court. Was born on March 5, 1930, and educated at St. Xavier's College and Government Law College, Bombay. Went to the Garhwal Hills in 1951 with a New Zealand expedition. He learnt rock-climbing in the Western Ghats. In 1956 he organised a successful expedition to Trishul (23,360 feet) and climbed the peak. On the way back, he made an attempt on Mrigathoni

in Garhwal. In 1958 he led the Indian team to Cho-Oyu (26,867 feet), the seventh highest peak in the world. Despite several setbacks, including an air-crash in which a considerable quantity of equipment and provisions were lost, the death of Maj. N. D. Jayal and a severe gale which destroyed tents and other equipment at Camp II, two members of his team succeeded in reaching the peak. He himself went up to 24,000 feet in support of the summit party.

FLT.-LT. A. K. CHOWDHURY: Was born on December 31, 1934. He joined the Joint Services Wing (N.D.A.) in 1952 and was commissioned in the Air Force in January 1956. He attended the Basic Course at the H. M. I. and joined the Nanda Devi expedition (Advance Course) in 1957 and climbed up to 23,000 feet. In 1959 he went with the Air Force Expedition to Chowkhamba (23,420 feet) and reached the top.

NAWANG GOMBU: Gombu (28) belongs to the Solu-Khumbu district of Nepal. He worked as a Sherpa on the British Expedition to Everest in 1953 and went up to 27,000 feet. In 1954 he worked for the American Expedition to Makalu. The same year he was appointed Instructor at the H. M. I. and did a mountaineering course in Switzerland. Also qualified in the ski course at Gulmarg. Participated in the Saser Kangri and Nanda Devi expeditions with the Advance Course parties from the H. M. I.

SONAM GYATSO: Was born on April 1, 1923. Is working in a civil post under the Government of India. Did the first Basic Course from the H. M. I. in 1954 and participated in an Advance Course to Nanda Devi led by the late Maj. N. D. Jayal. In 1958 he took part in the successful Cho-Oyu (26,867 feet) expedition and reached the summit. In 1959 he attended the Advance-cum-Pre-Everest Course.

CAPT. A. B. JUNGALWALA: Was born on December 26, 1933. He was commissioned in the Gorkha Rifles. During the summer of 1954, Capt. Jungalwala trekked to the "Valley of Flowers" and the Hemkund region of the Garhwal Himalayas. He attended the Basic Course at the H. M. I. in 1958 and the Advance Course in 1959.

INST. LT. M. S. KOHLI: Was born on December 11, 1931, in Haripur in, Hazara District (N.W.F.P.), West Pakistan. After Partition, he migrated to Delhi and took the M.A. (Hons.) degree from Delhi University in 1953. He founded the "International Youth Organisation", which has branches in India and six other countries. He joined the Navy in March 1954 as a commissioned Instructor Officer, and was placed in charge of the "Deep Sea Scouts" Organisation of the Service. Lt. Kohli started his mountaineering career in April 1956 by undergoing the Basic Course at the H. M. I. Soon after, he joined the Advance Course and went with the Eastern Karakoram Expedition led by the late Maj. Jayal. In April-May 1959, he organised and led the all-Naval Expedition to Nanda Kot (22,510 feet) in which he, along with K. P. Sharma, Chief Yeoman of Signals, succeeded in reaching the summit. He participated in the Advance-cum-Pre-Everest Course in 1959.

CAPT. N. KUMAR: Was born on December 8, 1933. He attended the World Scout Jamboree in Paris in 1947 at the age of 14. In 1950, he joined the Joint Services Wing (N.D.A.) and was commissioned in June 1954 in the Kumaon Rifles. Capt. Kumar successfully completed the Advanced and Instructors' Course at the "Winter Warfare School", Gulmarg, in 1956 and participated in the Himachal Winter Sports in 1957. He attended the Basic and Advance Courses at the Army School of Physical Training and obtained a high grading in both. In February 1958 he attended the Basic Course at the H. M. I. and, a month later, led the successful Army and Naval Expedition to Trishul (23,360 feet). In 1959 he attended the Advance-cum-Pre-Everest Course.

B. D. MISRA: An assistant professor in the Department of Economics at Saugor University, was born on January 18, 1933. He obtained a post-graduate degree from Allahabad University and served there for three years before joining Saugor University. Has been to Rupkund in Garhwal as a member of the Allahabad University Mountaineering Club and later to the Sukram and Sunperdhunga Glacier. He has also been to Gangotri. He has done the Basic Course at the H.M.I. and attended the Advance-cum-Pre-Everest Course in 1959.

DA NAMGYAL: (38) Belongs to the Solu-Khumbu district of Nepal. As a Sherpa, he has participated in expeditions to Pumori, Nanda Devi, Deodunga (Kulu Valley), Everest with the Swiss in 1952 and with the British in 1953, and Annapoorna with the Japanese in 1953. In 1954, Namgyal was appointed Instructor at the H.M.I. and later received mountaineering training in Switzerland. He has been to Mount Kamet, Nanda Devi and Saser Kangri on Advance Courses and climbed Everest up to 27,400 feet.

R. VIKRAM SINGH: Was born in Barabanki (U.P.) in 1929. Studied at the Doon School, Dehra Dun, and later at Stanford University, California. A scientist in the National Physical Laboratory, Vikram Singh has climbed around Bunder Punch. In 1958 he participated in the first ascent of Mrigathoni (22,490 feet) in Garhwal.

ANG TEMBA: (36) Belongs to the Thamy village of Solu-Khumbu district of Nepal. He worked as a Sherpa on expeditions to Ferrani with the Swiss in 1949, Nanga Parbat with the British, Chowkhamba with the French in 1952, Everest with the Swiss in 1952 and with the British in 1953, and Makalu with the Americans in 1954. On the opening of the H.M.I., Temba was appointed Instructor and later did a training course in Switzerland. He climbed Kamet with the first Advance Course of the H.M.I.

C. P. VOHRA: Belongs to the Mirpur district of Jammu and Kashmir. Was born in August 1934. He obtained his M.Sc. (Geology) degree from J. and K. University in 1955, and has been working in the Geological Survey of India since 1956. During 1957-59, he worked on some Kumaon glaciers. He did his Basic Course at the H.M.I. and took part in the Advance-cum-Pre-Everest Course in 1959.

FLT.-LT. N. S. BHAGWANANI: Belongs to the Sukkur district of Sind, West Pakistan. Was born on November 14, 1929. He took the M.B.B.S. degree from the Andhra Medical College, Visakhapatnam, in 1952 and joined the Medical Branch of the Air Force in March 1953. After qualifying as a paratrooper in 1954, Flt.-Lt. Bhagwanani commanded a para-medical team

for five years. He carried out some high-altitude jumps at Gulmarg and in July 1955 trekked to the Jamnotri glacier in eastern Garhwal with the Air Force Trekking Society. In 1956 he qualified at the Basic Course at the Winter Warfare School and in December 1957-January 1958 led the medical mission for flood relief work in Ceylon. In 1959 he participated in the Air Force Expedition to Chowkhamba and Nilkanth.

CAPT. S. K. DAS: Was born at Khardaha, near Calcutta, on April 2, 1927. He took the M.B.B.S. degree from Calcutta University in 1955 and was commissioned in the Army Medical Corps in 1957. Capt. Das has done trekking in upper Garhwal and has climbed upto 21,000 feet. He has undergone a course in Physiology in the Defence Science Laboratory, Delhi, and is working as a doctor and physiologist at the H.M.I. He did his Basic and Advance Courses at the Institute during 1959.

C. V. GOPAL: Was born in December 1927. Graduated from the Madras Christian College and later studied Cinematography at the University of Southern California in Los Angeles. He has been working in the Documentary Section of the Films Division (Ministry of Information and Broadcasting) since 1952. He took part in the Pre-Everest Course as a Cameraman.

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S. U. SHANKAR RAO: Was born on November 18, 1922. He took his B.Sc. (Hons.) degree in Chemistry in 1944. Since then he has been working in the Indian Meteorological Department. He had no previous experience of climbing.

SOHAN SINGH: Was born on August 10, 1911. He took the B.A. degree from the Punjab University in 1932 and joined service in the office of the Chief Controller of Stores, Simla, in May 1935. He organised an expedition to Panch Chuli in 1952 and trekked to Kailash and Mansarovar in June-July 1952. He did his Basic Course at the H.M.I. in 1958.

DHANBIR RAI: A civil officer of the Nepal Government. Was attached to the Expedition as a Liaison Officer on behalf of the Nepal Government.

NAIK BALAKRISHNAN: Born on October 3, 1923, in Trichur in Kerala State. Joined the Indian Army in August 1943, and is attached to a Signal Regiment.

SIGNALMAN OM PRAKASH VAID: Born on August 15, 1937, in Gummer in the Kangra district of Himachal Pradesh. Joined the Indian Army in June 1955, and is attached to a Signal Company.

APPENDIX III

CHRONOLOGY

September, 1959	:	Brigadier Gyan Singh, Principal of the Himalayan Mountaineering Institute, nominated as Leader and Mr. Keki Bunshah as Deputy Leader of the Expedition.
Oct.—Nov. 1959	:	Pre-Everest Course held at the Himalayan Mountaineering Institute on the Kabru Ice-fall.
November 16, 1959	:	A 20-member team, including 13 climbing and 7 non-climbing members, announced.
February 20, 1960	:	The team assembles in New Delhi.
February 27, 1960	:	Nearly 600 packages of equipment leave Delhi by road for Lucknow.
March 2, 1960	:	The team leaves Delhi by train for Jaynagar.
March 4, 1960	:	The team arrives in Jaynagar on the Indo-Nepalese border.
March 6, 1960	:	The Expedition leaves Jaynagar and the "Everest March" begins.
March 7, 1960	:	The Expedition arrives at Chisapani at the foot-hills of the Himalayas.
March 15, 1960	:	The Expedition has its first view of the Everest massif from Garma village.
March 18, 1960	:	The Expedition reaches Khari Khola in the Khumbu district.

March 22, 1960 : The Expedition arrives at Namche Bazar, the last outpost on the trade route to Tibet.

March 23, 1960 : The Expedition camps at Pangboche to begin acclimatisation.

April 5, 1960 : The Base Camp is set up at the foot of the Khumbu Ice-fall (about 18,000 feet).

April 10, 1960 : The leading party sets up Camp I at a height of 19,200 feet on the Khumbu Ice-fall.

April 13, 1960 : The move to the Base Camp completed.

April 15, 1960 : Camp II set up at 20,000 feet.

April 17, 1960 : The Expedition crosses the Khumbu Ice-fall and sets up Camp III at a height of 21,200 feet.

April 19, 1960 : Camp IV set up at the foot of the Lhotse Glacier at a height of 22,400 feet.

May 2, 1960 : Camp V set up at a height of 24,000 feet.

May 9, 1960 : Camp VI set up on the South Col, as the final take-off base (26,000 feet).

May 14, 1960 : Strong and chilly winds on the Lhotse Face and intermittent snowfall compel the climbers to withdraw.

May 19, 1960 : Brigadier Gyan Singh returns to the Base Camp on account of illness.

May 23, 1960	:	The first Summit Team consisting of Nawang Gombu, Sonam Gyatso and Narinder Kumar and supported by nine Sherpas reaches the South Col.
May 24, 1960	:	The first Summit Team succeeds in establishing Camp VII at a height of 27,600 feet on the south ridge of Everest. The supporting team of seven Sherpas returns to the South Col, leaving the three climbers at Camp VII.
May 25, 1960	:	The first Summit Team attempts to climb the peak and reaches a height of 28,300 feet, 700 feet short of the peak, but is compelled to withdraw on account of bad weather.
May 26, 1960	:	The second Summit Party, consisting of Ang Temba, M. S. Kohli and C. P. Vohra, waits at the South Col for the weather to improve to make an attempt to climb the peak but is ordered to return because of extremely bad weather.
May 27, 1960	:	The first Summit Party returns to the Base Camp.
		The second Summit Party returns to the Advance Base Camp.
May 29, 1960	:	The Expedition assembles at the Base Camp.
June 3, 1960	:	The Expedition reaches Namche Bazar on the return journey to Kathmandu.
June 17, 1960	:	The Expedition arrives in the Nepalese capital.
June 20, 1960	:	The Expedition returns to New Delhi by air from Kathmandu.

APPENDIX IV

MOUNTAINEERING TERMS

Arete	:	Sharp ascending ridge of a mountain.
Avalanche	:	Large mass of snow and ice sliding down a mountain slope.
Balaclava	:	A woollen cap which covers the head and cheeks right down to the neck.
Belay	:	Secure a rope by winding it round a projection; a firmly planted ice-axe may be used for the purpose. To make secure the ascent or descent of a climber with rope.
Bivouac	:	Temporary encampment without tents.
Cairn	:	A small heap of stones serving as a landmark on a mountain, generally on a pass, to indicate a route.
Col	:	Depression in a mountain-chain; pass.
Cornice	:	A mass of snow or ice overhanging a ridge.
Couloir	:	Steep gully or furrow of ice, snow or rock on mountain-side.
Crampon	:	Metal hook with spikes fitted to climbing boots to give a better hold on ice or hard snow.
Crevasse	:	Deep fissure in a glacier or snow-field.
Cwm	:	(Also Combe or Coomb), a large cauldron or basin in a heavily-glaciated region.

Eiderdown	:	Down feathers of Eider duck. A very warm and light material, used in high-altitude clothing.
Glacier	:	River of ice formed by the accumulation or consolidation of snow.
Glissade	:	Sliding descent over a steep slope of snow or ice
Ice-Axe	:	Mountaineer's axe mainly used for cutting steps on ice and snow and belaying.
Ice-Fall	:	Steep frozen waterfall; cascading ice in the "river" of a glacier even as a waterfall cascades the water of a river running down an uneven rocky course.
Karabiner	:	A metal spring-loaded clip which can be fixed to a rope or piton to facilitate ascent or descent.
Massif	:	Compact range or group of mountain heights.
Metafuel	:	Solid fuel available in the form of white tablets used in special stoves. Burns with a light blue flame like methylated spirit.
Moraine	:	Debris carried down or deposited by a glacier.
Piton	:	Metal spike which can be driven into rock or ice for fixing a rope.
Rappel	:	Descend down a very steep rock or ice-face with the help of a rope.
Scree	:	Mountain slope covered with small loose stones that slide down when trodden.
Serac	:	Tall pinnacle of ice, usually associated with ice-falls and glaciers.
Spur	:	Rib or lateral projection of rock.

ACKNOWLEDGEMENT

The Expedition received assistance from a large number of individuals, firms and organisations in India and abroad. Some of them have already been mentioned in the text of this book. There are many others mentioned below who have been of special assistance to the Expedition in several ways, and the members of the Expedition owe a debt of gratitude to all of them. There are still others who have rendered valuable assistance, but may have been left out.

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Firms and Organisations

Abbrahim Currim & Sons, Bombay	Umbrellas
Bata Shoe Co., Ltd., Calcutta	Climbing and approach march boots
Bengal Waterproof Co., Calcutta	Air-mattresses and tent flooring
Bombay Hosiery Mart, Bombay	Nylon socks
Boroughs Wellcome & Co., Delhi	Medicines
Bright Brothers (Private) Ltd., Bombay	Polythene bread-boxes and jars
British Drug House (India) Private Ltd., Bombay	Medicines
Caltex (India) Ltd., New Delhi	Kerosene oil
Ciba Pharma (Private) Ltd., Bombay	Medicines
D & P Products, Bombay	Tinned vegetables and fruits
Dumex (Private) Ltd., Bombay	Medicines
Messrs. European Supplies Org., Paris	Services
Favre-Leuba Watch Co., Switzerland	Wrist watches
Gami Cameras and Film Association, Milan, Italy	
Glaxo Laboratory (India) Private Ltd., Bombay	Medicines and Glucose 'D'
Godrej Co. (Private) Ltd., New Delhi	Steel folding chairs and locks

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Indian Coffee Board	Coffee
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Kodak Ltd., Bombay	
Lederle Laboratory (India) Private Ltd., Atul, Bulsar	Medicines
May and Baker (India) Private Ltd., Atul, Bulsar	Medicines
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Noble Stationery Mart, Bombay	Stationery
Parke Davis (India) Private Ltd., Bombay	Medicines
Pfizer (Revisions Pharmaceutical Works), Bombay	Medicines
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Rallis India Ltd., Pharmaceutical Division, Bombay	Medicines
Sandoz Products (Private) Ltd., New Delhi	Medicines

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Tea Board, North Zone, New Delhi	Tea
Messrs. Thorens-Riviera, Switzerland	Riviera shavers
Victory Flask Co., Bombay	Thermos flasks and water bottles

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All India Radio

The aerial photographs of the Everest massif appearing between pages 152 and 153 are by the Indian Air Force. The photographs were taken in June, 1953.

End paper based on Mahalangur Himal Chomolongma—Mount Everest Map of the Cartographical Section of the Austrian Mountaineering Association, Innsbruck. The original is in six colours.

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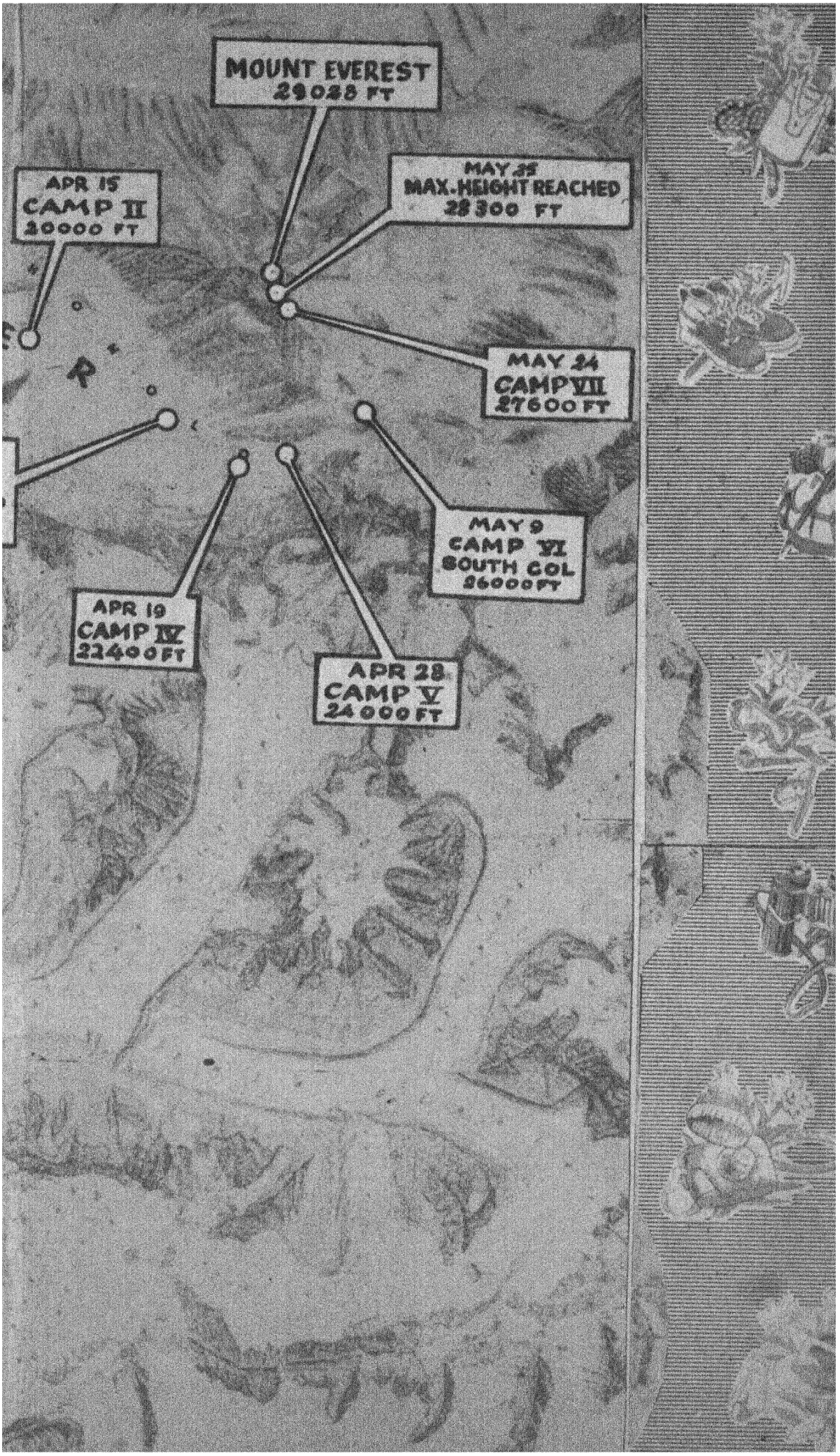
MOUNT EVEREST
29028 FT
APR 15
CAMP II
20000 FT
MAY 25
MAX. HEIGHT REACHED
28300 FT
MAY 24
CAMP VII
27600 FT
MAY 9
CAMP VI
SOUTH COL
26000 FT
APR 19
CAMP IV
22400 FT
APR 28
CAMP V
24000 FT