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## LURE OF THE HIMALAYA

Mountains, perhaps more than any other aspect of Nature except the sea, bring men into touch with those universal forces which in their summation men call God. On them we are able to review our physical selves and glimpse the hidden regions of the spirit. We are brought in some inexplicable manner into closer touch with the creative forces out of which we have been evolved, and the experience is refreshing and inspiring.

Mountaineering Holiday,—F. S. Smythe.

TO ALL "LOVERS OF HEIGHTS"

# LURE OF THE HIMALAYA

Embodying

ACCOUNTS OF
MOUNT EVEREST EXPEDITIONS
BY LAND AND AIR

BY

Dr. K. C. BHANJA, B.A.,

(AUTHOR OF Darjeeling at a glance, Wonders of Darjeeling and the Sikkim Himalaya, etc., etc.)

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## PREFACE

Man is by nature a worshipper of Beauty, which holds human heart captive,—beauty in the World of Form, beauty in World Formless. Thus, beauty is joy. And in Bliss which is joy superb, unbounded, and unending lies the fruition of Existence.

Existence, thus, relentlessly calls into play felicitous realizations through beauty. This is why in the heart of the Lords of the creation sways all the time predominant longing for exploration in the sublime realms of Nature, where beauty reigns supreme.

But wherein lies the justification of these fleeting glories of beauty is the question. The Divine Essence, that runs through the creation and lies latent in man, has a tendency to unfoldment, just as a bud shows itself off by unfolding its petals in all their delicate shades, fragrance, and loveliness. That is why man feels attracted towards all that is glorious in Nature.

But by no means, that is the be all and end all of life, which is in reality a pilgrimage from the Form to the Formless World, from what pertains to the senses with which we are walled in to what belongs to the Absolute Reality, from the domain subject to limitations to the Transcendental World (not realizable in experience), the perennial source of Bliss. The philosophy, here, hinges on the fact that beautitude of Nature which is but a perverted reflection of the Transcendental Reality, lures away the ego to its home of bliss.

The transition, here, as elsewhere in Nature, is not an abrupt one. In like manner, there can be no question as to the existence of the Unseen. The Unseen is only a presage of the seen, and the transition establishes itself by a difference in

potency and intensity, just as beyond certain limits, vibrations of, say, sound or light clear the course of perception.

Now will be understood what is really at the root of inspiration for adventures in the wonderlands of Nature, and wherein lies the justification of the creation of the land of poetry which reveals itself in enchanting phases of hills and dales, of surging seas and glistening peaks, of deep forests and mountain sides aglow with a world of flowers, of wide deserts and bleak plateaus strewn with stones and boulders and seamed with coloured hills.

Without this element of appreciation of beauty, which unveils itself to the aspirants who explore the remote Sanctuaries of Nature, entering into the synthesis of such adventures, in a supreme degree would have been lost the incentive to these exploits.

Apart from the sportive spirit underlying the contemplation for an assault on Mount Everest, or in other words, for attaining the highest summit with the view of breaking world record, there was attraction for exploring the unknown region on the golden roof of the world—the plateau of fascinating Tibet—across which lay the most romantic route to the loftiest pyramid of the earth.

And the Mount Everest Expeditions were more than amply rewarded when the far-flung ramparts of the Eastern Himalaya singularly lavish in its unparalleled display of every phase of mountain scenery imaginable, unveiled its unique beauty before the aspirants, to whom and to the world at large, the thrills of the journey from Kampa Dzong to the foot of Mount Everest below the North Col had so far been a sealed book.

Therefore, to the undaunted Everesters, to the Mount Everest Committee, and last but not least, to the Royal Geographical Society, the world-renowned organization which espoused the cause of the Committee in launching upon a scheme for fighting the world's highest pinnacle, the world is immensely indebted for the wealth of enthralling information as contained in the epic works of their adventures. But, unfortunately, all of these works, except that of 1933, are out of print for years, it being doubtful whether they will ever see the light with all their stirring illustrations.

These should be classed amongst the greatest works which are regarded as the world's heritage. The accounts of these thrilling adventures directed to the "Goddess Mother of Mountains" are of far greater value than the greatest creative literature.

Within the very limited scope of the book, the writer has used his best endeavour in presenting before his readers in a nutshell all that is strikingly informative in the episodes of Mount Everest. But in doing so nobody can be so painfully conscious, as the writer, of many defects and touches of tar brush, for which evidently his average talents are responsible. It is because, besides other considerations, he is fully alive to the fact that as compared to the felicity of diction that marks the pen-craft of the epic works of the various expeditions, what he has presented here is milk and water. But, considering how welcome would be even this insipid beverage to adventurers (the Tibetans themselves abhor milk) travelling on the most bleak and inhospitable plateau of Tibet, the writer has acted unblushingly in putting forward this faltering treatise, embodying accounts of man's supreme and crowning adventures on the face of the earth.

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Note:—This book is principally the sum and substance of the first fiveworks noted above embodying the results of the Expeditions by land and air.

## PART I

# PRELUDE TO THE THEATRICALS OF THE KING OF HEIGHTS

Through all our own generation and that of our forefathersthe summit of Mount Everest has been the symbol of remoteinaccessibility. Perhaps it is this very fact which inspired the long series of brave struggles to attain it, struggles which becamemore determined and even more gallant after man had reached both Poles and so left Everest in its solitary and inviolate majesty.

-FIRST OVER EVEREST-

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#### CHAPTER I

#### THE LORE OF THE HIMALAYA

Beauty is truth, truth beauty; that is all
Ye know on earth, and all ye need to know.

—Keats

significance realisable, however, only by the initiated. To others it simply means: 'The abode of the snows.' It has from time immemorial inspired poets and the heavenly-minded with feelings of immensity, of sublimity and purity. It conveys to the contemplative a message of truth which is beauty and beauty which is truth. Here is the beginning and end of all mystic quests. To the world at large, the impression of the grandeur of the Himalaya is enthralling, not to say anything of the soul-stirring spectacles of the play of colour on the snowy domes as the sun peeps out of the vault of heavens, or bids adieu to this side of the hemisphere.

The lore of the most exalted Himalaya is intimately associated with the pursuit and strivings after the realisation of the Divine Essence that permeates the creation. The infinitely beauteous range bespeaks the immutable glory of the Absolute, and herein lies its justification in the order of things. Some two thousand years ago Buddha and Christ tread and sanctified the snowy paths of the Himalaya. The sacred monastery of Hemis which is 25 miles from Leh. a small town on the Himalaya, fifteen days' march from Srinagar, the capital of Kashmir, and situated on the

south bank of the Indus still bears undeniable testimony to Christ's journey over the Himalaya. Jesus Christ lived in this monastery for some time. He travelled through India from the age of fourteen to twenty-eight and returned to Jerusalem when he was twenty-nine years of age. Credit for the discovery of the valuable manuscript in Tibetan language in the Hemis monastery embodying the life history of Lord Jesus is originally due to Dr. Notovitch, a Russian tourist. While in America, the Swami Abhedananda had been reading Notovitch's work styled, The unknown life of Jesus, his imagination was fired by an aspiration to visit the monastery himself. His thoughts were translated into action in the year 1922, when he took great pains in reaching this monastery, about which Prof. N. Roerich paints in words: upon the neighbouring sharp rocks, at morning, the stags appeared and, standing long upon the cliffs, turned their heads to greet the sun." The Swamiji got a few passages translated from this epoch-making manuscript with fourteen chapters. The facts enumerated therein about the life of Jesus bear a striking resemblance to what we learn from the Bible, in which significantly enough, his life history of the aforesaid period is wanting. Later in the year 1925, the well-known Archæologist, Prof. Roerich of America, whom one is tempted to designate 'an Apostle of lofty sentiments' visited Hemis while conducting an American Expedition to Central Asia. His exhaustive research in this connection is clearly demonstrative of Christ's sojourn in A few pithy words from that 'towering painter' and Tibet. 'profound philosopher' gleaned from his Altai-Himalaya and we finish the dissertation.

"Yet Buddhists preserve the teachings of Jesus, and lamas pay reverence to Jesus who passed and taught here."

"Many remember the lines from the book of Notovitch, but it is still more wonderful to discover on this site, in several variants, the same version of the legend of Issa. The local people know nothing of any published book, but they know the legend and with deep reverence they speak of Issa."

"Leh is a remarkable site. Here the legends connected the paths of Buddha and Christ. Buddha went through Leh northwards. Issa communed here with the people on his way from Tibet."

Here on the Himalaya, amidst pastoral life of Eastern Tibetans was born in the country of Amdo to the south of the almost ultra-mundane region of the great lake Koko-Nor that saint of the highest order, Tsong-kha-pa, who could speak soon after his birth, although he spoke little. Such a statement is apt to excite feelings of distrust and even of slander in the minds of sceptics, but often truth is stranger than fiction. Lombo-Moke set up his tent at the foot of a mountain named Tsong-kha-pa. He led a pastoral life with his wife, Chingtsa-Tsio, in the wild solitudes of Amdo. Many years of childless life rolled by. One day while engaged in drawing water from the bottom of a ravine, Chingtsa-Tsio fell senseless on a large stone bearing holy inscriptions in honour of Lord Buddha. When she came to her senses, "she felt a pain in the side and at once comprehended that the fall had rendered her fruitful." In the year of the Fire Hen (i.e., 1357), nine months after this significant and mysterious event, a son was born unto them, whom Lombo-Moke named Tsongkha-pa after the mountain at whose foot they encamped themselves for the last seven years. At the age of three, the holy child announced to his mother his intention to renounce the world. Chingtsa-Tsio did not, however, raise her voice against her son's determination. She then shaved his head and threw his long flowing hair somewhere adjacent to their black tent. Straightway there sprang up a tree, the wood of which emitted an exquisite fragrance all around, and each leaf of which revealed on its surface characters of the sacred language of Tibet. Tsong-kha-pa, then 52 years old, founded the Galden monastery, hidden in a circle of mountains some twenty miles away from Lhasa (Lha-ssa, meaning 'the land of spirits'). He revolutionised the cult of pseudo-Buddhism then rampant in Tibet. The holy doctrines of Tsong-kha-pa 'triumphed in all the religions comprised between the Himalaya mountains, the frontier of Russia and the Great Wall of China.' It even spread so far as Manchuria. At his birth place there still exists the sacred monastery of Kum-Bum where many monks used to dwell in caves wrapped in meditation. The word 'Kum-Bum' means 'Ten Thousand Images' and is quite significant, as it has allusion to the mysterious tree of the fascinating legend. The Himalaya can at least boast such a tree about which let an eye-witness, a westerner and above all a reputed Apostle of Christianity, one who made a desperate attempt to reach Lhasa via China and the Koko-Nor region to preach the Gospel of the Son of God, tell you in his own words what he actually witnessed and what his experience was like. It may be noted here that in 1846 the Lazarist missionaries Huc and Gabet reached Lhasa in the disguise of lamas after eighteen months' wandering through the unknown regions of China and Mongolia.

"At the foot of the mountain on which the Lamasary stands, and not far from the principal Buddhist temple, is a great square enclosure, formed by brick walls. \* \* \* Our eyes were first directed with earnest curiosity to the leaves, and we were filled with an absolute consternation of astonishment at finding that,

in point of fact, there were upon each of the leaves well-formed Tibetan characters, all of a green colour, some darker, some lighter than the leaf itself. Our first impression was a suspicion of fraud on the part of the Lamas; but after a minute examination of every detail, we could not discover the least deception. characters all appeared to us portions of the leaf itself, equally with its veins and nerves; the position was not the same in all; in one leaf they would be on the top of the leaf; in another, in the middle; in a thrid, at the base, or at the side; the younger leaves represented the characters only in a partial state of formation. The bark of the tree and its branches, which resemble that of the plane tree, are also covered with these characters. When you remove a piece of old bark, the young bark under it exhibits the indistinct outlines of characters in a germinating state, and what is very singular, these new characters are not unfrequently different from those which they replace. We examined everything with the closest attention, in order to detect some trace of trickery, but we could discern nothing of the sort, and the perspiration absolutely trickled down our faces under the influence of the sensations which this most amazing spectacle created."

"Its trunk can scarcely be embraced by three men with outstretched arms." Not more than eight feet in height. Extremely bushy. "The leaves are always green, and the wood, which is of a reddish tint, has an exquisite odour, something like that of cinnamom. The Lamas informed us that in summer, towards the eighth moon, the tree produces large red flowers of an extremely beautiful character. They informed us also that there nowhere else existed another such tree; that many attempts have been made in the various Lamaseries of Tartary and Tibet to propagate it by seeds and cuttings, but that all these attempts

have been fruitless." "The Emperor Khang-Hi, when upon a pilgrimage to Kounboum constructed, at his own private expense, a dome of silver over the tree of the Ten Thousand Images; \* \*" Khang-Hi also endowed it with a yearly revenue, for the support of three hundred and fifty lamas. From Rockhill we know the Chinese name of the tree which is Ta-erh-ssu.

Sven Hedin visited Kum-Bum to see this mysterious tree. He writes: "Unfortunately my own visit to Kum-bum was in the winter of 1896 when the holy tree was leafless."

The first reconnoitring expedition of Mount Everest conducted in the year 1921 discovered the sacred valley of Rongshar, a region north of Gaurisankar, nearly one hundred miles to the west of Mount Everest. Here stood in a village called Lapche Kang a beautiful monastery associated with the reminiscence of Mila Repa, an Orpheus of the Himalaya, who lived in Southern Tibet in the eleventh century. The holy site of Lapche is the home and the birth-place of this wandering saint who infused inspiration into the minds of the people by his rhapsodical songs and ethical parables. In the Rongshar valley life is sacred; killing of animals there is strictly forbidden. The members of the expedition could buy a sheep on promising not to kill it so long as they would be within the environs of the sanctified valley.

To know something very amazing about Milarepa, a little history of Atish should first come into our purview. Of the many teachers who penetrated into Tibet before his time, Atish Dipankar Sreejnan was by far the most learned and saintly. He was born at the village called Bajra-yogini in Bikrampur (Dacca, Bengal) in 980 A.D. He studied all the Buddhist literatures as also the philosophical books of the Hindus together with Tantra Shastras (scriptures on mystical practice in medieval

Hinduism). Dipankar even went to Pegu in Burma and there studied all the Buddhist scriptures at the feet of the preceptor. Dharma-kirti. Being invited by a king of Tibet (La-lama-jeshesodhe) he left the royal monastery of Bikramsila where he was the then presiding preceptor and started for Tibet at the age of sixty in the year 1038 A.D. It is said that on his way to Tibet, he rode upon a horse in such a way that he was always found seated in the air, nearly half a cubit off from the saddle. He was undoubtedly endowed with many occult powers. Dipankar preached in Tibet pure Buddhism free from the taint of Tantrism which lays special stress on the acquiring of occult powers. Atish Dipankar, after living in Tibet for thirteen years, passed away at the age of seventy-three in 1053 A.D. in the She-than monastery near Lhasa, where his relic tomb still exists. He has left behind him nearly one hundred original works of great value on Buddhism free from the taint of Tantrism, written in Sanskrit and Tibetan. His image is worshipped with great veneration in many of the Buddhist monasteries in Sikkim and Tibet.

Prof. Roerich's research tells of a mysterious event which took place when Dipankar passed by the retreat of Milarepa. The Tibetan saint intending to put the worth of Atish to the acid test "appeared sitting on the end of a blade of grass." In response to this occult manifestation, Atish made a similar demonstration. While the blade of grass on which Milarepa was seated was slightly bent, that under Atish showed absolutely no sign of drooping. On being accosted by Milarepa, the great teacher smiled and said that although his knowledge was on a par with that of the Tibetan hermit, the very consciousness of the former having hailed from a country where the Blessed Buddha himself lived and preached his doctrines exalted him.

The following few historical facts would be interesting to readers.

To Herodotus India was known, but in his work there is no mention of the mountains to the north of the country.

Alexander who invaded India in the year 327 B.C. called the Himalaya 'Emodus'.

Ptolemy who surpassed the old Greeks and Romans drew a masterly map of India with its hydrography, but Tibet or the rivers taking their rise from Tibet found no place in his maps.

Tibet seems to have been vaguely known to the Arabs during the time of the Caliphs. It was the musk-trade which led to the unveiling of Tibet to a certain extent.

In the year 1154, Edrisi, a renowned Arabian geographer, hinted at the sacred lake of Manasarovar.

Alberuni, the renowned Mathematician and Astronomer who adorned the court of Sultan Muhmud, came with him to India and learned Sanskrit, and thereafter through this medium diligently studied science, philosophy, and mathematics including Astronomy, then extant in Hindustan. In the year 1030, he wrote a valuable historical book on India in Arabic. In this work, is mentioned the Manasarovar region but the details in this connection deplorably lack any appreciable degree of distinctness, and are heavily weighted with descriptions gleaned from the ancient Puranic works of the Hindus.

Abul Fazal, the distinguished author of Ain-i-Akbari, in his noted work gives us some information about Tibet which however covers only those portions going by the name of Baltistan (so called by the inhabitants) or Chota Tibet (as called in Hindustan) and Ladak. The frontier of Baltistan is nearly twelve days' march from Kashmir. So even at this time nothing was known

about Tibet proper, the vast and the highest plateau lying to the west of Ladak.

It is, however, Mirza Haidar, a cousin of Babar, the founder of the Mogul Empire in India, who for the first time recorded some definite information about a greater part of Tibet. Mirza Haidar who was a 'roving adventurer' or 'a soldier of fortune' travelled along Tibet in 1533 A.D.

That great traveller and artist, Sven Hedin, whose name will ever remain associated with the exploration of Tibet, in his monumental work styled 'Southern Tibet' speaks highly of the Chinese maps. He accomplished his epoch-making journey across Tibet in 1906-1908. Sven Hedin writes: "Their maps of the sources of the Satlej and the Brahmaputra, and of the northern tributaries to the Tsanpo, were the best materials existing before my journey."

Exploration of the Himalaya naturally resolves itself into two items: the exploration of the Great Plateau with its rivers, and the exploration of its snowy giants. As to the first, simply the enumeration of the names of the intrepid travellers together with a few hopelessly meagre notes on their adventures through the regions of the mighty Himalaya, bleak, barren, unknown and fraught with danger at almost every step in view of brigands infesting the land, would take us ridiculously far away. It should, however, be mentioned here that of all the explorers of the 17th century, from which time onwards Tibet was persistently assailed by quite a number of adventurers, either for the sake of exploration for its own sake or with the idea of preaching the gospel of Christianity, as in the case with the Jesuit and other missions, the name of Ippolito Desideri of Pistoria stands out most prominently. He was the first European to traverse the

high valley of the Tsan-po (the Brahmaputra) a long, long way almost through the entire extension of Tibet. While at Lhasa, he was an eye-witness to the most dramatic and lamentable events that unrolled themselves in a series of weird films undoubtedly unparalleled in the history of the world in respect of cold-blooded murder, general massacre, and plots upon plots, heinous to the extreme degree on the one hand and most ingeniously laid on the other, so much so, that perchance by their side the world's best film productions would sink into insignificance both in scenic as well as in strategic effect. The area of operation of the drama may be literally said to have covered ground from China to Peru, when one would care to make a mental survey of the vast, desolate and inhospitable region of treacherous snow, utter solitude and almost inaccessible passes covered by the three territories, Tartary, China and Tibet. But for Desideri, who reached Lhasa in 1715, and stayed there for thirteen years, the most romantic episode in the annals of the great Himalayan region to the far east would have been lost to the posterity.

In concluding this chapter, it should be noted that the ancient Indo-Aryans were not in the dark as to the great range of mountains to the north of the land. The Great Epics of India, the Ramayana and the Mahabharata which were written during the period from 1400 to 1000 B.C. comprise descriptions of the Himalaya. These national epics as well as the Puranas which came into being in a later age sing the glory of Manasarovar. Specially, the Manaskhanda of the Skandha Purana embodies a most charming description of the Holy Kailas and Manasarovar, though masked by allegories from the beginning to the end.

Kalidas, the greatest poet in the world, who once adorned the court of the king Vikramaditya (380 A.D.) describes the sublime

Himalaya in no equivocal terms. The first chapter of his immortal poetical work, Kumarsambhava begins with an eulogy of the majestic Himalaya. His Megha-duta ('The Cloud-Messenger') which when just out of a London press sold almost immediately, pictures the Himalaya in a most charming and fascinating way.

## CHAPTER II

## THE COLOSSAL RANGE

Nature does not allow us to explore her sanctuaries all at once. We think we are initiated, but we are still only on the threshold.

—Seneca

HE HIMALAYAN range has been very aptly called by Noel the backbone of the world. Extending over a distance of over 1,500 miles, it girdles India on the north. In the confused maze of mountains with spurs running in bewildering intricacy, it is difficult to make out the unifying design that runs through all these anomalous variants. Survey has brought out the fact that the Himalayan system consists of two main ranges which are parallel.

'Odell, a geologist and a climbing member of the 1933 Expedition of Mount Everest found fossils at a height of 25,000 feet,' which it has been estimated, 'belonged to a period over one hundred millions of years ago when the Himalaya had been below the level of the ocean.'

This immense range bedecked with a world of snowy domes and pinnacles is verily an inexhaustible mine of beauty, which can better be imagined than described. The whole region is also a land of wonders, as will be to a certain extent evident on perusal of the concluding chapter of this book. Here we propose to make an humble attempt to depict the beauty of a few wondrous regions of this almost endless range.

Unlike other mountainous regions of the world except that of the Pamirs, the Himalaya embraces within its snowy ramparts a vast table-land having a mean elevation of 13,000 feet, which is almost twice that of Darjeeling, and an area of 651,700 square miles, being nearly thirteen times the size of England. It is bounded on the north by Mongolia, on the south by Bhutan. Assam, Sikkim and Nepal, on the east by China, and on the west by Kashmir. This Tibetan plateau is by far the highest and the most extensive plateau in the world. Compared to it the Pamirs, the so-called "Roof of the World", in all respects sink into insignificance. It is this great table-land that lends to the Himalaya a charm and fascination nowhere equalled on the face of the earth.

From the top of the blue, green or bare foothills and sometimes from the plains on the borderland, the snowy range or one or two pinnacles of perpetual snow some fifty or a hundred miles away may greet the vision of a spectator and suggest to the imagination a sense of culmination and limitation, but it is there that the real thrills of the great world of snows, of tumbled valleys and boulders, of glaciers and table-lands seamed with intersecting ridges begin. The spectacle, there, unfolds itself in all its glory and majesty to a traveller who is privileged to set foot on the highest arena of Nature around which rises the superb amphitheatre of mountains crested with cloud-touching pinnacles looking dazzlingly white in the mid-day sun, rose-red at dawn and golden orange at sundown. These snow peaks, when far far away, and are viewed through the crystal-clear atmosphere

of Tibet, betray a lovely colour—they are yellowed by vast distance, as when, for instance, Everest and Makalu some 150 miles away present to the view from Chomalhari near Phari Dzong. If the chance is given to you to approach nearer and nearer, these Himalayan giants grow bigger and bigger, raise their heads higher and higher in the sky—you feel staggered at the sight.

The loftiness of mountains in no part of the world is at all comparable with that of the Himalaya. The number of peaks which tower above 24,000 feet exceeds 80, whereas elsewhere in the world Aconcaqua rearing aloft to 23,060 feet holds the record. At the highest Alpine height (15,780') and above, the Himalaya can boast of hundreds of mountain lakes, whereas a thousand and one giants of 20,000 feet stature uprear themselves beyond the clouds amidst a sea of snow peaks giving an impression of unending magnificence and immensity to the few privileged onlookers from some high mountain-top or from the air under the auspices of highly improved mechanism of aviation.

If a few words, absolutely insignificant and faltering for the purpose though they be, were to depict the Himalaya, they would be—heaven-kissing peaks of perpetual snow; rock peaks of different shades which do not admit snow precipitation on portions of their almost perpendicular and sometimes overhanging faces, thereby revealing their amazing colours; glacier-and-spring-fed rivers that cut across almost level valleys, descend rapidly down boulder-strewn rocky beds, or in some places tumble down in thundering cataracts through awe-inspiring gorges; valleys thickly carpeted with blooming flowers of different shades; bleak level plain of sands and pebbles devoid of vegetation and running hundreds of miles around; crags and rocks rearing up to some three or four thousand feet upon the highest plateau each displaying

a different colour which must be seen to be believed: river-banks strewn with pebbles of varied colours; sêracs of ice moulded in infinite variety of forms and gleaming with exquisite tints, the whole spectacle representing a fairyland; vast regions of long grass growing in wild profusion; lakes of all sizes, some simply studding the region while others having a circumference of fifty to one hundred miles and over, some loking blue and some green, some abounding in fish and some not, and some completely frozen over in the winter; hot springs bubbling up through rocks at an elevation where the surrounding waters freeze during the winter and sometimes even in summer; gigantic waterfalls that in cold months assume the shape of a frozen pillar of ice, fantastically formed; vast and pathless regions of snows, rocks, sands and pebbles stretching away for hundreds of miles which are absolutely bleak, barren, and desolate, where solitude reigns supreme and where the sound vibrations produced by a pistol-shot may set in motion a great avalanche fastening itself to a neighbouring crag in an almost unstable equilibrium.

Referring, now, to a few beauty spots on the mighty Himalaya, we will close this chapter.

The region of the Himalaya which is perhaps by far the most magnificent is that of Kailas and Manasarovar. It is here, Prof. Roerich says that the great Vedanta once crystallised. It means that to the great seers of yore was revealed the Great Truth that underlies the Infinite Existence and the Infinite Creation. It is verily a place surcharged with spiritual vibrations of the highest order. Space forbids entering into details of the mystic aspect of this holy ground where Nature has displayed her wealth of beauty in a way she has never done elsewhere on the face of the globe. Sven Hedin, a prince of Tibetan exploration, who has like Savage

Landor most attractively depicted the sublime Himalaya by finestrokes of the pen as well as by the brush, while colouring the Manas region most painfully realised that his artistic talents had been failing him most hopelessly. He pens these words: "I stood several hours up here and made a hopeless attempt to sketch the landscape but succeeded in producing only a feeble immitation of the reality." No matter whatever explanation may beadduced, one of the potent factors that deters the functions human organism is endowed with is the magnetic attraction of thisglorious landscape, "the Elysium or Siva's Paradise of ancient Sanskrit literature."

Among foreigners, Edrisi, an Arabian geographer, is the first, in whose writings, we have a glimpse of the Manasregion.

Van Twist in 1638 for the first time definitely mentioned the name of Manasarovar which he called Masoroor.

It is said that amongst Europeans, Father Desideri is the first who visited and described the lake, and discovered Kailas. In his posthumus work first published so late as 1932, he writes about Mount Kailas: "Close by is a mountain of excessive height and great circumference, always enveloped in cloud, covered with snow and ice, and most horrible, barren, steep and bitterly cold. In a cave hollowed out of the live rock, Urghien (Padma Sambhava) lived for some time in absolute solitude, self-mortification, and continual religious meditation." This is the English translation of his MS. He has also recorded that this cave was then a temple which was consecrated to that mystic preacher and that there a Lama and a few monks were dwelling. In December, 1715 he reached the lake Retoa (Manasarovar). From his writing another fact is gathered that on the banks and in the sand

of Lake Retoa a large quantity of gold is collected which he holds is washed down from the Mountain Ngari Giongar by heavy rains and melting snow.

Mount Kailas is 240 miles from Almora. It towers up to a height of 22,028 feet, while the other peaks of the Gangri chain to which it belongs look incredibly dwarfed before its majestic upheaval of 7,000 feet sheer above the surrounding plain which is about 130 miles from east to west and nearly 100 miles from north to south. Kailas is a Triton among the minnows. The special beauty of this snow peak lies in its peculiar domy shape and the sharp contrast of dazzling ice and snow with precipitous and bare rock faces, exposed to view in artistic lines of demarkation giving an impression of titanic masonry, nowhere excelled in the whole Himalayan range. The circumambulation of the mountain takes thirty-two miles. It has five monasteries around it. The foot of Kailas is two days' march from the lake. Landor writes: "The Tibetans, the Nepalese, the Shokas, the Humlis, the Jumlis and the Hindoos, all have a strong veneration for this mountain.\*

The great lake, Manasarovar, stands to the south of Mount Kailas. Sven Hedin calls it: 'Heavenly Lake of the Throne Mountain.' The Gurla range is to the south of the lake. Sven Hedin's realisation of this lake is given below in his own words: "Gurla is a splendid background to the holy lake—no artist in the world can conceive anything more magnificent and interesting." "\* \* \* \* \* which has in reality the taste of purest, most wholesome spring water. Its crystal purity and dark greenish-blue colour are as beautiful as the flavour, and to the pilgrims from a distance the water of Manasarovar is preferable to sparkling champagne."

The altitude of the surface of the lake is 14,950 feet. It is almost oval-shaped. It is 54 miles in circumference, and one can circumambulate the lake generally in three days. Its area is nearly 200 square miles and its maximum depth is not less than 300 feet. There are eighty monasteries around the lake. It should be noted here that in the Himalayan region salt lakes predominate.

Near the lake water boils at  $185^{\circ}F$ . The maximum temperature of the region which is reached at the end of June is something like  $65^{\circ}F$ , while the minimum temperature recorded in the month of February is  $-20^{\circ}F$ .

The extensive gold-fields of Thokjalung and other places are some three weeks' march northwards from the shores of the lake.

A very interesting fact noticed by Captain C. G. Rawling on December 1st, 1904 was that although the cold was intense, the surface of the lake was only frozen to a distance of 100 yards or so from the edge, the central portion being quite free from ice. What was all the more striking and enigmatical was that Gun-chu Tso, an extremely salt lake was found at that time "frozen over from shore to shore to a depth of several inches." One explanation that has been put forward is that the lake is fed by hot springs, and the other is that the lake is excessively deep.

Savage Landor writes that when he recalls the Manasarovar, he cannot help thinking that it is the home not only of the gods, but also of the storms.

There is another lake adjacent to Manas which is known as Rakshas Tal or Ravan Sarovar, where the king of Ceylon did penance with the view of propitiating the god Shiva in the nebulous past some 1500 years before the Christian era. A beautiful undulating ridge of an average altitude of 1000 feet from the

level of the surrounding country intervenes these two lakes. The distance between these lakes varies from 1½ to 6 miles. Rakshas Tal (Devil's Lake) is called in the Puranas Bindusarovara.

The statements made by a number of tourists who visited and explored this region, as to the existence of a channel through? which surplus waters of Manas flow down to the other lake are not only conflicting but contradictory, some advocating its existence, some admitting the existence of its dry channel only, and some emphatically protesting either of the statements. As a matter of fact, these contradictions are apparent. As pointed out in no mistakable terms by Sven Hedin, the said overflow is a periodic phenomenon, depending on the rainfall on the Himalaya. The length of the channel connecting the two lakes is a little over three miles and it winds through a narrow undulating land. When there is an overflow the stream is quite large being 100 feet in breadth and 3 feet in depth. It is a well-defined channel which runs from east to west. With the view of settling this controversial matter on which much ink had been spilt, Ryder, Wood, and Baily made a long journey in this region and found that no water was then flowing from the lake, but that the small partly frozen stream they noticed was flowing from a hot spring. The discovery of this hot spring has some bearing on the interesting phenomenon noticed in respect of the freezing of the lake Manas as already referred to.

Perhaps it would not be inadmissible if it is claimed that what the Manas region is to the Western, the lake Cholamo region is to the Eastern Himalaya. In my book, Darjeeling at a glance, I have given a complete itinerary of tour from Darjeeling to Lachen via Gangtok, the capital of Sikkim, from which Lachen

is only 5 days' march. From Lachen to Shetchen Dok it is a gradual ascent of 24 miles, the two intervening stages being Sitong and Lachen Dok. The last march to Shetchen is a fairly stiff climb of ten miles. Near Shetchen is that beautiful lake named Cholamo, the home of the Tista river that gallops in harness along a boulder-strewn bed through the entire breadth of lovely Sikkim. The lake, Cholamo, has been dealt with in details in my book, Wonders of Darjeeling and the Sikkim Himalaya.

Of this lake, Sir (Dr.) Joseph D. Hooker, an eminent explorer and naturalist who travelled through this region in 1849 writes: "I doubt whether the world contains any scene with more sublime associations than the calm sheet of water 17,000 feet above the sea, with the shadows of mountains 22,000 to 24,000 feet high sleeping on its bosom." The two Sikkim giants Chomiumo (22,300') and Kangchenjhau (22,509') lend their mighty reflections to this still surface of turquoise blue water, situated at an elevation of 17,500 feet which exceeds that of Manasarovar by nearly 3.000 feet. After a further ascent of five miles is reached the Donkia Pass (18,131'), wherefrom the scene that greets the vision to a lover of the Himalaya has been well described by Blanford in the Journal of the Asiatic Society of Bengal, 1871 in the following words: "It is one of the most remarkable landscapes in the world, and alone worth the journey to see it.\* \* Cholamo lake is in front, beneath the feet of the spectator, beyond is a desert with rounded hills. Further away range after range of mountains, some of them covered with snow, extend to a distance the eye cannot appreciate. The total change of colour and form from the valleys of Sikkim, the utter barrenness, the intense clearness of the atmosphere, produce such an effect as if one were gazing upon another world in which the order of this is no longer preserved, where a tropical desert is seen amongst snow-capped peaks, beneath the unnaturally clear atmosphere of the arctic regions."

In my book, Darjeeling at a glance, I have given the details of a journey from Darjeeling through the tropical Sikkim to Jongri, the threshold of the snowy region of the Kinchenjunga group of mountains. It is an eight days' march from Darjeeling. the last three days' traverse being very arduous for reasons clearly mentioned therein in detail. At Jongri, a stony table-land is seen at an elevation of 13.140 feet. This is at the foot of Kabur (15,780'), that most regularly shaped snowy cone distinctly visible from Darjeeling and towering below Kabru. Here is the broad pasturage and grassy slopes of Jongri. A long but highly fascinating march of nearly 13 miles across the right bank of the Praig Chu, over heaps of rocks and boulders, around the base of two glaciers, along the banks of a small mountain lake, and through a series of grassy slopes and lastly an easy ascent of one mile bring a traveller to the Guicha Pass, a depression between Pandim and the spurs of Kabru. From this gap which from Darjeeling seems to be filled up by the great Kinchenjunga massif (an illusion of distance which mars the perspective effect of landscape), this stupendous mass of snow, ice and precipitous rocks presents a spectacle, the immensity and magnificence of which the brain can hardly comprehend. It is a staggering sight, to the right, to the left, and in front. It is a scene 'terribly' beautiful-it is awe-inspiring-it belongs to the dreamland. On the way to the pass will be seen the long series of jagged granite giants to the east of Jubonu wrinkled and seamed with most ghastly scars and cracks, being the unmistakable marks of erosion of tremendously powerful and piercing wind of ages.

On the north-eastern Himalaya is the amazing Land of Grass, which Madam Neel (an Oriental scholar), perhaps the most intrepid lady world has ever produced for travelling in the most bleak and dreary regions, while penetrating Lhasa in the disguise of a wandering beggar through China, epigrammatically designated 'the great Desert of Grass.' It is the region of Koko Nor, the Blue Lake. It is a Mongolian name. It is called in Tibetan, Tsot-Ngon-Po, in Chinese, Tsing Hai (Blue Sea). It is more than one hundred leagues in circumference. Huc has recorded that it occupies in maps a far greater space than it really possesses. Its water is bitter and salty. The marine odour reaches far into the desert all around. There is a small island towards the western portion. In 1845 when Huc visited this region, it was inhabited by twelve contemplative lamas, who dwelt in a most modest temple. There is no boat here. During the winter when the lake is frozen over, shepherds go there in pilgrimage. Plains all around are extremely fertile. Many streamlets adorn this beauty spot. The grass there is of prodigious height. Trees are, however, conspicuous by their absence. The Mongolians set up their tents in this magnificent land of pasture and 'tend their cattle on horseback, lance in hand, fusil in sling and sabre in belt,' in order to guard themselves against sudden onslaughts of hordes of Eastern Tibetans, known as Si-Fan. To foil their raids the Mongolians have even to shift their tents from placeto place in this extensive land where tents seem sunk into the raging sea of grass.

#### CHAPTER III

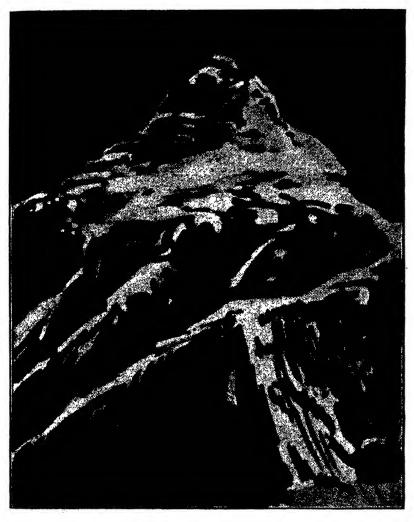
## A DRAMATIC DISCOVERY

All wish to know but few the price will pay.

—IUVENAL

HE Trigonometrical Survey of India while triangulating Hindustan brought out an interesting fact having far-reaching consequences.

Lieutenant-Colonel Valentine Blacker, the historian of the Mahratta wars of 1817-19 was appointed the first Surveyor-General of India in 1823. He held the office till the year 1826, on the 4th February of which year, he met with a tragic death in Calcutta as a result of a duel in which both combatants shared the same fate. He is the author of the first complete map of India. Lieutenant Everest, a disciple of Colonel Blacker, who later on became Colonel Sir George Everest and Surveyor-General of India carried on Blacker's work, in which the positions in space of some of the highest Himalayan peaks were calculated and taken advantage of in the great and most tedious triangulation work which ultimately resulted in an accurate map of India, now so easily handled by a layman. India was triangulated and innumerable mathematical data were recorded for further calculations on the basis of the same. In 1849 observations about many Himalayan peaks were made. These were worked out three years later. Amongst a number of Himalayan peaks, an unknown peak was marked Peak XV, on the triangulation chart. Many observations as to its height were taken from six different places in 1849 and 1850, the distances of which stations from



THE SUMMIT OF MOUNT EVEREST AS SEEN FROM NEPAL.

Everest varying from 108 to 113 miles. In 1852 when the computation was being carried on Radhanath Sikdar, a Bengali, the then Chief Computer of the Survey Department of India, surmised from his calculations that the Peak XV, is the highest peak in The authors of the Houston Mount Everest the world. Expedition, 1933, however, sarcastically remarks: "The story of the Bengali computer who rushed into Sir Andrew Waugh's office about 1852, crying out: 'Oh, sir, oh, sir, I have discovered the highest mountain in the world!' is probably a subaltern's messroom yarn, but it is good enough to go on with." The authors of "The Reconnaissance of Mount Everest, 1921" writes in an altogether different strain: "The observations were recorded, but the resulting height was not computed till three years later, and then one day the Bengali Chief Computer rushed into the room of the Surveyor-General, Sir Andrew Waugh, breathlessly exclaiming, "Sir! I have discovered the highest mountain in the Captain Noel, a Fellow of the Royal Geographical world." Society, gives the credit for this discovery to the computer. As to the consequences expected of this histrionic find, Noel very aptly writes. "The sequel was to be a struggle with gods and demons—existing only in the minds of the dwellers in the remote country of the mountain, but none the less the real opponents. It was to be a contest with Nature in her cruellest moods, waged where the earth surging upwards, thrusts herself, stark, bleak and lonely, through her enveloping atmosphere into the Great Void."

It was after calculating the following figures, the mean of which is 29,002' that the computer hastened to announce his discovery to Sir Andrew Waugh.

Stations of observations			Computed heights of Everest.	
Jirol		• •		28,991′
Mirzapur		• •		29,005′
Joaftia				29,001′
Ladhnia				29,998′
Harpur				29,026′
Minai		• •		28,990′
		Mean height		29,002′

If one side and two angles of a triangle, or say, two sides and one angle of a triangle are known, trigonometry enables us to find the remaining sides and angles of the same. advantage of these two facts, particularly the former, it is possible to accurately calculate the height of a peak from the level plains wherefrom the peak is visible, no matter, whether it be, say, 100 miles or more away. But errors creep in from various sources beyond human control. While measuring an angle, which is done with the help of an instrument called theodolite, the instrument must evidently be set up horizontally prior to observing an angle. This seems to be an easy affair, as it would simply necessitate the levelling of the instrument to the horizontal with the help of the spirit-level attached to it. But the immense mass of the Himalaya attracts the liquid in the spirit-level towards itself to an appreciable extent and as a result thereof, it does not show the horizontal and eventually the theodolite would not be levelled to the horizontal. And consequently inaccuracy creeps in in the measurement of an angle giving rise to a great difference in calculating heights of peaks. It may be noted here that this

phenomenon of attraction is no new thing, as we all know how the moon attracts our oceans. Moreover, it has been proved conclusively that the Himalaya also attracts the waters of the Indian Ocean quite appreciably. The extent of attraction of the spiritlevel from the different places of observation mentioned above was not accurately known at the time and hence no requisite allowance could be made in calculation. Be that as it may the Survey Department of India for all their records has accepted the figure 29,002 in preference to another figure (29,141) to be shortly dealt with. Many people who feel very inquisitive about the last digit namely 2, put it down either to eccentricity or at most to pedantry of the computer. By giving a thought to the matter, it would not be difficult to understand that if the attraction of the spirit-level is ignored, the plates of a theodolite after having been apparently levelled would remain slightly tilted up towards the mountains, and consequently the height of a peak would be underestimated. This is why a figure greater than 29.002 would be in favour of our Mount Everest. Later on it was found out that this inaccuracy in levelling amounts to 35 seconds at Darjeeling, about 51 seconds at Kurseong, about 23 seconds at Siliguri, and nearly 37 seconds at Dehra Dun and Mussoorie.

Errors in calculating the height of Mount Everest are due to all of the following leading factors:—

- (1) Levelling of the theodolite may not be quite horizontal (just explained).
- (2) The graduations on the arc of the theodolite may not be quite accurate.
  - (3) The telescope in the theodolite may not be perfect.
- (4) There may be error of vision, owing to defective eyesight of the observer.

- (5) Height of snow on the summit of Everest cannot be accurately surmised.
  - (6) Refraction of the atmosphere.

Of these factors, the last is the most potent, as quite a formidable error may lie at its root. The estimated error from this source may be something like 150 feet. Next to this is the height of snow accumulated on the summit, which has been most tentatively estimated, 100 feet being the maximum figure.

Refraction is an interesting subject, and a great problem that presents itself for solution to scientists while calculating heights of peaks. It is a well known fact that with the increase of altitude, the density of air decreases, so much so that at the summit of Mount Everest, the density of air is only one-third of the density of air at sea level. This is why, a ray of light proceeding from a peak to an observer's eye through the telescope of a theodolite does not travel along a straight line owing to varying density of air it has to pass through. It assumes a curved path concave to the earth. The observer naturally thinks that the ray of light is coming from the direction which is tangential to the curve at that point, and evidently the peak seems to be situated in the same direction. Consequently the height becomes overestimated, or in other words that peak appears too high and 'not lower than it really is' as written, evidently through oversight, in the book, First over Everest. Unfortunately, the error from this source cannot be accurately known.

During the period 1880-3 and again in 1902, a fresh set of observations with the aid of improved instruments were taken from hill-tops near Darjeeling, such as Tiger Hill, Sandakphu and Suberkum, 'respectively 107, 89, and 87 miles distant from Mount Everest.

Colonel S. G. Burrard, Superintendent of the Trigonometrical Survey of India after very carefully making all possible allowance for errors arrived at twelve figures representing the estimated height of Everest from so many observing stations. The mean of these figures worked out at 29,141 which in feet may be said to speak out most pedantically the altitude of the King of Heights.

In the opinion of Burrard, the above figure of 29,141 is still too low, as no allowance was made in respect of deviations from gravitational force. In any way, this figure is more reliable than 29,002. Nevertheless, the latter figure is the one which still enjoys recognition of the Survey Department of India.

After it was discovered that the Peak XV is the highest in the world, Sir Andrew Waugh, the then Surveyor-General of India, named the mountain after Sir George Everest, his predecessor, under whose directions the triangulations of India had been started, a result of which was the discovery of the highest peak in the world. Although this mountain was named Everest. it was not only being persistently called Gaurisankar by the natives of India, but also by many foreign states. Even in that gigantic work, Encyclopædia Americana, we find the name Gaurisankar retained. In Captain Rawling's work, The Great Plateau, we find that this novel nomenclature dissatisfied many people and many used their endeavour to change it in most cases to Cho-mo Kangkar or Gaurisankar. At last, Captain Wood was deputed to Katmundu in order to settle the vexed question whether the mountain had any native name in Nepal or not. This very shy and retiring mountain, which makes no appreciable impression on the native onlookers from the prominent parts of Nepal, was an unnamed mountain almost lost in the mazes of apparently higher peaks towering up more superbly under the delusive effect of proximity. They also ascertained that a very beautiful mountain over one hundred miles from Everest was known as Gaurisankar. In the Mount Everest Expedition of 1921, its Tibetan name came to the knowledge of the explorers to a certainty. Gaurisankar (23,440') known in Tibet as Chomo Tsering, or Trasi Tsering is the westernmost of a group of five very sacred peaks which were distinctly visible from the holy Rangshar region. All the foreign states of the world were then informed by formal state announcement under the signature of Colonel Burrard that the Peak XV was to be called Everest and not Gaurisankar as had been done in most cases, and they were requested to observe this uniformity in naming the mountain on which much ink was being spilt by writers and geographers all the world over, and over the name of which much confusion prevailed for many years. It is recorded that Colonel Burrard obtained promises from many nations to substitute 'Everest' for all names so far used.

Half of Mount Everest is in Nepal, while the other half is in Tibet. It therefore stands on the borderland of two forbidden lands. It is situated almost precisely on the intersection of the meridian 87E. long. with the parallel 28N. lat., and from a central position, Everest towers above all Asia.

Although Mount Everest was so far regarded as the highest mountain in the world, it, however, remained for Captain Ryder (later on he became the Surveyor-General of India), who with Captain Rawling in 1904 carried out scientific exploration from Gyantse to Simla via Gartok, that is to say, covering almost the whole extension of Tibet, to prove to the satisfaction of the scientific world that this mountain was really the highest, as no other summit in that region of giant peaks extending for many

miles all around, especially towards far north, could at all boast of hurling defiance at this monarch of mountains.

#### CHAPTER IV

## ROUND THE PINNACLE OF THE WORLD

No good work is ever lost.

—MAX-MULLER.

Purpose directs energy, and purpose makes energy.

—C. H. PARKHURST

ROM the middle of the nineteenth century till its close, no one ever made any attempt to approach Mount Everest, not imposing when looked at from the Indian side. Only its tip shows -from the plains of Hindustan, the mountain being hidden by a mighty array of snow peaks towering up in comparatively closer Fully half a century rolled by during which no regions. reconnaissance of the approaches to this mountain seems to have been contemplated. This period was, however one of 'Pundit explorers,' a peculiar and a rather whimsical term which needs elucidation. They were native explorers, who were deputed by the Governments of Bengal and India to explore the forbidden kingdoms of Tibet, Bhutan and Nepal. It was Captain Montgomery, an active officer of the India Survey, who in 1860 struck upon an idea of training certain intelligent natives of India in the use of instruments required for scientific exploration. As to their general education, one should do well to refer to the description of Goldsmith in the following lines:

> "The village declared how much he knew: It was certain he could write and cypher too."

They became known as 'Pundit explorers,' although, in point of fact, they were not Pundit (erudite Hindu) in any sense of the word. They were not even all Hindu by caste, some being Mohammadans, as in the case of Ata Mohammad ('The Mullah') who explored the gorge of the Indus. One of them Mirza Shuja was a Persian, who in late years after making his way through 'Afganistan and the Pamirs met with his tragic death at Bokhara where he had been treacherously murdered while asleep. These explorations being carried out in great secrecy, the names of the explorers were not published until late years. They were designated by an arithmetical figure, or by two capital letters.

There was the risk of losing life at any moment; at least tortures awaited them on their being exposed. They mostly travelled in the disguise of a devout mendicant, a pilgrim, a trader, or a medical man. The scientific instruments they carried with them were portable and rudimentary and these had to be very cunningly hidden, or kept disguised in various ingenious ways. Compasses were cleverly disguised as amulets worn round the neck. Boiling-point thermometers were kept inside hollow walking sticks. A Tibetan tea-bowl was in some cases used as a mercury trough. A Tibetan prayer-wheel was taken advantage of for secreting field books and sundry notes. Sometimes instruments were concealed in a box designed with a false bottom. A Tibetan rosary (a string of 108 beads) was used for counting So a complete set of missile of the forbidden land. cunningly devised and manufactured in British India were hurled upon the jealously guarded territories on the far-off Himalava. Besides these scientific instruments, the explorers often carried with them medicines for reasons which will be obvious from what follows. About these explorers Noel writes: "They travelled in disguise and were allowed a free hand, earning only a few rupees a month. They were rewarded only when they returned—if they returned! \* \* \* \* They counted their every step by the revolution of their prayer-wheels, or by their beads on their rosaries." Patience and preseverence they showed on one hand, and hardships and privations they had to undergo on the other in face of imminent danger, constitute a subject which should better be left to the imagination. Under the most adverse circumstances imaginable, they had rendered services to the government in a way that had their stories been widely known, their faithfulness and loyalty would have been proverbial.

One of the explorers designated "A—K" (Kishen Singh, not Kalian Singh as noted by Noel) from his route traverse fixed the longitude of Yarkhand as 77-15'-55". Seven years later this was verified by wireless telegraphy. It proved extremely surprising when the figure was found to be amazingly near exactness, the longitude of the place working out at 77-15'-46". When A—K—returned to Darjeeling on 12th November, 1882 after traversing through unknown regions for four and half years, he was found clothed in rags, his body was emaciated with terrible hardships and deprivation, which fell to his lot in the course of his long journey covering an incredible distance of 28,000 miles of which, however, he made a continuous survey.

Another explorer, Pundit Kinthup, who was deputed by Captain Harman of the Indian Survey to trace the course of the Tsanpo, the river that rising from the Manas region runs along almost the entire extension of Tibet from west to east, carried out his orders when most people would have taken to their heels for self-preservation. He was to cut special types of blocks of wood, and throw into the Tsanpo. Harman, for fully two years,

had the river named the Brahmaputra that flows through the dense forest of the Abor Savages in Assam watched for the blocks, which Kinthup were to throw in the Tsanpo. No block, however, made its appearance on the Brahmaputra. Harman fell ill and left India, and with his departure the watch was abandoned. Kinthup was sold to a Tibetan Lama by the Chinese priest whork he accompanied. He had the good fortune to serve successively two masters in Tibet as a slave. At last after four years when he was set free, he made a long journey reaching a place, fifty miles from the plains of Upper Assam, where he floated on the Tsanpo some 500 logs of required description to facilitate identification. He had done his duty, but alas, he was too late in doing so. Meanwhile Harman had breathed his last. Kinthup's progress down the banks of the Brahmaputra was checked by 'the obstinate and the pig-headed persistence' of the savage Abor officials at Miri Padam, wherefrom to the plain of Upper Assam it is a journey of 35 miles through very deep forest, and consequently he had no other alternative but to retrace his steps to Lhasa en route for Darjeeling, where he arrived in November, 1884. It may be added here that it is this traverse of 35 miles through which extension only the course of the Tsanpo or the great Brahmaputra has not been so far traced.

Of the many intrepid 'Pundits' who explored the Himalaya and left authentic records, it was Hari Ram (officially known as No. 9) whose approach towards Everest was the closest. In the early autumn of 1871, he left Darjeeling with the intention of striking across the great plateau through Sikkim. To negotiate with the frontier guard for a secret permission to penetrate Tibet was a great problem before him. Besides, he anticipated tortures in the hands of the Tibetan official jealously guarding the frontier

pass. He, however, ingratiated himself with a Lepcha Chief in Sikkim on his way to the pass by treating, and at last curing his wife of her ailment; and thus with his help he made his way into Tibet. While heading westward, his baggages were closely searched at Shira Lamasery, but they could hunt nothing out. Thereafter, for a time, he travelled along the banks of the Arun river, which cuts its way across the great Himalayan chain extending from Everest to Kinchenjunga towards its middle and gallops through precipitous gorges of the hills of Nepal, and debouches at a place some twenty miles north-west of Jogbani at the Terai. While proceeding southwards, he happened to reach a village called Tashi Tsering, situated on the bank of a lake 20 miles in length and 16 miles in breadth, lying at an elevation of 14,700 feet. The lake was surprisingly clear and pure, unlike most other tarns and lakes of Tibet. It thus appears to be bigger than Manas. This lake stands on the borderland of Tibet and Nepal. He made another discovery that has some bearing on a similar but thousand times more miraculous a find on the other side of Everest which will be dealt with elsewhere in this book. It was the discovery of the hot springs at Cho Dzong. marching westward from Shigatse, he had the privilege of visiting the great Sakya monastery of Tibet in the far north. It was then inhabited by 2,500 monks. This monastery is famous for its notable collections of not only Tibetan, but also Sanskrit works of great antiquity. On October 8th, he arrived at Tingri Maidan. which is two days' march to the west of Shekar Dzong, wherefrom the climbing Expeditions of Everest marched direct south to reach its foot. By this time, Hari Ram had almost completed half of the circumambulation around Everest from east to north, and from north to north-west of the mountain. Lastly, he gained Nyenvam (Ninam) almost to the west of Everest far beyond Gaurisankar and very near the great massif of Gosainthan (26,305'), the well known giant of Nepal. From the frontier village of Nyenyam, he descended into Nepal. He had to cross the Bhotia Koshi river times out of number over bridges spanning it in a most precarious way, so much so that they seemed to him impracticable even for mountain-goats noted for their sure-footedness. Besides, he had to do many scrambling business, arduous to the last degree, in going over the ground of Nepal. It has been conjectured that in this extensive journey of the explorer, he hardly approached Mount Everest within a radius of twenty-five miles from the summit.

In 1885, the intrepid explorer, Hari Ram, made his second journey to Tibet-this time via Nepal. On reaching Khumbu Dzong, the first town on the frontier of that part of Tibet, after a march of nearly one month from Dagmara in the Terai, he could push on no further, being stopped by the Tibetan Government of the place. He made a stay there for six weeks, after which period he succeeded in curing the Governor's daughter-in-law of goitre, and thus enlisted his sympathy, the result being that he was included in a party leaving for a trade expedition to the north. Without entering into any more detail, it is to be pointed out that this time Hari Ram passed within twenty miles of the mountain on its western side, and it is in this journey only that he must have caught a glimpse of Mount Everest for the first time, although he does not make any mention of this fact. In his first expedition, it can be definitely said that this mountain was obstructed from view by giants towering at closer quarters.

In 1880, another Pundit explorer named Ganderson Singh was deputed by Captain Harman from Sikkim to proceed to the

Tingri Maidan via Tambar valley on the western side of the Singlela range which marks the western boundary of Darjeeling. He, however, of his own accord, followed the Arun valley running parallel to it and closer to Everest. He reached the Popti Pass wherefrom Makalu was nearly 15 and Everest some 20 miles away. A fully equipped and a full-fledged survey party under Captain Ryder reconnoitred the region of giant peaks as mentioned in the previous chapter, and approached Mount Everest while he was still some sixty miles away from it.

No further approach to the moutain seems to have been made till the year 1913, when Captain J. B. Noel made a great endeavour to approach the mountain from the east. It is Noel's exploration of the region of Mount Everest that paved the way to the four epic expeditions of the mountain by land that took place in 1921, 1922, 1924 and 1933. It can be said without the least shadow of a doubt that Noel mainly drew his inspiration for this exploration from the writings of Hari Ram. Hooker and last but not least, Sarat Chandra of Tibet repute. To Rai Sarat. 'the hardy son of soft Bengal', Noel is at least indebted for his decision as to the route for penetrating the forbidden land of Tibet. He writes: "I planned the route from the writings of Sarat Chandra Das." He kept clear of the usual route via Lachen and Donkia Pass, or Lachen and Sebu La (the shortest), or via Phari Dzong (the longest) for fear of being detected. He was wise in following the most antiquated route leading to the tableland of Tibet via Chorten Nima La, a pass far to the west of Chomiomo, the westernmost of the three Sikkim giants that tower up to immense heights with their far-flung ramparts, and jealously barricade the frontier of Sikkim and Tibet for a great distance from east to west. The route via Chorten Nima La, a pass long

ago abandoned by the Tibetans is a short cut to the great tableland, no doubt, but the going is not only arduous but risky. He did the journey alone. He had with him three servants named Adhu, a Bhutia, Tebdoo, a Sherpa Nepalese, and Badri, 'a little man from the mountains of Garhwal.' What he writes about Badri is strikingly significant:—"He felt the peculiar charm of the mountains." It is this charm of the Himalaya that is enticing, and constitute the real incentive to an adventure. Noel entered Tibet in the disguise of a Mohammadan, as foreigners and in particular white men were prevented from entering this forbidden land. On his way to the pass from a ridge he viewed to his great delight 'the verdant pasture lands of Lhonak.' It was alluring to the extreme, the region through which they were passing being bleak, barren and grossly inhospitable. He pens these words: "We did not dare to look back to the lovely grassy meadows of Lhonak, lest this should lure us from our goal-we had to nerve ourselves to go forward to the north." It was a call of the sublime region wherefrom Everest called into being its mighty upheaval. At Lhonak the Tibetan shepherds come in summer by the Naku Pass from Khamba Dzong to graze their sheep and yaks. He made for the Chorten Nima Pass, which he writes is 'a cleft in the mountains, blocked by snow and the debris of rock avalanches.' Its beauty lies in its peculiar awe-inspiring aspect. The air seemed 'dead.' Noel writes: " \* \* \* mountain climbers know this condition as 'stagnant air,' but the men called it 'La-druk'—the Poison of the Pass." The descent from the pass was through a staircase of rocky ledges, which led to the terraces of ice, at the bottom of which rested a glacier. The field of ice proved treacherous in places where it broke away from the rock walls of the mountains, leaving gaping chasms. The cracks

betrayed their real character as in some cases they were covered up with snow crusts, and hence were not discernible while descending the pass. He could sometimes look down to some 50 feet in these dark recesses. On their way down the pass, he had to take shelter in a nook by the side of a glacial lake. Noel describes that these lakes are 'like pale blue translucent cups filled with emerald water.' From his repose under the azure canopy of heavens, he could see the stars looking brighter and larger through the rarefied air. He came across a little stone-hut mentioned by Sarat Chandra. On the route it was the first, but forsaken Tibetan guard-post. Lastly a shrine was discovered by Adhu. It is the pilgrims' shrine of Chorten Nima, lying hidden in a secluded nook. Inside the shrine were found seven nuns in all, of which the Chief nun and two others were completely blind. At this exit from the high mountain, making offering to their shrine was advised so that no misfortune might overtake them on their journey. To the north stood in almost utter barrenness the great plateau of Tibet seamed with ranges of undulating hills devoid of trees and all vegetation. While the members of the Mount Everest Expeditions hit upon the easier though unknown route of the Tibetan plateau higher up and far to the north, Noel was proceeding along a route never traversed by any European before through mazes of mountains buttressing up the table-land from the south. He had, therefore, an unique experience of the mountainous regions direct to the east of Mount Everest. heading westward, he was brought to a standstill by deep canyons, and he had, consequently, to make a long detour. On his way he crossed the Langbu Pass and boldly negotiated the difficult pass, Chabuk La. When he reached the top of the pass, he was staggered by a terribly lofty view of snow peaks, towering up to .23,000 feet; and as a veil of clouds uplifted itself, Everest loomed at a distance of 60 miles exposing the last 1000 feet of the mountain for which was destined to ensue an epic struggle with all the furious elementals of Nature in years to come. Noel proceeded further till he was within forty miles of the goal—the foot of the King of Heights. Ultimately he reached the valley of Tashirak (ten miles beyond the Tashirak Pass) beyond which lay the most beautiful valley in the world, the Kama Valley. Everest lying farther to the west is a fitting background to this magnificent valley, a subject which will come into our purview in a later chapter. Although for obvious reasons Noel had to retrace his steps from Tashirak, his reconnaissance of the mountain from a distance which is a little less than what intervenes between Darjeeling and Kinchenjunga served as a great stimulus for the mountaineering world. His progress was stopped by the Dzongpen (magistrate) of the district of Tinki who, alluding to the 1904 Military Mission of Lhasa, accosted him:-"Why come at the time of the War?" Noel was ordered to leave Tibet at The last soldier of the magistrate's armed party intenonce. tionally made a little delay in leaving the spot. While passing he jostled his horse against Noel who then jumped ahead, and caught hold of his bridle. Noel was fired by means of a Tibetan match-lock, the aim of which instrument is not only defective but potent enough to play havoc with its possesser. It had no effect whatsoever on the explorer. A shot from his American rifle, and all was well in no time—in great consternation, rode off the soldier at a full gallop, and left the scene for good. Noel then returned to India in six weeks.

In 1849, Hooker reached Wallan-choon Pass, a few miles to the south of Tashirak, which is 45 miles from Mount Everest,

while the Pass of that name is nearly fifty miles from the mountain.

In 1879 Sart Chandra crossed the Kang La (north of the Kang Peak visible from Darjeeling towards north-west) from Sikkim into Nepal, traversed through the valley of Kangbachen, negotiated the Jongsong La (20,200'), and thence made his way to Shigatse in Tibet via the Chorten Nima Pass. Regarding this journey, Smythe, a renowned author and one of the most successful climber of both Everest and Kinchenjunga remarks: "This is one of the boldest journeys on record in that part of the world, and the crossing of the Jongsong La, a high glacier pass, was a great feat." Two years later, in 1881, he crossed the Nango Pass, north of the village of Kangbachen and proceeded on his long journey to Lhasa. In these two notable travels, Sarat Chandra seems to have been within 40 to 45 miles of Everest to the east of the mountain.

So prior to the reconnoitring expedition of Mount Everest in 1921, the nearest approach to the mountain made by the Pundit Explorers was within, say, 20 or 18 miles, while amongst the Europeans, Noel held the record by his journey through the very heart of the Himalaya which brought him within a range of 40 miles from the world's highest summit.

#### CHAPTER V

## THE CALL OF THE KING OF HEIGHTS

"Ambition grew with success."

—SIR F. YOUNGHUSBAND.

"The delight is in the chase, and it ceases with the capture."

—R. A. GREGORY.

"The heavens are calling you and wheel around you, Displaying to you their eternal beauties, And still your eyes are looking on the ground."

-DANTE.

"One of the great mysteries of existence is that what is most awful and most terrible does not deter man but draws him to it \* \* \* \*"

-SIR F. YOUNGHUSBAND

"It is a call of the great spaces, and of the great mountains.

It is a call that mocks at the song of the Lotus-eaters of old,

It is more insidious than the siren's, call,

And it is a call that, once heard, is never forgotten."

—Prof. N. Collie, F.R.S., President of the Alpine Club.

world's highest summit is a far cry. But the spirit of man is indomitable. Never vacant is mind; in like manner, man's spirit knows no rest—it has a tendency to unfold itself by unveiling Nature not only in the laboratories while seeking for the unity in diversity, that is to say, forcing her to reveal the laws that rule her varied manifestations and phenomena, but also in her very abode where men prefer to come face to face with her glories, no matter if it would necessitate coming to grips with her raging elements. It is this inspired strivings after the exploration of Nature's sanctuaries that constitute an expression of the spirit of man. The dearer is the cost entailed, the dearer is the enterprise to the heart.

When the North and the South Poles were reached, the attention of the adventurous people naturally centered round the highest summit. The Alps, the Andes, and the Caucasus had been conquered. The mighty Himalaya was, thereafter, engrossing the thoughts of the mountaineering world.

In 1854, two years after the discovery of Mount Everest, systematic mountaineering as a sport, it may be said, made a beginning, when Sir Alfred Will ascended the Wetterhorn. In the following year, an ascent of Monte Rosa was made for the first time. In 1857, the Alpine Club was founded in London, and after its inauguration, the techniques of mountaineering were well studied. Most European countries followed in the footsteps of this novel organisation, which took a little over half a century to conquer all the Alpine peaks, the last peak having been ascended in 1910.

In Europe, Mont Blanc was climbed long ago in 1786 by a chamois hunter, Jacques Balmat, and also by a chamonix doctor, Michael Paccard. It may be mentioned here that Mont Blanc is not an isolated peak, but represents the highest point in a massif of mountains, twenty-five miles in length and ten miles in breadth. In the Caucasus Matterhorn perhaps stands next to Mont Blanc in attracting the notice of both mountaineers and lovers of mountains. The beauty and majesty of this isolated peak "has inspired more shutters to click than any other peak in the world." Matterhorn may be called the Chomalhari of the Caucasus, Chomalhari being a Himalayan peak which will be described elsewhere in this book. Edward Whymper ascended this superb pick in 1865 for the first time, before which it did not yield to any assault. At this time, 'the Caucasus was practically unknown, save to poetic imagination.' In the Himalaya, although certain

officers of the Indian Survey while carrying on their work incidentally set their foot on some remarkable altitudes, no real mountaineering object, however, was in view. When all the Alpine giants were bagged outright in 1910, 'ambition grew with success' and men looked round for adventures of still superior order. It was at this time that Freshfield, Mummery, Donkin, and others appeared on the scene, and the great ranges of the Caucasus were explored. On the Himalaya a number of mountaineers, the pick of different nationalities, evidenced their untiring zeal. The pioneers in this mighty field were Schlagintweits, Conway, Bruce, Mummery, Freshfield, Longstaff, Younghusband, the Duke of the Abruzzi, and quite a number of others. Assault on the Himalaya proved to be a new problem, as here, leaving aside many new difficulties that presented themselves to the mountaineers, they had not only to contend with far more intense cold but also with immensely high altitudes which required acclimatization, or in other words, the mountaineers had to first season themselves before attempting climbs on prodigious heights under the most trying conditions imaginable. We now find in 1883 W. W. Graham climbing Kabru (24,015'), that tent-like twin peaks towering up before a spectator from Darjeeling to the west of Kinchenjunga. Sir Martin Conway explored the Karakoram in 1892, and climbed a peak of 23,000 feet. 1895, A. Mummery met with his tragic death while exploring Nanga Parbat, 26,620' in height. Mummery's party mysteriously disappeared near the foot of this infuriated mountain. who know the skill and foresight of the pre-eminent British mountaineers who tackled the mountain ascribe the disaster to something supernatural, and not to an avalanche which is ordinarily thought to have occasioned the calamity. In 1899, Freshfield penetrated the snowy regions of Sikkim beyond Jongri, and succeeded in making a complete contour of Kinchenjunga after undergoing terrible hardship, and negotiating high glacier passes at altitudes varying from 22,000 to 23,000 feet. The mountains of Garhwal and Kumaon were explored in 1907 by C. G. Bruce, T. G. Longstaff, and A. L. Mumm. Trisul (23,360') was conquered by Dr. Longstaff, who by straining himself to the utmost climbed the last 6,000 feet in ten and a half hours. Before men made any attempt to climb the highest known mountain in the world, the following notable heights had been attained on the Himalaya.

Mountaineers.	Heights attained.		
Conway		23,000′	
Workman		23,000′	
Longstaff		23,360′	
Kellas and Mead	de	23,600′	
The Duke of the	24,600′		

The Duke of the Abruzzi is the first mountaineer who directed his attention to the world's highest peak, but for want of permision from the forbidden lands of Nepal and Tibet had to rest contented with the next highest, K2, (Godwin Austin, 28,250') in the Karakoram Himalaya. But K2 having proved impracticable, he climbed Bride Peak (25,000') in Kashmir to an altitude of 24,600 feet noted above. He could have certainly scaled the mountain to a greater height, had not mist and blizzard impeded his progress.

In 1893, nearly half a century after the discovery of Everest as the highest peak in the world, a thought first flickered in the mind of Captain Bruce (later Brigadier-General Hon. C. G. Bruce)

that it was then high time to arrange for an ascension of Mount Everest. He gave vent to his feelings to Howard-Bury (the would-be leader of the first Everest Expedition, 1921) while they were at Chitral that they should make a glorious termination to their journey from Chinese Turkestan across Tibet by ascending Mount Everest. The psychology behind has been very aptly expressed by Howard-Bury: "Each has his own inner aptitude, which he aches to give vent to and brings into play." About the Duke of the Abruzzi he says: "He was never happy until he had discovered some inaccessible and impracticable mountain and then thrown himself against it and come to grips with it in dead earnest \* \* \* \* \* \* In the year 1897, General Bruce and Sir Francis Younghusband formulated a definite plan to tackle Mount Everest. The forbidden lands of Nepal and Tibet stood on the way of Everest negotiation. Persistent discouragement of strangers then marked the policy of Nepal; while Tibet was dead against any foreign incursion, no matter how well-meaning it might be. Tibet's policy was one of majestic isolation. which is a lama-led country, grossly steeped in superstition and ignorance, and where an overwhelming majority of the people constitutes the great brotherhood of lamas who in all matters wield the sceptre, is naturally a land where foreign intrusion is looked upon with the greatest suspicion and dismay. conjectured that access to Mount Everest from the South through Nepal would be extremely difficult, and quite impracticable not only by reason of sheer height of the mighty upheaval from the comparatively lower region of Nepal, but also owing to mountaineering obstacles of a supreme order that were likely to present themselves to the climbers-a fact clearly borne out in a later year when Everest was assailed by air. Approach through

Nepal was then ruled out of consideration. Major Ryder and Captain Rawling, who in 1904 had approached the mountain within a distance of 60 miles almost due north, already reported that the mountain looked accessible from that direction. So Tibet held out hope, but then Tibetan diplomacy in matters relating to foreign wayfaring, however well-intentioned it might be, was a subject not only impracticable but also annoying to the extreme. Approach of foreigners not only excited grave suspicion of economic and military exploitation, but to the Tibetans it also meant something more—they were afraid lest the people be freed from the clutches of lamaism. To make the point clear, a few lines are here quoted from Landor, a great Himalayan traveller: "To anyone acquainted with Tibet, it is a well-known fact that except in large towns, nearly all people besides brigands and Lamas are absolutely poor, while the monks themselves and their agents live and prosper on the fat of the land. The masses are maintained in complete ignorance, and seldom is a layman found who can write or even read. Thus everything has to go through the Lamas' hands before it can be sanctioned." To elicit an answer from Tibet to any correspondence is an awfully dilatory process, and then when an answer is forthcoming it is characterised by a peculiar ambiguity. It was for all these weighty reasons that when at last the Royal Geographical Society espousing the cause of the Alpine Club deputed, after sounding the India Office, Lieutenant Colonel C. K. Howard-Bury to India to negotiate personally with the then Viceroy, Lord Chelmsford, and Sir Charles Bell, the then Political Agent in Sikkim, the latter who was held in high esteem in Tibet did not think it worth while to negotiate with the Tibetan Government unless he would receive orders to go to Lhasa and solve the problem on the spot.

Sir Charles Bell who owned for himself the appellative, 'Officer of Peace' had an interview with the Dalai Lama, the Pope King of Tibet. Business was not discussed at the first meeting as, in his own words, that 'would transgress the laws of courtesy and make the path uneven.' At his second visit, he most tactfully raised the question of Everest, and produced a map showing its position. His Holiness asked him to leave the map with him for his examination and consideration. After the map and the whole situation had been studied by the Lama's Chief Secretary, the consent of the ruler of Tibet to an expedition was given. At the same time, was presented to Sir Charles Bell a strip of parchment-like paper made in Tibet on which was written a curious sentence which Mr. Bell has thus translated:—"To the west of the Five Treasuries of Great Snow, in the jurisdiction of White Glass Fort, near Rocky Valley Inner Monastery, in the Bird Country of the South (Lho Cha-mo Lung)." The meaning of the queer phrases are given below.

'Five Treasuries of Great Snow' means Kinchenjunga, 'White Glass Fort' means Shekar Dzong from which fort, it will be seen later in this book, the Mount Everest Expeditions headed direct south to reach the mountain. 'Shekar' means shining glass. 'Rocky Valley Inner Monastery' means the Rongbuk monastery, sixteen miles to the north of Everest. 'Rongbuk' means the valley of precipices and steep ravines. Lastly 'Bird Country of the South' means bleak but thrilling kingdom of snow and ice, of boulders and crystalline rocks, extending towards south for a distance of sixteen miles from the Rongbuk monastery to the foot of Mount Everest.

Was the little scrap of paper bearing that poetic dictum a token of the much-coveted permission for which the mountainering

world was looking forward in great suspense, or was it meant to carry an impression that the site of the proposed warfare, that 'Bird Country of the South', was not unknown to the Autocrat of Tibet? In any way, by the joint efforts of the Royal Geographical Society and the Alpine Club, a party of Englishmountaineers was organised under the leadership of Colonel Howard-Bury with the view of reconnoitring Mount Everest, and' finding out if there was any practicable route for ascending it, as climbing the mountain at the very first attempt would be out of the question. No great mountain in the world ever yielded to the first attempt. Kamet, in the western Himalaya, the superb peak of 25,450 feet being the second highest peak in British administrative territory, was first climbed by the Smythe Expedition, 1931, after there had been a number of failures in the past. Besides, the route to Mount Everest westward from Khamba-Dzong across the high Tibetan plateau for a distance of over 200 miles was practically unknown, leaving aside the practicableclimbing route to the ridges leading to the final pyramid, as theseridges are barricaded by Everest's ramparts of bewildering intricacy as will be seen later. In the very short expedition season, it is not, therefore, humanly possible to even make an endeavour toclimb the mountain in the first expedition.

A response to the call of the highest mountain in the world could only be made after every subject relating to this supreme adventure had been well thrashed out. It was to be a game with an enormous sum of money, say £10,000 to £15,000 for an expedition, and above all with life, man's most precious possession on earth. Before climbing Everest, man had attained a height of 24,600 feet, and it was with reason doubted whether man would not break down from sheer lack of oxygen at 25,000 feet. That

was the highest limit, it was surmised, human organism could possibly stand. What of the remaining 4,000 feet that would be still ahead. Sleeping business at higher altitudes is extremely trying, as would be explained later. Supposing that the human frame can adapt itself to the most exotic conditions deplorably prevailing at an altitude, say, of 26,000 feet, and even manage to sleep there for a night, what then! A successful covering of the outstanding balance of 3,000 feet and retreating from the summit to the camp before nightfall may sound an easy affair to a layman, but to a climber the job is a proposition beyond the bounds of possibility.

To enable the climbers to contend with the effects of high altitudes, bringing in their train menacing lack of oxygen scientists have played their parts well by inventing oxygen apparatus, making it as efficient as they could possibly do. But the weight of the apparatus including a few oxygen cylinders that were to be carried at tremendously high altitudes seemed in the battle-zone to have outweighed the benefit to be derived from the life-giving principle—what seemed to have been gained in potency was lost in the carry. Preparations for conducting a climbing expedition nay even for a reconnaissance are too many to mention, and are cumbersome and wonderful too. There were asbestos-lined and felt-sided boots, wind-proof overcoats, eider-down sleeping bags, orange-tinted goggles, ferocious crampons being a steel-pointed device which when tied to a boot enables a climber to walk on fairly steep ice, coils of rope made of silk, oxygen-appartus, iceaxes for cutting steps on ice, and when needed, capable of playing the role of a Saviour during a glissade, be it voluntary or not, rope ladders, folded ladders to cross crevasses, and a hundred and one varieties of queer equipments. And then, were called for a few hundreds of pack-ponies, mules and yaks, besides an imposing array of enterprising coolies, and last but not least, 'an imposing heap of yak-dung, to serve as a fuel on the Tibetan plateau.'

Who were the undaunted persons to have responded to the call of this mighty pinnacle, the very embodiment of the forces of Nature, the symbol of inaccessibility, and an expression of immensity and towering loftiness that baffle the imagination? The response came from all classes of people—from the Army, the Navy, the Civil Services, University professors, graduates, undergraduates, men of science, medical practitioners, schoolmasters, pugilists, wrestlers, and last but not least, schoolboys. It was to be a wrestle of the whole human race with Nature in her magnificent form. It is the spirit of this unique enterprise that perhaps dictated some of the applicants to bring to the foreground the superior abilities of others whom they had recommended at the risk of their not being enlisted in the expedition. The appeal of these epoch-making expeditions after covering a distance of 4.000 miles from London to Mount Everest was universal. Sir Francis Younghusband writes: "None were more interested than Their Majesties the King and the Queen, and H.R.H. The Prince of Wales."

What could possibly lie at the root of all these prodigious enterprises both dangerous and exhausting in the extreme, apart from their being a great drain on money? Why this fight for the last stronghold of Nature? Supposing that Mount Everest has yielded to man's supreme efforts, what is that to the people of the world at large? Is it not quite an useless enterprise? Is precious human life worth throwing away at the mercy of Nature in her cruelest moods? Is not the proposition positively pernicious? Who will answer all these poignant questions? Had

the expedition some scientific research in view? Let us hearken to the Mount Everest Committee and the distinguished climbers and eminent writers of the Everest Expeditions. They have made it definitely clear that the only object of these adventures was to ascend the highest summit of the world, and nothing else; that all other objects were subordinate to it. Scientific and other results would follow as a matter of course, because as soon as it would be announced to the world that these expeditions were going to be conducted, geographers, geologists, botanists, naturalists, and men of varied branches of science would at once be inspired to join hands with 'the lovers of the heights' who constitute 'a brotherhood more intimate, more closely united, more affectionately disposed to one another than any other group of men.'

What does this love of height mean? Does it simply signify the love of pitting oneself against a mighty mountain invincibly guarded by appalling barriers and endowed with the most powerful forces Nature has at her command? Does the whole enterprise then resolve itself into utter climbing exertion, 'buffeting against storms,' 'testing one's nerves,' 'running hair-breadth risks,' wrestle with altitude while gasping for breath, and running the risk of being totally engulfed by snow, ice and even rock avalanches, standing extreme cold most defiantly, to mention but a few of many items—and all these for simply setting one's foot on the top of the heaven-kissing pyramid?

It is only mountaineers who know what choicest gifts mountains have in store for them. It has been truly said: "But to those who have struggled with them, the mountains reveal beauties they will not disclose to those who make no effort." And then when man stands on the summit of a lofty mountain, and looks around from that exhilerating atmosphere, man merges

for a precious moment into the Infinite Bliss that is latent in and permeates every atom of this Universe. Men wanted to explore the abode of gods in order to enjoy the real thrills of life, no matter if death overcomes before life's mission is fulfilled. On their return journey after the Expedition of 1924 had been brought to a close, Bentley Beetham while looking at the whole historic ground that greeted his vision in clear moonlight from his tent set up at a height of 18,000 feet, and reflecting upon the perishing of Mallory and Irvine gives vent to his feelings in the following words which are pregnant with meanings:-"That night and with that scene in front of one, it was quite easy to realise that price of life is death, and that, so long as the payment is made promptly, it matters little to the indivdual when the payment is made. Somewhere, up there, in that vast wilderness of ice and rock, were two still forms. with all the vigour and will of perfect manhood, they were playing a great game, without their ever knowing the beginning of decay. Could any man desire a better end? It seemed not."

It has also been held that men wanted to test the capacity of human organism to stand those tremendous altitudes, to know whether under most trying circumstances, the material forces of the body increase proportionately to triumph over the most exotic conditions, and finally to see whether, when the last ounce of physical force had been brought into play, men could force the body upwards through sheer force of spirit, thereby feeling and at the same time demonstrating to the world at large that spirit of man can dominate the material. Herein lies a great lesson for men to learn. The inner significance of the great Himalayan climbs has been well expresed by Sir Francis Younghusband. In his *The Epic of Mount Everest* he writes: "Indeed the struggle

with Everest is all part and parcel of the perpetual struggle of spirit to establish its supremacy over matter. Man, the spiritual, means to make himself supreme over even the mightiest of what is material. Again in the remarkable foreword to Everest, 1933, that thoughtful writer has helped 'the world at large to understand a little better the inmost meaning and purpose of these tremendous undertakings.'

Younghusband writes: "Man's supreme adventure in the material world was seen to be symbolical of supreme adventure in the realm of the spirit. And this record of the Everest climbers' undaunted efforts has come to be an inspiration not only to mountaineers and geographers, but also to that far more numerous host of humble yet ambitious strivers after the topmost pinnacle of achievement in the varied branches of human activity. It has given new heart to many a lonely invalid struggling through all adversity to keep his soul steadfastly set on the highest. Its appeal is universal."

### CHAPTER VI

# THE GOLDEN PLATEAU THAT LEADS TO MOUNT EVERST

"Who will dispute that Tibet is a land of mystery!"

—THE RIGHT HON. THE EARL OF LYTTON, G.C.S.I., G.C.I.E.

"In the distance all the land was that yellow and brick-dust colour I had often seen in pictures and thought exaggerated and unreal."

—E. CANDLER

DISTANCE of over two hundred miles is to be traversed across the golden roof of the world before the foot of Mount Everest can be reached. It is, therefore, of interest to-

readers to have some glimpses of fascinating Tibet before weproceed further, and unfold the tales of the Expeditions.

Tibet has earned for itself a number of charming appellatives -"The Closed Land of Mysteries," "The Forbidden Land," "The Hermit City," "The Roof of the World," etc.

The vast and extensive snowy range that greets the vision of a spectator from Darjeeling, stretching away from the eastern to the culminating western point of the horizon, practically speaking hedges in the "Roof of the World," a vast table-land having a mean elevation of 13,000 feet, that is, fully 1,000 feet higher than the highest elevation met with in the district of Darjeeling, its lowest plains being 12,000 feet above sea-level. It is bounded on the north by Mongolia, on the south by Bhutan, Assam, Sikkim, and Nepal, on the east by China and on the west by Kashmir. Its area is 651,700 square miles, being nearly 13 times the size of England, but its population is comparatively very meagre, being four to six millions only.

It appears from the existence of water-worn pebbles of this plateau that the land was at no remote geological age under water. Whereas rainfall in Sikkim is on an average 200" per annum, in Tibet it does not exceed 14". The rain-clouds that sweep on to Bengal and Sikkim and enrich these lands with exuberant flora and teeming fauna are hardly able to cross the lofty ranges that jealously hedge in this extensive plateau of Tibet.

Tibet is consequently not a fertile land. It is in a bleak region, forests being conspicuous by their absence. not at all available on the plateau of Tibet. These are brought from Bhutan, Nepal, and Sikkim. Timber is, however, found in the Chumbi Valley of Tibet, which was formerly included in Sikkim. So house-making is a great problem there. The only fuel, the

Tibetans have, consists in dried dungs of yaks, and this is scanty too,—nay miserably insufficient for this cold country. In some parts of Tibet they get fuel from scrubs and thickets. When they feel colder, they put on more clothes, and never use their precious fuel for warmth. Ablution is a thing almost unknown in Tibet, for where is sufficient fuel to heat the ice-cold water!

Inordinately insufficient though its rainfall is, Tibet at least boasts of being the mother of most of the greatest rivers of the vast continent of Asia. What are the Indus, the Sutlej, the Brahmaputra, the Irrawadi, the Salween, the Yangtse Kiang and the Hoang Ho? They all take their rise in this closed, lofty region, which in its turn, is studded with lakes ranging in their area from hundreds of square yards to hundreds of square miles, the larger lakes being not navigable due to terrific storms that sweep the hill-sides and the rocky plains.

Wind runs wild and howls an hour before noon till sundown, and sweeps along the plateau for miles with dust-devils consisting of sands and small stones. Bolts from the blue join hands and thunder from above, and particularly play havoc with the trees worn, stunted and dwarfed by weather and curved by hurricanes, that would still dare to raise their heads in the bleak regions, skirting the plateau of this 'land of the thunderbolt.'

The upland valleys that only assume a countenance of friendliness with the people of this land, cleanly cut off from the outside world, find it trying to yield crops such as barley, wheat, and peas, which are practically the only crops Tibet can boast, in view of extreme cold that cripples growth and blunts the edge of activity. In the village of Phari Dzong, for instance, situated at an elevation of 15,000 feet, crops never ripen, so evanescent is summer, the vegetation grown being reserved for fodder for

animals during the trying wintry months, in which the people strive somehow to eke out an existence under the shelter of stony huts, almost embedded in snow and ice.

Although the principal occupation of an overwhelming portion of the population is rearing of sheep and yaks, the former supplying them with wool, a very valuable commodity, and the latter with milk which is turned into butter, extensively used to make their beverage of tea potent enough to keep body heat at par. But, then again, insufficiency of fodder in winter reduces the animals, particularly the yaks, to a skeleton. The poor animals drag on their miserable existence till summer brings in its train some vegetation which fatten them nicely—a redeeming feature. Such is Tibet, sternly inhospitable. But all the same, life here has all its romance and attractions, which is here as elsewhere, 'a pendulum betwixt smiles and tears.'

Tibet, however, stands in magnificent isolation with all its singular beauty. On its lovely plateau, rise ranges of hills which divide the country into basins, forming political units under the charge of Dzongpens (Head of an administrative district). Lakes and coloured stony crags of various shades—red, yellow, white, grey, green, etc.—lend a charm to the landscape which has perhaps no parallel all the world over. The beauty of the distant towering peaks of eternal snow, which greet the vision through the extreme and unparalleled clarity of the atmosphere before the wind blows, is certainly incomparable.

Lhasa, the mysterious capital of Tibet, very deservedly boasts of a colossal and magnificent eight-storied edifice erected in 1642 A.D. on the slopes of a hill, rising aloft from the plateau. This edifice, which is painted white all over, except the central and the topmost portion which is resplendently crimson in colour,

is called 'Potala' after the name of a rocky hill standing at the harbour at Cape Comorin in Ceylon in the extreme south of India, a name which has eventually some bearing on the history of India and introduction of Buddhism into Tibet in the 7th century A.D. This most imposing edifice of Central Asia is both a palace and a monastery. His Holiness, the Dalai Lama, the Pope and Monarch of Tibet, resides in this palace with some 200 selected lamas or priests. It can, however, accommodate some 500 monks. Lhasa lies along the banks of a lovely river called Kyi-chu which adorns the mystic city in close quarters.

Lhasa was founded in the middle of the 7th century by the king, Sron Tsan Gampo. Nearly two-thirds of the population of Lhasa are lamas. Population of Lhasa is 30,000, of Shigatse (the second city), 130 miles to the west of Lhasa, 12,000, and of Gyantse (the third city), 60 miles south of Shigatse, 5,000 only. In Tibet the number of women is much less than that of men. This is why polyandry is practised here. A girl must marry all the younger brothers of her husband at the interval of a few years. Of course, this rule is not everywhere prevalent.

In Tibet law has also its mysterious side. Punishment is also meted out to the relations of a convicted criminal, the idea being that crime to a certain extent originates from the negligence of those who are connected with the offender. Dr. Somervell has recorded an instance in which after he had been cheated by some unknown owner of a pony, who fraudently took an advance of money for supplying the same, the local magistrate, on the case being reported to him, gave a smart slap to his own brother. His explanation was that it was his business to see that no such offence was committed by any one in the locality. He mentions another instance, where a long-drawn-out enquiry was being instituted in

order to discover which hand of a criminal committed robbery, so that the correct one might be removed.

Superstition of all sorts haunt the minds of the Tibetans. The epidemic which occurred in Tibet in 1921 was attributed to the geologist, Heron, and his hammer and chisel, as their impression was that a strike against a rock sets devils free, and this is why he was strictly forbidden to enter into Tibet in 1922. They too on their part do not excavate gold mines, but simply superficially collect gold-dust which their country-abounds in, as is evident from the gold-particles noticed in most of the waters of the rivers rising in Tibet. The Tibetans never liked the idea of the Mount Everest party exploring the snowy peaks of the Himalaya. The priest of the Rongbuk monastery, 16 miles to the north of Mount Everest, who blessed the porters before climbing further, said that it is no good taking infinite bodily pains and risk in climbing the Kingdom of Snows, and that the lamas with ease can project their astral bodies to the summit of Everest. This fact has been recorded by Professor Roerich in his Altai Himalaya.

In Tibet, everything is astonishing. Their copper coin, sho, is smaller than the half-sho, and the quarter-sho. It is very funny that the Tibetans believe, like the Indians, in the efficacy of Swastika (a kind of cross sign in which there are two pairs of parallel lines running from the extremities of the lines forming the cross), called Yung-trung, which is regarded as a luck-bringer.

As soon as a Dalai Lama (the Pope and King of Tibet) passes away, his sub-ordinate Lamas forthwith set out for remote parts of Tibet or China, being principally guided by the result of occult investigations, to find out his holy successor, who is often a child. The word, Dalai, means (vast as) ocean. The

Dalai Lama at the time of writing this book is the 14th in the line of succession which commenced in the year 1876. It is also said that this child too, before he is discovered, keeps on claiming that Lhasa is his priestly seat. For confirmation, the lamas mix up all the ecclesiastical vessels, robes, etc., belonging to the deceased Dalai Lama with similar other articles, which former, it is held, are definitely recognized by the child, who is then made the Pope and King of Tibet. The writer has got all this information from His Serenity Namgay Lama, the present Head Lama of the Ghoom Monastery, who is a direct disciple of the previous Dalai Lama of Tibet.

Shigatse is the seat of the government of Panchen Rimpochay, more commonly known as Tashi Lama, who is a personage next in importance to the Dalai Lama. Shigatse is also the seat of learning of Tibet, and as a matter of fact the Tashi Lamashad always been the spiritual tutors of the Dalai Lamas.

One of the Tashi Lamas of Shigatse predicted before his death that he would soon be born of a deaf and dumb mother in Tibet. This transpired to be true. The baby was discovered in a very lowly cottage born of a deaf and blind woman of Tibet, with no history of his father. One may, if he likes, see her photographic reproduction in Mr. Macdonald's book on Tibet. This Tashi Lama was not an ordinary being, as would appear from some historical incidents, one of which has been recorded in Prof. Roerich's Altai Himalaya. His Serenity the Tashi Lama, on being asked if he possessed any psychic power, smiled and forthwith became invisible amidst several people and guards, and after a while, when people were energetically searching for him, he reappeared in the midst of the throng.

Relating to the mystic aspect of this closed land, one more event may be narrated here. Sengchen Lama who was put to death by being drowned in Tibet for his conniving at the visit in disguise of the great Indian explorer, Sarat Chandra Das, to Lhasa in 1882, 'before his execution in Lhasa, pointed out that he would soon reincarnate again on earth.' Very soon after a boy (a Mongolian prince) was born in Chinese Turkestan 'with the same rare and characteristic defect on his knee, which distinguished the late Lama.' The above quotation is from Prof. Roerich, who adds: 'At present in our service is the son of the servant of the late Lama, and he was wont to travel on the orrands of his father to the young prince." Tibet has been truly called 'the closed land of mysteries.'

The history of the spread of Buddhism in Tibet is interesting. Buddhism found a definite footing in China in the 4th century. In 641 A.D. the king, Sron-tsan-gampo, of Tibet attacked China. The king, Taitsung, of China came to terms with the ruler of Tibet, and gave his daughter Wencheng in marriage with him. Two years after this incidence, he married Bhrikuti, a princess of Nepal, daughter of the king, Angshu Barma. These two royal consorts, initiated in Buddhism, won the heart of the king, and Buddhism was then destined to be the state religion of Tibet.

The Jokang monastery of Lhasa was built in 652 A.D. to house some images, the principal one being that of Buddha, brought from China as a part of the dowry of the aforesaid Chinese princess. This king deputed an ambassador named Thangmi Sambhot to India to study Buddhism.

Sambhot learnt Sanskrit and Pali, and then studied the scriptures of both Buddhism and Brahmaniacal religion. He returned to Tibet in 650 A.D. It was he who introduced the

then Sanskrit alphabet of Bengal and Magadha into Tibet. All the Tibetan scriptures are written by means of this alphabet.

After the death of the king, Sron Tsan Gampo, his son Thri-sron-de-tsan ascended the throne and invited the then Tantric Buddhist priest, Padma Sambhava, from India to visit Tibet. Padma Sambhava (born of a Lotus) is called by the Tibetans Guru Rin-poche (the precious preceptor). It is said that he was born of the heart of a lotus and was an adopted son of Indradyumna, the then king of Orissa. He was a very learned preacher and his renown spread the length and the breath of India. He was also an occultist of the highest order. In the Tibetan scriptures are mentioned his various psychic powers, such as flying in the air, vanishing like air, imparting life to the lifeless, and so forth.

The primitive people of Tibet were worshippers of devils and demons. Their worship is known as Bon-worship. There are many monasteries of the Bon-po of the Black Faith in Tibet. The people of this sect are hostile to Buddha and Buddhism. They do not recognize the Twin Popes of Tibet—the Dalai Lama and the Tashi Lama. They regard the Dalai Lama as a ruler collecting taxes.

There is hardly any monastery in Tibet or Sikkim which does not contain an image of Padma Sambhava, who has a place of esteem next to Lord Buddha himself. He was a *Tantric* Buddhist priest. And as *Tantrism* pertains to the mystical practices in the mediæval Hinduism, Padma Sambhava was an occultist too. In the Tibetan scriptures, are mentioned his various psychic powers, such as flying in the air, vanishing like air, making a serpent harmless, summoning the rain, etc. etc.

Tantrism does not lend itself to exposition in the hands of the sceptics who are not prepared to study the subject at the feet of a master. The application of common sense or erudition relating to other spheres of knowledge counts for little or nothing in realising the inner significance of the doctrines of the Tantras. The criticism of the ignorant is consequently devastating.

After Padma Sambhava as many as 80 Buddhist preachers penetrated in the course of a century into this closed land of mysteries. All of them hailed from Bengal except a few who came from Kashmir and Nepal.

Of them Atish Dipankar Sreejnan who was by far the most learned and saintly, took the whole of Tibet as if by storm. Something has already been said about this preceptor in the first chapter of this book. Dipankar preached in Tibet pure Buddhism free from the taint of Tantrism. The people of this sect put on yellow caps. Those of Padma Sambhava use red caps. The Redcap-sect adheres to the present Lamaism, which in one word may be defined as worship of a living diety in the person of His Holiness the Dalai Lama, the Pope and secular ruler of Tibet. It is a curious fact that the Dalai Lama himself, however, belongs to the yellow sect. It is surprising too that the yellow-capped monks are rare both in Tibet and Sikkim.

<sup>&</sup>quot;Beauty and grandeur in nature lie primarily in exclusiveness, remoteness and unexpectedness."—F. S. Smythe.

## PART II

# AFTER MOUNT EVEREST BY LAND AND AIR

"Heaven knows that Everest's inaccessibility is daunting enough for any venturer's heart. The physical aspect alone of the task, the sheer height and the wild icy bastions and ramparts of iron cliffs, have appalled all those who, from Jules Verne downwards, have dreamed of surmounting it."

-FIRST OVER EVEREST

#### CHAPTER VII

### TOWARDS THE WIND-SWEPT PLATEAU

"The secret of romance is remoteness, whether in time or space."

—E. CANDLER.

ARJEELING had ever been the favourite place wherefrom started the Everest Expeditions with all their parapharnalia and the mighty arrays of porters recruited from this hill-station.

A little toy-like train starts from Siliguri and winding its way up the most crooked and romantic railroad in the world reaches Darjeeling without using cog-wheels. It does a giant's work by climbing 7,000 feet in 40 miles from Sukna, whence the locomotive ascends the Himalaya in right earnest to Ghoom being the highest point it attains shortly before reaching Darjeeling, the natural beauty of which, Younghusband says, "is unsurpassed in the world." Smythe, that eminent writer and great mountaineer, writes: "The view of the Himalayas from the hill-station of Darjeeling is world-renowned." From here, the Expeditions vanished for nearly five months from the world's ken in nearly a fortnight, inasmuch as Tibet may unhesitatingly be said to be situated in another planet.

The route adopted by the several Expeditions stands out in three well-defined natural divisions:—(i) from Darjeeling to Kampa Dzong, (ii) from Kampa Dzong to Shekar Dzong, and (iii) from Shekar Dzong to the foot

of Mount Everest. This chapter deals with the first division—climbing through Sikkim and penetrating the Tibetan plateau, heading almost northwards. The second division is covered by a long westerly march across the unsheltered tableland of Tibet, seamed with intersecting ridges of low undulating hills, while the third is a thrilling southward journey across the region of crystalline rocks. The first two divisions are of almost equal distance, whereas the third is about half of either of these two, the distance covered being roughly 350 miles from Darjeeling to the northern foot of Mount Everest.

The journey from Darjeeling to Kampa Dzong in Tibet comprising all the phases of Himalayan landscape is superbly fascinating. The first thirty-three miles to Kalimpong is along a light motor-road which gradually descending from Ghoom (7,400') reaches the great valley of the Tista river magnificently spanned by a beautiful bridge at an elevation of only 710 feet from the river. From this bridge Kalimpong is reached by a steady ascent of ten miles. The next march of thirteen miles to Pedong and onwards is what warmly greets a real traveller, as motor-roads and towns in the sense we understand them \* are conspicuous by their absence, and one feels that the solitary march has just made its beginning. Pedong is a small mart on the frontier between Sikkim and British India. About Pedong General Bruce has written: "I have an affection for Pedong. It is charmingly situated, and looks well over the Sikkim valleys." From Pedong begins the real start for Tibet. After a sharp descent to the hill stream, the Rongpo-Chu, spanned by a strong suspension bridge, and then a steep climb Rhenock is reached in two and a half hours. At Rhenock which is the gateway to Sikkim, Tibet, and Bhutan, there is a post and telegraph office and a small bazaar.

From Rhenock mainly two routes lead to Kampa Dzong in Tibet. One is the direct Gangtok-Lachen-Sebu la route, while the other is the round-about Jelap-Phari route, which latter reaches Kampa Dzong after describing an arc of a circle on the remote side (Eastern) of Gangtok, the capital of Sikkim. To this arc the Lachen route may be considered as a chord. The Phari route again has two alternatives. One is via the Nathu, while the other is via the Jelap Pass. On their Tibetan sides and fully eight miles below each of these two passes which are situated on a range running north to Tibet, two tracks run down till they meet at the village of Rinchengong and thereafter unite to form one path which leads to Phari. It may be noted here that the Nathu Pass is nearly three miles north of the Jelap Pass as the crow flies, both these passes being on the frontier between Sikkim and Tibet. From Phari there are two different routes which meet at Tatsang wherefrom Kampa Dzong is twenty-two miles away to the west. The Lachen route was not adoped by any of the expeditions while marching to Kampa Dzong, principally because of the extraordinarily steep and tiresome journey it involves, and the treacherous Sebu La Pass which often remains closed by heavy fall of snow even in mid-summer. In the 1924 Expedition, when General Bruce was incapacitated by an attack of malaria from proceeding any further into Tibet, Hingston accompanied

him in his journey back from Tuna to Gangtok and joined the Expedition party at Kampa Dzong which he reached via the direct Lachen-Sebu La route. The route to Nathu La (which unlike the Jelap La is not open all the year round and is rarely used for penetrating Tibet) via Gangtok, Karponang and Changu has been fully dealt with in the writer's work, Wonders of Darjeeling and the Sikkim Himalaya, and for that reason and also to minimize space is not described in the present work. But it is deemed expedient to quote the following few lines from that book. "After a few miles from Karponang the bridle path could no longer be extended and a very narrow and extremely steep track leads up the giddy precipices in a precarious way, the only redeeming feature of this, so to say, hanging path being a rough wooden railing. A climber when looking behind him down this almost perpendicular piece of engineering is apt to lose his nerve. On completion of this sensational feat one is entertained by the scene of an easy country till an ascent all of a sudden presents to the view a calm sheet of water amid a dismal scenery. It is the lake of Nuk Tanyi, at a remote end of which stands the solitary bungalow of Changu. Overhanging cliffs and boulders skirting a side of the lake along which the route leads to the bungalow lends a gloomy aspect to this bleak region."

We are also tempted to incorporate the graphic description of the Pass as given by John Easton. He writes:—While ascending the Pass: "\* \* there was much stumbling and holding up and whistling and halloing by all concerned." While on the summit of the

Pass: "The wind swept, cold and pure, cut against our faces, whistled in our ears, filled our eyes with tears, but all unheeded as we gazed at the marvel stretched before us. For all doubts faded, and all fears were dispelled; before us stretched immortality, purification, a revelation of the world as God sees it, where no man has stepped to mar it—Om mane padme hum!" While descending down the Tibetan side of the Pass: "Slush, mud, water, snow:we splashed through it all. We ran down the mountain side, jumped, slid, a medley of men, mules and ponies, until we reached the valley, \* \*"

The Lachen route has not been described by Ruttledge in his Everest 1933. In the above-mentioned book of the author, he has narrated in details this romantic journey up to the Donkia Pass. Mr. Hingston, however, did not cross the Donkia Pass, but proceeded almost due north from Lachen, thus leaving the Pass to the North-east, and reached Kampa Dzong after crossing the Sebu La Pass. Lachen village which is fifty miles from Gangtok is situated in a very desolate place far above the Lachen valley. It is curious that a Finnish Mission is here conducted among the villagers who have the reputation of possessing splendid health and exceedingly good complexion and comely features. What is singular and striking is that their skin appears to be almost transparent. Mr. Smythe writes: "These Lachen people are remarkably handsome with finely chiselled features and smooth, clear skins. Miss Hurtz and her successor, Miss Kronquist, 'self-exiled in solitude', were placed at the head of this Mission at Lachen. The latter breathed her last in 1939. The people of this place where apples grow in abundance earn their livelihood principally by rearing sheep and yaks. The route from Gangtok to Lachen is characterized by the crossing of turbulent mountain streams as well as waterfalls at places, in one of which the feat in going over a bridge spanning the tumultuous Lachen is precarious. The real thrill of the journey, however, begins from Lachen onward. Two miles ahead is the Zemu River, the bridge spanning which is at times washed away by the floods of this glacial stream. Nearly seven miles from Lachen, the solemn grandeur of glaciers and snowy peaks greets the vision of the travellers. And soon after this, the river is crossed at Tallung Samdong by a wooden bridge. Five miles away is the last Sikkim dak-bungalow at Thangu which is a very cold, damp, and wind-swept place. The bridle path ends at Thangu, and thereafter the journey is over a rough track amidst rocks and boulders, and up very steep slopes of towering mountains. Finally all track is lost amid wilderness of mountains engirdled by rocky valleys and steep-sided moraine shelves.

Now a description of the journey from Rhenock (45 miles from Darjeeling) to Kampa Dzong. Places in order of progressive march onward with intervening distances in miles as represented by figures are the following, in which the halting stages are marked by asterisks.

Rhenock 3 Ari 12 \*Sedongchen 8 Lingtu 7 \*Gnatong 9 Jelap La Pass 13 \*Yatung 12 \*Gautsa 16 \*Phari 24 \*Tuna 12 \*Dochen 11 \*Khetan 16 \*Tatsang 22 \*Kampa Dzong.

The altitudes are: Of Ari, 4,700'; Sedongchen, 6,500';

Lingtu, 12,617'; Gnatong, 12,210'; Jelap La Pass, 14,390'; Yatung, 9,400'; Gautsa, 12,500'; Phari, 14,200'; Tuna, 14,800'; Dochen, 14,900'; Tatsang, 16,000'; Kampa Dzong, 14,000'.

From Darjeeling Kampa Dzong can ordinarily be reached in 15 days. The distance to be traversed is 223 miles via the above mentioned route, in which up to Dochen a traveller gets the advantage of dak-bungalows. Thereafter one has to pitch one's camp on the high Himalaya at Khetan and Tatsang. In the latter place the night temperature inside the tent on June 4 was observed by the 1921 Expedition. It was 7° of frost. Outside it was 15° of frost. The running streams were all frozen over.

Now a description of the travel towards the wind-swept plateau right up to the fortress of Kampa. From Darjeeling to Rhenock, it is a journey through the British territory, while from Rhenock to the Jelap Pass the way is through lovely Sikkim. From the Jelap La, the Tibetan borderland, up to Phari the climb is to attain the high plateau of dreary Tibet. Lastly from Phari onwards, the go is through the home of blizzard, the region where the three mighty Sikkim giants, Pauhunri, Chomiomo and Kinchenjhau, tower aloft and keep watch over the Tibetan passes.

From the frontier village of Rhenock where oranges grow in abundance, the road to Ari ascends steeply on stone-stairs through a secluded region under a canopy of stately trees. One feels as if one is off at last towards the roof of the world. Everything now speaks of bliss, ecstacy, and peace in this desolate region which admits of no worldly elements to be borne along. The scenery in all the round of Nature is singularly impressive. next march from Ari to Sedongchen is at first a descent (for nearly four hours) to the Rongli River at 2,700' above sea level, and then a very trying ascent (for nearly seven 1 hours) to Sedongchen. One of his Majesty's soldiers while climbing up the great precipice rising from the bed of the Rongli River, and leading to Sedongchen and thereafter to Lingtu 12,617', was overheard by an officer of rank seriously making a remark to the effect that the tiresome mountain they were tackling must be one of the four pillars on which rests 'the roof of the world.' For some distancethe way is along the bank of the hill stream, the Rongli, where the dense tropical vegetation and stately trees covered by blooming orchids are of absorbing interest. The 1921 Expedition had the unique opportunity of crossing this region in May, the season of flowers. The following words are found in the Reconnaissance, 1921. "Every branch here is covered by thick matted growth of orchids." From an elevation of nearly 3,000 feet it is a steady pull terminating on 13,000 feet at the summit of Lingtu. The way is through cultivated slopes and forest. The road leading to Sedongchen is exceedingly steep and execrably stony with hollows and rough rocks where one's ankles are apt to be twisted. A tourist was much delighted and regarded it as a good sign when he happened to pick up a horse-shoe on the way up Sedongchen, but soon after he made out that an inexhaustible treasure of this token of fortune is to be met with all the way. This

stony floor of the Himalaya plays havoc with the shoes of donkeys, horses, and mules carrying on their backs all the commodities of trade, principally wool, all the year round between Tibet and India. In his book. To Lhasa at last, Powell Millington calls this wealth of foreign articles "a supplementary pavement of horse-shoes." He also adds: "It was a good farrier who could shoe a horse that he would lose no shoe between Lingtam and Gnatong." The last eight miles to the summit of Lingtu is an arduous Lastly it should be mentioned that the region climb. from Sedongchen to Gnatong is badly infested with leechesup to an altitude of nearly 10,000 feet. The climb from Sedongchen to Gnatong has its redeeming features. Here is a wonderful zone of rhododendrons, the flowers of which show every shade of orange and red. The flowers are pink, scarlet, yellow, white and cream coloured in different shades. Colonel Howard-Bury, the leader of the first Expedition to Mount Everest, 1921, writes: impossible to imagine anything more beautiful, and every yard of the path was a pure delight. Among the smaller flowers was the large pink saxifrage, while the deep reddish-purple primula covered every open space." From Lingtu on a clear day the snowy range unfolds itself in all its glory and majesty, far superior to what is observed from the favourite view-points, Phalut and Sandukphu in Darjeeling. A little below the summit of the mountain are the remnants of the old Tibetan fort of Lingtu, which was jealously guarded by the Tibetans towards the end of the year 1887, thus necessitating the forcing of an expedition into Tibet in 1888. Not being able to resist the attack of the British regiment, the Tibetans moved backwards and in one night built a stony wall fully three miles in length and some three or four feet in height at Gnatong, whence they beat a hasty retreat without fighting. Gnatong is seven miles from Lingtu, the journey being a descent from the top of "one of the four pillars." Gnatong is a small desolate village, which was found on March 30 half buried in slushy snow. Here is a sub-post roffice.

Before we proceed any further it would not be in the fitness of things if we do not descend to details as to the effect of high altitudes on human organism not acclimatised Ordinarily at about 10,000 feet, climbers to them. are for the first time attacked with what has been termed mountain sickness, characterized by such symptoms as giddiness, headache, nausea, and prostration. It will be interesting to many of my courteous readers if a little digression is made here. In seasickness, it is the sea which is the cause of the sickness. In home-sickness, lack of home brings about the disorder. While so far as lovesickness is concerned, it is simultaneously both love and lack of love that produce the derangement. But there is something novel about mountain sickness, in which either the causation of sickness is mountain or the sickness is the effect of separation from mountain. The following is perhaps the most authoritative quotation in this connection. The writer is that eminent explorer A. H. Savage Landor. "Once you have visited the snow of the Himalayas," said a venerable old man of Kumaon to me, "you will have to return to them time after time until you die. When away from them, all through your life you will ever see them before you in your dreams." "Well, that was quite He further writes: "Two years have elapsed since my first journey across Tibet, and I was still suffering from the effects of the tortures and wounds which had been inflicted upon me during my captivity in the Forbidden Land. Nor did banquets and receptions, or interviewers, autograph collectors, etc., much help to rebuild my constitution. In fact, while in London, instead of improving I was getting weaker and more of an invalid every day." Landor now remarks that he thought that help might ensue from the Tibetan friends who had tortured him. He undertook another exploration of Tibet and it was a glorious success. Such is really the lure of the Himalaya. We think hardly there is a man who having once been friendly with the sublime Himalaya will not pine for repeated excursions and explorations.

In concluding this digression on mountain sickness, we cannot help quoting the following few lines of Millington. "Mountain sickness is like measles. If you get a really good go of it, you are not likely to be soon attacked again by it, even though you have to ascend to an altitude far higher than that at which you originally succumbed. Many a man lay gasping for several days at Gnatong, which was only twelve thousand feet up, and later on climbed the Karo La (16,800') on his own flat feet smiling."

Now then, the travel onwards from Gnatong. The next stage is Yatung via Tak La, Kupup, and Jelap La (La means pass). At Kupup there is a large lake nearly

one mile in circumference. The Jaldhaka river which separates the Darjeeling district from Bhutan takes its rise from this lake, known as Kupup Lake. From Kupup the Jelap La is attained by a very trying ascent of three miles. The meaning of Jelap La is significant. It means "the lovely plain pass," and so it is, having a length of nearly 150 feet. Its sister pass, the Nathu La means "the pass of the listening ear." The meaning is not very clear, but it seems to have some reference to the peculiar solitude and character of its own. Nathu La is singularly gloomy, but it boasts of a kithless signpost giving the two very sharp-directions: To London—To Lhasa. To the exhausted traveller it has undoubtedly a tickling effect "on the mental palate."

The top of the Jelap Pass (nine miles from Gnatong) is a nice flat ground marked by a heap of stones forming a cairn. Tibetan prayer-flags attached to sticks flutter day and night in the strong wind that blows continually across the bleak and desolate pass. A telegraph post also marks the summit of this frontier pass. From the pass one can run the eye over the distant honey-coloured plateau of Tibet about which Mr. Candler writes: "In the distance all the land was yellow and brick-dust colour I have often seen in pictures and thought exaggerated and unreal." From this pass is visible for the first time some forty miles away in Tibet as the crow flies that enticing cathedral of lily-white snow called Chomal Hari, unanimously said to be the world's most beautiful peak.

The 1924 Expedition crossed the Jelap Pass on April 1.

On this occasion General Bruce writes: "The descent."

from the summit was certainly over snow for a time, and the path below was unpleasantly iced and dreadfully slippery for animals. How those heavily laden Chumbi mules managed to get over it was a wonder."

It is a remarkable fact that things are quite different on the Western Himalaya, where precipitation of snow is overwhelmingly great, so much so that the Zoji La, an eleven thousand and five hundred feet pass, which is the main gate from Kashmir towards Baltistan and Ladak and is the lowest depression for hundreds of miles on either side would have been some ten feet under snow at this time of the year. Fortunately, the Jelap La remains open practically speaking for the whole hoary winter. The unending mule trains with their bales of wool keep on maintaining lovely furrows across the precipitated snow and ice that tend to close the route on either side of the pass in winter.

The road below Jelap on the Tibetan side is a descent of over 6,000 feet in eight miles, and what is appalling is that the route is straight without a single bend up to Langram, three miles from Jelap.

The stage next to Gnatong is Yatung which is twenty-two miles from the former and thirteen miles from the Jelap Pass. On the way to Yatung from the Pass lies the three prosperous vilages, Langram, Rinchengong, Phima, and Chumbi. This lovely place is the seat of the British Trade Agent. The natural scenery at Yatung has been most graphically described by Edmund Candler in his The Unveiling of Lhasa. "The valley (Yatung) is beautiful beyond the beauty of the grandest Alpine

scenery, carpeted under foot with spring flowers and ablaze overhead with flowering rhododendrons." "To try to describe mountains and forests is a most unprofitable task; all the adjectives of scenic description are exhausted; \* \* one's sensations are incommunicable, that it is impossible to make people believe and understand." "It is the poets who have described what they have not seen who have been most successful." He further writes about the Chumbi Valley (comprising Yatung): "Paradise would be easier to describe." "But what irony, that this seductive valley should be the approach to the most bare and unsheltered country in Asia!"

Yatung which is the oldest of the four villages, Yatung. Chumbi, Pipithang, and Shashima that form the great Chumbi Valley, has a piece of folklore behind. The following lines are quoted from An unfrequented highway through Sikkim and Tibet to Chumolaori. "A small boy once presented himself at the Agency, weeping bitterly, and hugging a small peach tree under his arm. 'My father and mother are dead,' he explained, 'and I have nothing left but this peach tree. If you will look after me and send me to school I will give you this tree.' The boy is now on the way to become one of the brightest lights of the village of Yatung that was Shashima, and the peach tree flourishes in the Agency compound."

Yatung is often sounded as Nya-thang by the native traders and as Yatung by the Europeans. Its latitude is 27°-25'-30" N and longitude is 88°-56' E. In Candler we find: "The privilege of access to Yatung was the result of the agreement between Great Britain and China with

regard to trade communication between India and Tibet drawn up in Darjeeling in 1893, subsequently to the Sikkim-Convention."

Chumbi Valley is the valley of the river Ammu Chu. From Rinchengong (eight miles from Jelap) lying at the foot of the valley forming the junction between the Jelapvalley and the valley of the Ammu Chu, right up to Yatung is a very pleasant ride of five miles across the extensive valley of Chumbi. And after an arduous struggle with cold and heights, Chumbi verily appears to be the Garden of Eden, about which the following lines of Millington will not be quite out of place. "The valley itself was a delightful spot to have reached. After the unpleasantness of those heights that one had traversed, this valley seemed a sheer Garden of Eden. It was a place to dally in, in which to wander about accompanied by your best girl, picking wild flowers for her, and listening with her to the humming of the bees, and the bubbling of laughing brooks, rather than a place in which to concentrate an army for an advance into the enemy's country." This last part of the quotation alludes to the 1904 Military Mission to Tibet, in which the march of a procession of soldiers. in one file covered a distance of fully five miles over the Tibetan tracks.

Some three or four thousands of men inhabit the Chumbi valley. Rainfall at Chumbi is 50". In summer the temperature never rises above 70°. Almost daily at noon a world of mist creeps up from the valleys of Bhutan and a constant drizzle is the result. Chumbi is a fertile valley. Wheat and barley grow in abundance. Here

cabbages grow up to a strikingly big size. The ground also yields potatoes. The Chumbi mules are sure-footed, and the feat they perform in climbing and particularly descending snow-covered passes is really wonderful. They by instinct make out the track completely obliterated by a heavy fall of snow.

Just above Yatung is Kanjut Monastery, visible from the Jelap Pass. The next is a very long march of twentyeight miles up the desolate valley of Chumbi to Phari Dzong. On the way and twelve miles away from Yatung is, however, the next stage, Gautsa. On the way to Gautsa is Galinka, a flourishing village with a wealth of barley The Galinka Monastery is in the centre of the village. On the route is seen a very impressive waterfall frozen over almost all the year round. The fall is a sheer drop of some three hundred feet. Thereafter an extensive plain comes into view. It is called the Lingmatang plain. On crossing a river and going up a spur, one reaches the Donka Monastery, which was once the seat of Geshe Lama or Gheshe Rinpoche, a man of great learning. In this monastery once lived an oracle of repute. About this oracle McGovern in his To Lhasa in disguise writes: "I observed this Chumbi oracle very closely, and found that his methods correspond in general to those used by mediums in the west. He goes into an ecstatic trance, frequently accompanied by epileptic symptoms, and while thus obsessed delivers semi-coherent words which fortell what is to happen. Prophecies delightfully vague, \* ' but it is remarkable that half-way through the great world

war he foretold the exact year and month in which hostilities would cease."

One can ride at a gallop on the Lingmatam plain, at the end of which the valley narrows and the path runs close along a bank of the rushing stream, Ammu Chu, which extends to Madarihat in the plains of India where it is called the Tursa, which finally empties itself into the Kalchini River. The way along the bank of the Ammu Chu lies through a forest of tall trees, such as birch, juniper, silver fir, and so forth. Lastly the stage rest-house of Gautsa, the last village in Chumbi, appears at the bottom of a steep and terrific gorge. Gautsa is a small straggling village of less than a dozen of huts. Air here is scented with the fragrance of pine trees. A small level plain which Gautsa boasts had been once the scene of a kind of rustic football game and once of a three-a-side polo. Football at this height is tantamount to playing the game at the ordinary level of the earth's surface while being weighted down with an eighty pound load on one's back. The readers will be interested to know that polo used to be played in Ladak on the western Himalaya for centuries on a ground some 400 yards by 80 yards. Cunningham saw polo played at Ladak with 20 players on each side. Here musician made a most lovely din, especially when a goal was won. So the enterprise in this direction by the members of the Mount Everest Expedition parties is by no means a record-breaking one at this appalling altitude.

Gautsa which is some five miles away to the north of Lingmatang is thickly wooded and is among wonderful mountain scene. With the march onwards from Gautsa. the wild savagery of mountains and the dense forest growth lag behind. In summer rhododendrons dwarfed by cold and altitude to the extent of one foot in height continue to blossom in pure whiteness and in pink up to an elevation of 1,000 feet from Gautsa, beyond which the purple variety decorates the hill sides to a certain height in an ever-decreasing luxuriance, till flowers are conspicuous by their absence. It is just after a slow and a long climb of eight miles from Gautsa that the undulating, treeless, open plateau of Tibet bursts upon the view of a lover of heights with startling suddenness. And the moment one sets one's foot on the threshold of the Great Plateau, icy-cold blast of west wind comes screaming as it were to forbid the traveller to enter the forbidden land of Tibet. One feels as if one is gazing upon another world pervaded by a new order of things. Diffidence originating in the rigor of the Phari plain suffers an eclipse under the shadow of Chomal Hari, "the Lily White Mother of Snow" that standing in splendid isolation towers aloft abruptly to an incredible height of 9,000 feet above the roof of the world. A more shapely peak cannot be imagined. Chomal Hari has been unanimously called the most beautiful mountain in the world. It dominates the Phari plains and stands like a sentinel bearing 33° from Phari over the sandy downs of limitless horizon. This sharp and inconceivably high peak, as it stands silhouetted against a characteristically deep blue sky of Tibet with its crystal-clear atmosphere, does not lend itself to description. Norton of Everest repute writes: that most beautiful mountain.

Chomulhari, whose isolated position and perfect shape combine to produce a picture from which one can hardly take one's eyes." Ruttledge in *Everest 1933* writes: "We camped beyond the pass that day, at the very foot of Chomo Lhari. The wind was blowing strongly at our camping-place, Shabra-Shubra, but all thought of discomfort was vanished by the view of that magnificent peak."

Chomal Hari (23,944') with its almost perpendicular final ice-slopes lured away as its first captive, F. Spencer Chapman, who in the year 1937 conquered this Queen among mountains. He in that year left its foot on May 13 and pitched his last camp at 21,500 feet, and reached its summit on May 21 with his porter companion, Pasang, a Tibetan, the only man who could follow him up to the summit. From an altitude of 23,500 feet, unconquered Everest and Makalu, 150 miles away to the west and yellowed by vast distance greeted his vision. descending Pasang slipped down. Chapman, although: roped up with Pasang, could not stop him glissading down precipitious ice-slopes, as the latter being demoralised by the accident did not use his axe. After he went down some 300 feet, Chapman managed to check his motionwhen his axe-point cut home and he could gradually stop. Had it not been possible to arrest the appalling momentum by the exercise of mountaineering skill, both the climbers would have reached the plains of Tibet, some 3,000 feet below the point of accident. In his downward descent Chapman had his head downwards. Pasang was unhurt, but the fall had completely unnerved him.

Chomal Hari is regarded as a holy mountain and is

worshipped by the people of both Tibet and Bhutan, between which territories it stands.

After nearly two miles of journey forward, Phari appears in the distance. Although it looks just two miles away, it is still six miles off, and is very close to the base of Chomal Hari. Here is a fort (Dzong) which was built in 1792 A.D. Phari is at the base of the Mo River. It is the highest town in the world, but it is at the same time in all probability the dirtiest and the most filthy town on the face of the globe. Its streets are buried in an abominable mixture of the droppings of ponies, mules, pigs, yaks, and sheep, and snow to the depth of fully four feet, to which has been added accumulated filth of ages. In the houses are huddled together human beings, pigs, yaks, fowls, and what not. Phari means hog, and Dzong means hill, so that Phari Dzong eventually boasts of a most appropriate appellation. The expeditions of 1922 and 1924 were put to great transport difficulties by the willy Dzong Pen (magistrate) and his Gyembus (headmen). They demanded abnormal prices for baggage animals that were to carry the expedition loads on the Tibetan plateau. While fully six hours' arguing with the local authorities solved the transport problem in 1922, in 1924, however, the situation was by far the most grave. Although the passport with the official seal of the Tibetan Government decreed every assistance, the authorities concerned payed little heed to its mandate. In the course of the long-drawnout dispute in matters relating to transport facility, a telegram from Lhasa, instructing the Dzong Pen to render them every assistance and to see that they are not overcharged was received. A telegram was then wilfully drafted complaining the treatment received at the hand of the Phari authorities in an open Durbar. This was later on at a psychological moment torn off before them by way of a bluff which had its desired effect.

From Phari begins the region of yaks, which has been aptly called "buffalo in petticoats." It looks like a buffalo, but its nature is exceptionally mild—the petticoat influence prevails. Its long hair and bushy tails constitute a splendid protection against cold and blizzard. An author writes: "I believe he is really at his cosiest, when lying in a snow-drift on a winter's day with his petticoats around him and only his horns showing. He then feels really tucked up." Brigadier General Hon. C. G. Bruce in *The Assault on Mount Everest*, 1922 writes: "It was curious to see yaks contentedly chewing the cud, the whole of their weather-side being a mass of frozen snow. They seemed to be quite as happy lying out in a blizzard as though they had been ordinary civilised cows in a barn."

One doubts very much as to the existence of grazing at Phari even at summer. It is when a herd of yaks are seen apparently eating snow-and-ice-covered earth on slopes of hills that a newcomer knows for certain that something nourishing is concealed underneath the frozen surface.

Phari fort is six stories high. It is surrounded by a courtyard where mules and ponies are stabled. The walls are of massive stonework which would take heavy guns to demolish. It has been estimated that the fortress has enough space to hold the whole Tibetan army with

provisions for a year. The interior of the fort is a medley of stairs and dark, cavernous rooms "which would take a whole day to explore." In the 1921 Expedition the Phari Dzong Pen was presented one lever electric torch, "which although first frightened him was later on much appreciated."

Phari is very close to the Bhutanese frontier, the nearest Bhutanese town being only two miles away. The Great Snowy Range of the Himalaya is six miles north of Phari. This range is crossed at Tang La, at the foot of Chomol Hari which runs northwards for at least ten miles across the great Tibetan plateau. Tang La is twelve miles from Phari and is reached by a gradual ascent which is hardly noticeable. A little descent across the northern face of the pass brings one on the desolate, sandy and gravelly Pun-sum Thang plain which is traversed about twelve miles to Tuna.

Kampa Dzong is five days' march away to the northwest from Phari. The intervening distance via the Tuna-Dochen route is 65 miles. There is a direct route (not described here) which leads to Kampa Dzong through the region of the northern spurs of the Pauhunri group of snow mountains. Taking this route Kampa Dzong is reached in four days, but the traverse necessitates crossing the Donkya La and two other high passes, each of the height of nearly 18,000 feet. This route is through the home of blizzard where the three Sikkim giants, Pauhunri, Kinchenjhau, and Chomiomo raise their snow-clad flat tops to a towering height of some twenty-three thousand feet. The journey is arduous in the extreme. Norton remarks:

\*\* \* \* this area is the most inhospitable of any we meet on the Tibetan plateau. \* \* \* I have now crossed it four times both in spring and summer, but never without encountering a blizzard or constant storms of snow and sleet."

The first day's march from Phari is to Tuna after negotiating the easy Tang La, a 15,200 feet pass. Tuna is a village of a few deserted houses, and is miserably cold and situated in a most inhospitable region. At Tuna temperature falls to 25° below zero. The country all round is sterile and unproductive.

Tuna is nevertheless a historical place. In 1904 when the British Government "were drawn into the vortex of war against their will by the folly and obstinacy of the Tibetans," Colonel Younghusband who was at the head of the Mission was intercepted a number of times by chattering Tibetan messengers, whose constant reference to Yatung undoubtedly meant that the Mission should beat a retreat to Yatung. Ultimately in the interview that took place between Colonel Younghusband and the Lhasa Depon, the latter pointed out that there would be trouble if the Mission would proceed any further. In this dreary upland of Tuna were uttered the following words terse and to the point to finally combat Tibetan duplicity and evasive policy which had brought about the armed Mission into Tibet. "Tell him," Younghusband said to Captain O'Connor who played the part of an interpreter, "that we have been negotiating with Tibet for fifteen years; that I myself had been waiting for eight months, that the mission is now going on to Gyantse. Tell him that we have no wish to fight and that he would be well advised if he ordered his soldiers to retire. Should they remain blocking our path, I will ask General McDonald to remove them."

From Tuna to Dochen is a ride of twelve miles along a sandy plain scattered with rounded pebbles along the hill sides, being a distinct evidence of a lake which had dried up long long ago. Some nine miles away from i Tuna is a place called Guru where Tibetans opposed the march of the 1904 Mission and were the first to take the offensive with the result that Guru witnessed a scene of a fierce battle. Three miles ahead is Dochen where there is a stage rest-house near the shores of the lake suffocated at places with weeds of various colours. Behind the lakesnow-and-glacier-covered mountains form a lovely background. Bar-headed geese and Brahminy ducks swim on the still sheet of water on which the neighbouring mountains cast a picturesque shadow. The trade-route to Lhasa from Darjeeling proceeds northwards from Dochen (160' miles from Darjeeling) while the aspirants to Mount Everest are to strike off westwards leaving behind the telegraph line connecting Kalimpong with Lhasa, the capital of Tibet. This line was laid up to Gyantse by the 1904 Expedition to Tibet and was extended to Lhasa in 1921 by the British Engineers. From Gyantse to Lhasa, the line is under the control of the Tibetan Government. while that between Kalimpong and Gyantse belongs tothe British Government.

Khetan, eleven miles away from Dochen, is reached after crossing the Dug Pass (16,400'). It is a dirty village and almost deserted. A shallow muddy pond is the only

source of water for villagers. Khetan still boasts of the remnant of buildings and other ruins which are clearly depictive of the existence of a prosperous town in ages long gone by. Kala Tso (Tso means lake), situated a few miles north of Dochen, evidently at one time covered the ground up to Khetan wherefrom it is now far off owing to shrinkage. This dessication is only a single instance out of hundreds in Tibet. Even the holy lake, Manasarowar, bears unmistakable signs of dessication as pointed out by Sven Hedin.

On the way to Tatsang, the camping ground next to-Khetan, two nunneries called Doto and Shidang are met with. It is said that this region being near the Nepal frontier was raided by the valiant Gurkhas, and consequently most of the men had been killed in battles while the women survived. It is a curious fact that in other parts of Tibet males predominate to an overwhelming extent, thus necessitating the introduction of polyandry.

While being carried on a litter over a high pass of 17,200 feet on the way to Kampa Dzong, Dr. Kellas died of heart failure. His death is most lamentable; the mountaineering world lost in him a keen lover of heights. He had been a physician attached to a London hospital. Each year in summer without in any way announcing anything about the enterprise under contemplation he used to visit the Himalaya to undertake independent exploration with the view of climbing some giant peaks. In the year 1921 Kellas exerted himself to the utmost in conquering Narsing, a well known massive peak in the neighbourhood and lying to the east of Kinchenunga.

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Narsing yielded to the efforts of this great mountaineer. Later on he spent several nights at extremely low Temperatures in the camps over 20,000 feet on the slopes of Kabru, a satellite of Kinchenjunga. And before he had time to recuperate he had to respond to the first call of the King of Heights when after a very short stay. at Darjeeling he took upon himself the task of joining the first Mount Everest Expedition which left that Queen of Hill Stations on May 18. On the day following his death he was buried on the slopes of the hills to the south of Kampa Dzong. It was verily a very befitting place for the final well-earned rest of this most enthusiastic explorer of the snowy heights of the Himalaya. It commands a view of the mighty snowy range out of which to the south on the yonder horizon the three Sikkim giants, Pauhunri, Kangchenjhau, and Chomiomo tower aloft to heaven-kissing heights, which Kellas alone had climbed. From the same spot the snowy crest of Everest is seen over a hundred miles away glittering in its yellow robe which distance alone can lend.

Kampa Dzong is forty-nine miles and is just three marches away from Dochen. On the way lie Khetan and Tatsang, but nowhere is any rest-house. At Tatsang there is a nunnery, supported by the scanty offerings of a few yak-drivers. Here on June 4, 1921 the night temperature inside the tent was observed to be 7° of frost. The running streams were all found frozen over. The last art of the journey to Kampa Dzong is a descent for a miles till Kampa Dzong is reached at an elevation of

14,000 feet. Here temperature is mild as compared with the bitter cold of the dreary uplands of Tibet.

Regarding Kampa Dzong Dr. Somervell writes: "\* \* \* a lovely mediæval fortress, no body knows how many thousand years old. It is one of the most beautiful, and I suppose quite the most romantic structure of its size in the world." Ruttledge describes Kampa Dzong thus: "The place is a little sun-trap and besides has architectural beauty of the highest order. Those Tibetan builders had an eye for line and proportion. The rounded towers, one above the other and connected by steeply mounting walls, lead up to the square-cut citadel with its sloping sides. The whole edifice, springing from precipitous rock, is a setting for a fairy story."

The castle of Kampa is situated on a giddy height on the slopes of a hill. From a distance it appears as if it has merged into the rock. Kampa Dzong is a gigantic fortress with magnificent stone and wood works. Inside this castle are the images of Dalai Lamas (Pope-kings of Tibet) for centuries. But in spite of all these poetical descriptions, an objectionable feature of this colossal architecture lies in its quite a number of flights of dangerously steep stairs, where pitch darkness reigns supreme, while outside, it is brilliantly sunny.

The flat roof of the Dzong commands magnificent view of Mount Everest and Makalu over a hundred miles away as the crow flies. What has been very aptly said about the Potala, the palace of the Pope King of Tibet, equally applies to this superb castle. "It is not a palace on a hill, but a hill that is also a palace."

From Kampa Dzong to the north is visible on the far off horizon peeping snowy range of what has been designated by Sven Hedin as the Trans-Himalaya which lies to the north of the great river Tsan-po, "the life artery of Tibet," which runs across almost the entire extension of the vast plateau to a distance of 13,000 miles from Kailas right up to the dense forest of the Abor Savages in Assam, where it takes up the name "Brahmaputra," and flows down to the plains of India.

"There is a great question-mark in the sunny heights, in the purity and beauty of snow, earth, and atmosphere. We talk of heaven, as though it were some place better than the World. Is not that an insult to the Creator of the World? There is a peace in Nature, a peace in which death seems trival and meaningless, a transition in some evolutionary process of which man is an unending part. But why hasten death through strife and suffering? The true index of war is not death, it is the misery and suffering it creates, which renders man incapable of appreciating the beauty of his environment."

—F. S. Smythe.

"After scrambling, slipping, pulling, pushing, lifting, gasping, looking, hoping, despairing, climbing, holding on, falling off, trying, puffing, loosing, gathering, talking, stepping, grumbling, anathematising, scraping, hacking, bumping, jogging, overturning, hunting, straddling, and at last attaining for know ye that by these methods alone are the most divine Mysteries of the Quest reached."—I. N. Collie.

#### CHAPTER VIII

# THE THRILLING MARCH FOR THE BATTLE ZONE

"We penetrated further and further into this mysterious Tibet."

—Trans-Himalaya, Sven Hedin.

"Happy days, when everyone was strong and unstrained; and hope ran high."

—Everest, 1933

FTER crossing the bitterly cold and dreary uplands of Donkya La region, it is pleasure to spend a few days at Kampa Dzong at an elevation of nearly 14,000 feet which is the average height of the great plateau. Every time, Expedition suffered greatly while negotiating the high (18,000') passes of the Donkya region. In 1924 Beetham had a severe attack of Dysentery. Mallory had disquieting symptoms, and Somervell "suspected the possibility of appendicitis." With reference to the 1922 Expedition, General Bruce writes: "What was very much brought home to us was the absolute necessity of windproof material to keep out the tremendous cold of these winds." In the same year, in the home of blizzard, three porters who had lagged behind with the slowest of the yaks lost their way after the twilight deepended into night. They stayed out the whole night in the open and continued their journey the following morning to the nunnery of Tatsang some five miles away. General Bruce remarks: "These men had not yet been issued with their full clothes and how they managed to sit out the night clothed as they were and without any damage of any kind passes one's comprehension. So low was the temperature that night that the quickly flowing stream outside our camp was frozen solid." Next to Phari, Kampa is the place where it is necessary for an expedition to change the transport animals. And this is an affair which requires at least two or three days, as the animals are to be procured from different parts of the country. Besides, negotiation as to the fixing of rates of hiring baggage animals is not only an irksome but a very dilatory process. They were to receive transport animals at the "current rate" according to the pass-port of the Dalai Lama, but unfortunately there was no current rate. These are factors which make delay inevitable. In the meanwhile lower elevation, comforts, brilliant sun, and lastly, more or less prolonged rest at Kampa, all contributed to recuperation.

The march onwards from Kampa right up to Shekar Dzong is a westerly one. Although the routes adopted by the different expeditions from Tengkye to Shekar vary to a certain extent, they are essentially the same. In 1921 when the first Mount Everest Expedition was conducted, the high plateau of Tibet, westwards from Kampa Dzong, was practically unknown.

From Kampa the Expedition branched off westwards to Lingga, a march of sixteen miles. For the first four miles it is a pleasant ride across a great plain. Shortly after the Yaru river is crossed at the picturesque village of Mende with its attractive willow trees. Thereafter on passing over a spur, formed of slaty rocks, another great plain comes in sight. It is a plain which extends all the

way to Tingri which is over twenty miles away to the west of Shekar, seven days' march away from Kampa. This plain is, however, at places seamed with almost barren, undulating hills of variegated hues. The Yaru and the Bhong Chu (which takes up the name 'Arun' in Nepal), flow across the plain almost longitudinally over practically the entire extension of this great plain till they take up their southerly courses. It should be mentioned here that the latter river forces its way through tremendous gorges that cut across the main Himalayan chain almost midway. between Mount Everest and Kinchenjunga. Five miles. across this plain westwards is the village of Lingga, surrounded by marshes and ponds. Lingga boasts barley fields and long green grass emerging between patches of water. Here other villages come into view scattered over the plateau. The existence of a number of hamlets here. is an unmistakable sign of prosperity. Prior to 1921 the villagers never saw a European. It has been remarked that when for the first time they happened to come across the Sahibs, they felt shy, but they soon became friendly. From Lingga is seen to the south the main snowy rangeof the Himalaya, while on the way to Lingga, if the weather permits, Mount Everest emerges to the view amid, a world of lesser peaks.

From Lingga the next march is to Tengkye Dzong. It is a journey of thirteen miles over a perfectly level plain. The midges and the sand-flies infest the whole ground, and are a constant source of trouble and annoyance to travellers as they hover around the heads of the intruders, in hundreds. The plain is nevertheless fertile as is evinced.

by the presence of herds of yaks and flocks of sheep that are found all the way grazing upon it. In the marshes and ponds bar-headed geese, Brahminy ducks, mallard, and teal hold high festival till the approach of winter. What is very astonishing about these birds is that they "are almost as tame as barndoor fowls." A march over ? the Tibetan plain, it must be remembered, is not an easy affair, as at about eleven o'clock every morning the wind gets up and plays havoc till sundown, as with it the atmosphere becomes, so to say, absolutely clogged with dust and sand, so much so that some members of the Everest Expeditions had to have recourse to the Matthews respirator. Ruttledge writes: "The dust penetrated everywhere, making our food and drink gritty and our throats dry." On the way to Tengkye are seen some curious sand dunes which are some twenty feet in height. These sand dunes are on the move and are the novel -creation of wind sweeping across sandy plains.

Tengkye Dzong is reached by finally skirting a swamp at the head of which there is a fine, little lake, on the opposite side of which rise up the walls and towers of the fort of Tengkye. This lakelet is a veritable home of waterfowls. The fort overlooks the lake and dominates the hamlets and the monasteries picturesquely situated on the hill sides. Tengkye itself is at the mouth of a wide valley. About half a mile away is a large village and a big monastery beautified by a charming willow grove full of birds. Ruttledge writes: "It is a never-ending joy to find the birds of Tibet so tame; the place is a paradise for the ornithologist."

Like Gautsa Tengkye boasts level ground. Here in 1933, the porters played football of some sort. It was an amusing game in which the chief aim was to go for the ball and to hit it by "feet, hand, or face" It has been remarked: "The Tibetans, to whom an altitude of 15,000 feet was as sea-level to us, were indefatigable."

Tengkye lies half-way between Darjeelng and Mount Everest. In all the expeditions, transport animals were changed here, as the next place of importance is Shekar Dzong which is seven marches away from this Tibetan town. The Dzongpen (magistrate of a division) of this place proved very friendly to the expedition parties. In 1933 he advised the Expedition members of that year to avoid the old route via Gyangkar Nangpa and take a parallel route to the north over the Baman Dopté Pass. This suggestion is in view of the most unruly nature of the people of this district.

From Tengkye to Chusar it is a march of about fourteen miles. On the way are seen well-irrigated barley fields. Shortly after, a climb of some 3,000 feet brings one to the top of a pass called the Tengkye Pass (17,000'). From the Tengkye Pass comes the large and picturesque lake of Tsomotretung to the north-east. Far away to the north of the lake the peeping snow peaks of the Trans-Himalaya dwarfed by distance greets the vision of the spectator, while to the imagination flashes the intervening broad sheet of crystal-clear water of the swiftly flowing Brahmaputra. To the west one can look down into the valley of the Yaru flowing gently through a flat valley. The descent from the Pass, although a very steep one,

is rewarded with the exquisitely sweet smell of a kind of white and pink trumpet-shaped flower which grows here in abundance. The flower is, however, poisonous as is evident from the fact that no animal would touch it. Colonel Howard-bury writes: "I picked some flowers of it and put in my button-hole, but was warned by the Tibetans not to do so, as they said it was poisonous and would give me a headache." While the hill-sides are carpeted with these flowers, the valley at the bottom of the hill is covered with gorse bushes. Flocks of sheep and cattle graze upon it all day long. Not far off is Chusar Nango with its dilapidated tower of stone. To the south is seen the Nila Pass which leads to another forbidden land,—Nepal.

Gyangkar Nangpa is a short march of some sevenmiles from Chusar. The way is across a wide plain through which flows "the muddy and the sluggish waters of the Yaru." Nearly three miles away from Chusar the river had to be forded. In summer it is about 80 yards wide and not more than three feet in depth. Sandy hillocks five to six feet in height raise their heads around gorse bushes which in their turn emerge from these curious heaps of sand to the best of their ability-it is verily a competition between the drifting sand and the growing bushes. Gyangkar Nangpa was the country residence of the then Phari Dzongpen. His house as depicted in the words of Howard-bury was "a fine stone building dominating all the small houses. The tops of the walls were all covered with gorse and juniper, rather suggestive of Christmas decorations."

The great impressive peak of Sangkar Rhi is near Gyangkar Nangpa. This peak lured away in 1922 Finch, Wakefield, Mallory, and Somervell who attempted to climb this 20,000 feet peak but did not succeed.

The next camping ground is at Shiling where an old lake-bed is clearly recognizable. On the way to Shiling and before reaching Transo Chumbab the 1921 Expedition suffered much from a violent snow-storm. When the storm raged high "every one dressed up as though from a gas attack with goggles over the eyes, and comforters and handkerchiefs tied over the mouh and nose to keep the sand out." The Shiling route is full of big sand-dunes of which some rise to a height of 20 feet or more, and when swept by furious wind blow like smoke. Travellers and animals are then apt to lose their way and for that reason do not move when overtaken by a sand-storm.

In 1924 in the morning of April 21 some of the members of the Expedition climbed a hill above their camp and caught a sight of Mount Everest some sixty miles away to the south-west. This was the view which the mountain presents to the east, on which side it is distinctly a snow-peak. From here was visible a face which running down to 6,000 feet from the summit is lost in the mazes of smaller peaks. Norton writes: "A beautiful and most formidable mountain it seems from here." In 1921 from a spot, a few miles further ahead and at the entrance of the valley of the Bhong Chu, a precipice of 3,000 feet was climbed for the sake of diversion and amusement. Howard-bury writes: "The view extended to the East from beyond Chomalhari to Gosainthan, a distance of

some 250 miles. In the centre Mount Everest stood up all by itself, a wonderful peak towering above its neighbours and entirely without a rival." It will be of interest to know that a projection on the plains of Bengal and Behar of the range beginning with the Nepal giant, Gosainthan, and culminating in Chomalhari, the Queen of the Tibetan mountains, would be the straight line joining Darbhanga in Behar with Cooch Behar in Bengal.

From Shiling a day's march away is the village of Trangso Chumbab which was reached both in 1921 and 1922 by the above-mentioned Gyangkar route. In 1924, however, Trangso Chumbab was reached after crossing the Baman Dopté Pass and thereafter arriving at Shiling by following the valley of the Yaru. This is only a slight modification of the old route. In 1933, however, the Expedition altogether avoided the Gyangkar-Shiling route and reached Transo Chumbab via Khengu and Jikyop. It is an arduous march of eighteen miles that is required to reach Khengu, on the way to which the high Baman Dopté Pass is negotiated. Khengu is abominably full of dust and the Expedition had to move on to the medows of The transport animals, however, had to be brought via the Gyangkar route as the negotiation of the Baman Dopté Pass was calculated to be not ony tiresome but also extremely difficult. From Dochen Sankar-rhi is seen towering up on the south.

The march to Dochen proved ominous. The ponies of Karma Paul and Lobsang Tsering had both fallen down. It should be mentioned here that Mr. Paul is Tibetan by birth and is, at the time of writing this book, in

Darjeeling wherefrom his services were secured by the Expeditions of 1922, 1924, and 1933. Ruttledge writes: "He speaks almost perfect English, writes it very well indeed, and is equally at home in the Tibetan, Nepali, Urdu, Bengali, Sikkimese and Lepcha languages." Lobsang Tsering was at the head of the postal organization of the Expedition, meant to facilitate communication between the Base Camp and Kalimpong. Karma Paul broke his little finger as a result of the fall. Lobsang sustained a fracture. He was at once given an anæsthetic and his collar-bone was promptly set by McLean. But anæsthetic at over 14,000 feet had its queer effect. Lobsang did not seem to be on the way to regaining his consciousness. It "\* \* \* \* and the doctors had to work has been written: hard with coramine and artificial respiration until the heart's beat was resumed, and a very green and shaky Lobsang returned to consciousness."

In 1933 the transport animals that carried the expedition baggages along the Gyangkar route consisted of yaks and donkeys only. About the latter Ruttledge writes: "It is amazing that these little creatures with their pipe-stem legs, can carry 160 lbs., the same as a yak. If given more than that they simply lie down, and the transport officer has to re-allot loads, with the active non-co-operation of the drivers." On the way to Dochen and again before encamping at Jikyop, the Chiblung Chu had to be forded. The water was fairly deep and everybody became inquisitive to know whether his own particular bedding was getting soaked. The question evidently hinged on the size of the baggage animal. The yaks, gentle by nature,

however, played a foul play here. These animals are very fond of assembling on a sand-bank if there is any in the middle of the river wherefrom it is difficult to dislodge them unless by throwing at them stones with unimpeachable accuracy. Why this cold-and-wind-proof animal should demur to wade through water is not easily, understood.

Jikyop is one day's march away from Dochen. Here in 1933 they had to spend some unpleasant hours amid a sand-storm. The next march is to Transo Chumbab.

From Transo Chumbab all the Expeditions branched off to Kyisong, a pretty little village on the banks of the Bhong Chu. This march is a long one of eighteen miles and is trying. Just a mile or two ahead of Kyisong begins a striking change in the landscape, so much so that the country around has been not inaptly compared to the mountains of the moon. On all sides are isolated stony hills of conical shape. The scene that presented to the view of the Expedition members from the top of a low pass, a mile or two beyond Kyisong, finds felicitous expression in the words of Ruttledge which run thus: "\* \* \* we looked across a wonderful landscape of plain and hill to the single pyramidal rock on which Shekar stands. Had the western geographers known of this place, it would certainly have been included among the wonders of the world. \*\* \*\* Even more than Kampa, it is a setting for a fairy story, a place of enchantment." The march is principally along the Bhong Chu Valley shut in both sides by limestone hills which rise to some three to four thousand feet above the river. Norton described the

scenery thus: "As we neared Shekar these grew always more completely barren and desolate until one could picture oneself among the mountain scenery of the moon; utterly devoid of vegetation, they were of every shade of colour, from lemon yellow to rust-red or purple." Bhong Chu (called Arun in Nepal) on this Tibetan plateau stands only second to the Tsan po (called the Brahmaputra in the plains of India) in width. It is fully two hundred feet broad, and the valley is flat and delightful. Shekar is a short march of twelve miles from Kyisong. On a rocky mountain that seems to pierce through the blue vault of heaven with its sharp conical top stands the towering monastery with its innumerable buildings and fort which soars above them all. The whole edifice from a distance appears to be embossed half way up the turreted hill. The buildings of the fort are picturesque and bear a striking resemblance to Gothic architecture. There is a colossal image of Buddha in the monastery. The Reconnaissance, 1921 is written: "This was by far the largest and most interesting place that we had yet come across." Shekar is a great monastery where some four hundred monks reside. About Shekar Dr. Somervell in his After Everest writes that it is "the largest town and monastery hereabout with wonderful buildings and evidence of very definite civilization." Shekar means "shining glass." It is an apt appellative. All the houses on the hill-sides and at the foot of the rock on which the mighty edifices stand are white, the whiteness being all the more exaggerated by reason of the contrast with the

brilliantly coloured hills all around, which are mainly red and dark brown.

The Dzongpen of Shekar is a very important official in this part of Tibet. The whole of the country south of Shekar including the holy Rongbuk Valley are in his jurisdiction. In 1922 the Dzongpens were all presented with Homburg hats, while in addition to these cheap hats the Shekar Dzongpen was given photographs of the Dalai Lama and the Tashi Lama. In The Assault on Mount Everest, 1922, General Bruce writes: "The great Lama of Shekar is an extremely cunning old person and a first class trader." In this year the Expedition collected an army of Tibetan and Chinese curioes. In 1924 this official rode out to meet the Expedition and greeted the members most courteously. Whatever may be the remark of General Bruce against this Tibetan Magistrate, we notice in hischaracter some notable trait as revealed in 1924. In that year a small mistake was committed in the price fixed for transport-a mistake in favour of the Expedition. Though meagre it was not so when multiplied by nearly 300, a figure which represented the number of transport animals, but the Dzongpen did not allow his aristocracy to suffer from rectification of defects in an undertaking which had already been got through.

In 1922 the Expedition had to halt for three days at Shekar in view of movement of officials and marching of troops by Shekar from Tingri (twenty miles away to the west of Shekar )to Shigatse, the seat of Tashi Lama.

In 1933 the highest roofs of the gigantic buildings were attained and therefrom the ruined and highly steep

Dzong was climbed up and finally the top of the lookout post was reached. It was a precarious feat as in the words of Ruttledge it "seemed as if it might come crushing down at any moment." Mount Everest from here wassome fifty miles away to the south and could be seen if weather permitted. Owing to inclement weather in the south they could through a telescope catch an occasional glimpse of the North-east aréte and the North Ridge of Mount Everest from this giddy point some one thousand feet from the base of the hill.

The Expedition must be on most friendly terms with the Shekar Dzongpen as otherwise it would not be possible to recruit Tibetan porters for work at the glacier camps and organize supplies of fuel to the Base Camp. The reasons are not far to seek. The Tibetans are as a rule reluctant to work above the snow-line, as they are not as physically fit as the Sherpa porters are in this respect. Not only that, they are afraid of treading on glaciers on spiritual grounds. Besides at this particular time of the year (April) they have to make the most of their time in their fields in attending to cultivation during the short summer season.

From Shekar an Everest Expedition is to strike off due south. The foot of the mountain is just four marches away from the picturesque castle of western Tibet. From Shekar the real thrill of the journey begins. The scenery all the way across the valley of the Dzakar Chu and that of Rongbuk wears altogether a new aspect, and throwsout a hint as to the nearness of the King of Heights.

Panglé is a short march away from Shekar. The first

part of this traverse lies through a very narrow defile. The loads on the donkey's backs got scraped off, and some were loosened and had consequently to be securely tied up again. The go was terribly disquieting. Ruttledge writes: "We had to work pretty hard, some retrieving the donkeys which had taken advantage of the position, others helping the profane drivers to tie the loads up again." The Bhong Chu is crossed by "an unusually good bridge." Even in the middle of April, Panglé had been found snow-covered.

Next day Pang La, a pass of 17,000 feet, is crossed. It is a steady pull to attain a height of 3,000 feet from the encamping ground. This is the last pass that is negotiated before entering into the threshold of the battle zone which is only three marches away from here. On the way to Everest Pang La is evidently the last towering height that commands a glorious view of Everest, some 35 miles away as the crow flies.

From the pass itself four of the highest mountains of the world come into view, while on climbing a hill over the pass two more giants stand forth, one in the far east and the other in the far west. From east to west they run thus: Kinchenujnga (28,156'), Makalu (27,790'), Mount Everest (29,002'), Gyachung Kang (25,910'), Cho Uyo (26,750'), and Gosainthan (26,305'). It is a magnificent panorama of the main Himalayan Range, which from here seems to skirt the horizon to the south. Amid a jagged line of peaks these giants stand out in such a dominating way that their satellites are distinctly dwarfed in their presence.

Mount Everest most befittingly rears, up its mighty

stature in a central position. The northern face of the entire topmost portion of Mount Everest heaving up to a height of 6,000 feet was found in this season almost bare of snow. It is undoubtedly due to the sweeping northwest wind that lashes mercilessly at the precipitious slopes of the rocks forming the great pyramid. Makalu from here "looked impossible," and they "were promptly stumped," on stealing a glance at it through a telescope.

Barren though the pass is, it has, for reasons not known, has earned the appellative "Pang La," or the grassy pass. While bidding adieu to this interesting pass, we cannot help quoting the following informative lines of General Bruce. "\* \*\* \*\* on this occasion the mountain was almost clear of snow and gave one a very different impression. We have recognized the fact that Everest, on its north face, is essentially a rock peak. Unfortunately for us, it did not remain clear of snow for long, rough weather again coming up; the next time we saw it we found it again clothed from head to foot in snow."

After crossing the Pang La, the Expeditions had to reach Tashidzom, a village which boasts a fine grove of willow standing in the midst of green meadows. This is well watered and looked after with great care, as the headman of the village has to supply wood to the Rongbuk Monastery which is partly collected from here. Wood as fuel in Tibet is very hard to get.

The last village on the way to Mount Everest is Chodzong, fifteen miles away from Tashidzom, in the valley of the Dzakar Chu. The march onwards is a traverse along this barren valley. The Dzakar Chu rises from the

snout of the East Rongbuk Glacier, and it is towards this that the Expeditions had to move.

There was quite a large grove of thorn-trees opposite to the place of encampment of the 1922 Expedition. This was just luring them away in the hope of materializing their "vision of a wood fire," but their spirit was quickly damped when they were told that gathering of any sticks from this grove would at once stir the blood of the demons infesting the grove who would eventually revenge on them.

The stage from Chödzong to Rongbuk is characterized by utter desolation. It has been thus depicted by General the final march from Chödzong to the Bruce: Rongbuk Monastery being extremely interesting. There is only one word for it: the valleys of Tibet leading up to the Rongbuk Monastery are hideous. The hills are formless humps, dull in colour; of vegetation there is next to none." A redeeming feature of the utter desolation of this last stage is the big monastery of Rongbuk. Norton's description is very interesting: a cheerless desolate valley suggestive at every turn of the greater desolation to which it leads. The valley is narrow and the river absurdly small to represent the drainage of four great glaciers with some dozens of smaller tributaries. The hills on both sides are ugly brown humps of limstone devoid of any beauty of colour or form. For 10 to 15 miles on either bank of the river-bed stand the great moraines that once flanked the now shrunken glacier, for all the world like interminable railway embankments." These gigantic moraines are composed of white crystalline rocks, their whiteness being enhanced by the brown hills that shut up the valley on both sides. These crystalline rocks evidently fell from the cliffs of Mount Everest and its satellites in ages long gone by. Even during the last week of April bitterly cold wind comes sweeping over this valley from the extensive snow-fields that lie ahead giving one to understand that the land of ice and snow is drawing very near. The valley narrows a good deal as the hill-sides come closer and closer. Grass is conspicuous by its absence. The scenery all around speaks of complete desolation. The go was over the snow-sprinkled track closed in on either side by gigantic moraine shelves. A turn in the valley all of a sudden reveals the great mountain which seemed to dam up the valley further to the south, and almost simultaneously the Rongbuk monastery figures close by to one's great amazement.

Rongbuk is probably the highest permanently inhabited place in the world. Its altitude is 16,500 feet. More than 300 monks reside here. Of these some twelve monks inhabit the monastery permanently. Others come in periodically, and stay here for uncertain periods. These associated lamas are mostly well off, and they invest sufficient money with the villagers of the surrounding countries in return of which the villagers regularly supply them with requisite food stuffs, such as barley, eggs, milk, etc., and fuel. The maintenance of these migrating lamas does not, therefore, represent a drain on the resources of the villagers. In any way, how the people of the thinly populated countries around can maintain this army of monks buried in the temple, round which icy-cold winds howl throughout the year, passes one's comprehension.

The Rongbuk, particularly the upper Rongbuk Valley, is sacred. Its sacred character is neither legendary nor rests on its remoteness or its splendid seclusion and isolation, but is well-founded. The tameness of the ashramdeer is proverbial in Hindu Mythology. There are even hundreds of instances on record in which it has been observed how ferocious animals such as tigers instantly lose their ferocity the moment they happen to come within the range of the aura that emanates from a perfectly holy man. Rongbuk upholds the truth underlying this mystic records of yore. It is in the fitness of things that the valley which leads right up to the foot of the highest mountain in the world is sacred. A few quotations from the narratives of the various expeditions will be convincing to the readers.

From the narratives of the 1921 Expedition we find: "At the entrance of the valley, we passed some very tame burhel within a few yards of the path, \*\* \*\*" "Every animal we saw in this valley was extraordinarily tame. In the mornings we watched the burhel coming to some hermits' cell not a hundred yards away from the camps to be fed and from there they went on to other cells. They seemed to have no fear whatsoever, of human beings. On the way up the valley we passed some females that were so inquisitive that they actually came within 10 yards of us in order to have a look at us. The rock pigeons came and fed out of one's hand, and the ravens and all other birds here were equally tame; it was most interesting to be able to watch all their habits and to see them at such close quarters." From those of the 1924 Expedition:

Wild sheep and burhel roam about near the Base Camp. "Sometimes they came within 20 yards of our tents, even when people were moving about in camp. Higher up on the mountain was a hermit's cell and we were told that the sheep used to visit this sanctuary, where they took food out of the hermits' hands." Norton in The Fight for Everest, 1924 writes: "The birds walked about all around our feet, the hill rock-dove, the alpine chough, the little brown accentor-true friend of man like all his species-Adam's snowfinch and Brandt's ground-linnet, most of them actually resting in the vicinity. And one day a herd of "burhel"--one of the shy and wary wild sheep of the Himalayas--grazed within 25 yards of our tents, all fear of man banished by the fact that the solitary lamainhabiting the hermit cell just above the camp made a practice of feeding them. Fully to appreciate these things you must have spent six weeks up the East Rongbuk Glacier in the land of rock and ice where life is not."

Further up the valley, along the gigantic moraineshelves are a nunnery, and some secluded cells and caves where hermits lead a life of meditation and somehow eke out an existence. These recluses are offered scanty food fairly regularly from the monasteries and nunneries. How without any food or drink and even fire in this miserably cold region life-blood keeps on running through their veins is unaccountable. "Their cells are very small they spend the whole of their time in a kind of contemplation of the Om, the god-head, and apparently of nothing else," writes General Bruce. He also adds: how it is possible for human beings to stand what they

stand, even for a year, without either dying or going mad, passes comprehension."

Rongbuk means "the valley of precipices or steep ravines." In the Upper Rongbuk Valley which is regarded as extremely sacred, killing of animals is strictly forbidden. The great prayer-wheel that lies at the mouth of the valley opposite to the village and monastery of Chobu marks the limit beyond which to the south animals are not allowed to be killed.

The Head Lama of the Rongbuk Monastery was sober-minded and a man of dignity and great reputation. Ruttledge remarks: "For all his dignity, he is very human, and a good friend." The leader further writes: "He told me to be very careful and to allow no killing of animals or birds in the Rongbuk Valley, and to treat his people well. Then he promised to pray for us." In another place it has been observed: "He has a most attractive smile, and an air of great authority." General Bruce writes: "Then we went up to pay our respect to the Rongbuk Lama. This particular Lama was beyond question a remarkable individual. He was a large well-made man of about sixty, full of dignity, with a most intelligent and wise face and an extraordinarily attractive smile."

This Head Lama had the unique opportunity to witness the glorious pilgrimage of the Europeans as represented by their four great Expeditions of 1921, 1922, 1924 and 1933, in which last year he was about seventy years of age. This is evidently a great attainment as the rigor of the Tibetan plateau is inimical to life, which in



THE RONGBUK MONASTERY at 16,500' and 16 miles to the north of Mount Everest.

this dreary land is a constant wrestle with cold, wind and scarcity.

This great Lama once made a query as to the object of the Expedition. General Bruce writes: "As a matter of fact, it was very much easier to answer the Lama, than it is to answer the inquiries in England. The Tibetan Lama, especially of the better class, is certainly not a materialist. \*\* \*\* I was fortunately inspired to say that we regarded the whole Expedition, and especially our attempt to reach the summit of Everest, as a pilgrimage." The Lama once told Karma Paul, the renowned interpreter, that General Bruce had been in a previous incarnation a Tibetan Lama. As to this alleged incarnation, however, General Bruce remarks: "I do not know exactly how to take this."

The blessing of the Rongbuk Lama was always sought for in earnest by all the climbing members of the various expeditions. He was very keen about impressing on the Expedition "that no animal of any sort should be interferred with," what to say of killing any. As a matter of fact every time word had already been given to the Tibetan Government to the effect that during an expedition they would not take to shooting. In 1924 the Lama had fallen sick and could not conduct the ceremony of blessing the Expedition, and we would see in a later chapter what had happened this year. The year 1933 witnessed the ostentatious parading of porters in their best in the premises of the Rongbuk Monastery, and each one was armed with a rupee for an offering. The Europeans stood in order

too. Each of them had to proceed in turn to be touched with the dorje and blessed.

Mount Everest which illusively seems from here to be quite near and easily accessible is in reality sixteen miles away. Filling up the southern end of the valley, Everest towers aloft in commanding majesty. The series of precipices of appalling steepness that present to the view from here looks forbidding to all intents and purposes.

Beyond the Rongbuk Monastery to the south begins the battle-zone. In words Ruttledge depicts: "Boulder and scree, snow, blue ice and precipices would be our scenery for the next three months." Life henceforth would be a continuous struggle with cold, wind, and altitude.

"Curiously enough, Everest is the only great Himalayan peak which can definitely be said to be accessible to mountaineers. Other great peaks may defy all comers for all generations, and among these I would number Kangchenjunga."—F. S. Smythe.

"The men who will force their way to the summits of Everest and Kangchenjunga will be men capable of disciplining their minds as well as their bodies, genuine philosophers at heart, who experience in mountaineering something far greater and finer than the mere physical joys of struggling with an inanimate opponent.—F. S. Smythe.

"Himalayan mountaineering is mental as well as physical. Nowhere is the control, conscious and subconscious, of mind over matter-better demonstrated than at great altitudes, and the reaction of the body to the processes of the mind is marked."—F. S. Smythe.

## CHAPTER IX

## NERVE-RACKING SURVEY AND A FOOTING AT LAST

"I decided to leave our bags in the sa phug and to attempt a reconnaissance higher up. We should walk the more easily, carrying only our mountain staffs."—My Journey to Lhasa, Alexander David Neel.

"There are three voices of Nature. She joins hands with us and says Struggle, Endeavour. She comes close to us, we can hear her heart beating, she says Wonder, Enjoy, Revere. She whispers secrets to us, we cannot always catch her words, she says Search, Inquire. These, then, are the three voices of Nature appealing to Hand, and Heart, and Head, to the Trinity of our being."

-Prof. J. ARTHUR THOMSON.

HE first expedition conducted in the year 1921 had as its objective the finding out of a practical route to the summit of the mountain. It was a very arduous task, and a long-drawn-out struggle, it may be said, from May 18 to October 4, as on the former date the Expedition left Darjeeling, while on the day following the latter, it left Kharta with the view of coming back to civilization. Owing to a very late start they had to bear the brunt of sweeping monsoons, one rushing from the south off the Bay of Bengal and the other from the west off the Arabian Sea. The Bay of Bengal monsoon which causes heavy downpour in Sikkim can cross the main Himalayan chain only when it is exceptionally strong. Unfortunately such was the case in 1921. On their return to Darjeeling somebody remarked: "We had good rain." Mallory was

tempted to reply: "We had bad snow." During the early part of their exploration to the western side of the mountain they were overtaken by the Arabian Sea monsoon, which caused much rain and snow on that side. Now when in the early part of September they were engaged in exploring the region to the east of Everest in the Kharta Valley, they had to confront the other monsoon and had to watch to little or no purpose the blue and cloud-free sky to the west. Hampered in every way though they were, the work they had done was immense. They not only reconnoitred over a vast tract of land and climbed many precipices of appalling heights to the north, then to the west, and lastly to the east side of the mountain, with the object of finding out a possible and the easiest route to the top, but surveyed and described an area of 12,000 square miles. Besides, had been worked out in detail photographic survey of 600 square miles of the environs of Mount Everest. All this was done by Major Morshead who with his assistant surveyors left Darjeeling with fifty porters on May 13. Geology was creditably investigated by Dr. Heron. A new world in the wilderness of mountains and the skirting Tibetan plateau was thus opened up to the knowledge of the world at large.

In the year 1921, ear-marked for reconnoiting the mountain, the Expedition first proceeded from Shekar westwards following the right bank of the Bhong Chu all the way, till they reached Tingri, 20 miles away from Shekar. Tingri is an extensive level ground some 20 miles in length and 12 miles in breadth. A large part of the plain is saturated with soda, and birds and beasts are

almost conspicious by their absence in this alkaline region. Plants at Tingri are few and far between. A small hill in the middle of this plain is inhabited by the people of this small Tibetan town. In any way Tingri boasts military governor, under whom were found a sergeant and four or five soldiers. On the top of the hill the old Chinese fort is still seen in a dilapidated condition. Books written in Chinese character are still preserved in this castle of far China.

China's position as Suzerain of Tibet appears to date from the early days of the Manchu Dynasty in the latter part of the seventeenth century. At that time Lamaism or Tibetan Buddhism was reigning supreme over a vast area of High Asia from Ladak to Manchuria. The shrewd Manchu Emperors at once recognized the vulnerable point of weakness in the politics of the Lama-led countries, and not only adopted Lamaism as their state religion, but also recognized the Dalai Lama of Tibet as its head, and thereby imperceptibly secured a hold over Tibet, Mongolia and other lamaistic countries of Asia.

During the latter part of the eighteenth century when the Chinese power was on a decadence, the Nepalese in about 1790 invaded Tibet and sacked Shigatse. Tibet sought for the help of China. The Manchu Emperor, Ch'ien Lung despatched an army into Tibet which drove back the Nepalese to their own country. This Tingri fort thus came into being at this time of warfare.

Territorial integrity of Tibet was never attained. On the other hand soon after the end of the 1904 Military Mission led by Colonel Younghusband into Lhasa, Chinese forward

movement in Eastern Tibet began. The quite intentional procedure of Great Britain as evinced by the denial to herself the right of stationing a British representative at Lhasa suffered, so it seemed, a wrong interpretation in the minds of the Chinese Government, who in 1910 succeeded in overthrowing the Tibetan Government by a sheer force of troops. But a year or two later after the revolution in China, Chinese suzerainty over Tibet was finally brought to a close.

On the hills around Tingri there are evidences of the fighting that once took place. A large number of ruined and deserted villages that were seen in the valleys around had been the outcome of the nasty hostilities between these to neighbouring territories. The Tibetans still paid tribute to Nepal for Tingri and its surrounding countries.

The Expedition took shelter in an old house which was previously a Chinese rest-house. The people of the locality do not utilize this beautiful building which is regarded as haunted by ghosts, as here many Chinese died. Water of the locality was found muddy. About half a mile off a clear spring was discovered which bubbled up in a deep bluey green basin. On June 19, after a month's journey from Darjeeling, the Expedition reached Tingri.

From Tingri Bullock and Mallory started off with the view of reconnoitring the north and the north-western slopes of Mount Everest. Wheeler and Heron left for Kyetrak. Wheeler was to begin his photographic survey from Kyetrak, a village to the west of Mount Everest and lying at the foot of the Khombu Pass on its Tibetan side. This pass leads to the Khombu Valley in Nepal. Kyetrak

is a wretched village of a few dirty stone houses and a big chorten. Beyond to the south is the Khombu Pass which is sometimes dangerous to cross owing to extraordinarily powerful blizzard which may sweep away whole convoys. On the way to the Khombu Pass were found many curious ice formations. It has been written: "As we passed onwards, new glaciers opened up in every valley." Almost midway between Tingri and the Khombu Pass is Pushi Pass (Marmot Pass). This pass is so called because of its southern slopes being frequented by quite a large number of marmots.

The Expedition proceeded even far away to the west of the Rongshar Valley. Nyenyam, the last Tibetan town, is at the junction of the Po Chu and another almost equally big river rising from the glacier of the Nepal giant, Gosainthan. Po Chu flows through Nepal where it is known as the Bhotia Koshi which further away in its downward course meets with the Dudh Koshi to form Sum Koshi, which last empties itself into the well-known Arun of Nepal at a point almost to the south of Mount Everest, which is eventually completely girdled in a clock-wise direction by the Bhong Chu, the Arun, the Sum Koshi, and the Bhotia Koshi. The twin peaks of Gosainthan are distinctly visible from Nyenyam. From the distant parts of Nepal, this mountain seems to possess only one peak.

A party went off to the Rongshar Valley to the southwest of the Pushi Pass. This is looked upon as a sacred valley. Here many hermits and nuns were wrapped in meditation in their respective caves. They were told of a hermit who after meditating for ten years would be living on ten grains of barley a day and "they were looking forward to that day." A female anchorite who lived for 138 years forbade killing of animals in this holy valley. It has been pointed out that "that was the reason why the flocks of burhel we had passed were so extremely tame." They walked 7 or 8 miles down the valley. "The rose bushes were charming all the way. In July this valley should be called the valley of roses."

In the sacred valley of Rongshar is the celebrated temple of Lapche Kang containing many images of Buddha. Lapche is the home and the birth-place of Mila Repa, a wondering monk who lived in Southern Tibet in the eleventh century. He taught people by songs and parables. His writings are still extant and are highly enlightening. Owing to the sacred nature of the Rongshar Valley, the slaughter of animals is strictly forbidden;—"we were only able to buy a sheep on promising not to kill it until after quitting the valley." It has been observed in *The Reconnaissance*, 1921: "Although they are Buddhists and accordingly object to the taking of life, they do not in the least mind killing their sheep or their yaks for food, but they object to their shooting wild sheep or gazelles or wild birds for food."

From the Rongshar Valley is seen to the west the beautiful peak of Gauri-sankar, regarded as holy by the Hindus, in whose mythology this peak finds a great place. In Tibet this mountain is called Chomo Tsering or Trashi Tsering. It is the esternmost of a group of sacred peaks known collectively as Tsering Tse-nga (*Tsering* means five peaks). The remaining four peaks are: Tingki

Shalzang, Miyo Lobzang, Chopen Drinzang, and Tekar Drozang. Beyond Gaurisankar to the west are seen one after the other: Cho Uyo, Gyachung-kang, and Mount Everest. The Survey of India has distinguished the peaks of Cho Uyo and Gyachung-kang by the name of M<sub>1</sub> and M<sub>2</sub>. These mountains are to the W.N.W. of Mount Everest. Gyachung-kang is conspicuous by its colossal overhang.

Mallory and Bullock walked from the Rongbuk monastery some seven miles further up to the Rongbuk Valley. In this region of rocks and ice they kept themselves laboriously engaged in training Sherpa porters in snow and ice work. Besides, they were exploring all the different glaciers from that side with the view of finding out a route suitable for climbing the mountain. Mallory, one of the greatest mountaineers world has ever produced—greatest from every point of view—was deceived by a small trickle of a stream issuing from the East Rongbuk Glacier. He would have certainly pushed on, had it been found of some size. Of course, Himalayan glacier streams are always small in the region of their birth, but it was deceptively smaller than what could be even imagined.

After having thus reconnoitred the northern and the western sides of the great mountain, they started off in search of the Kharta Valley to the west of Mount Everest. Rains had already set it. It was July 5. They were to!d that the village of Kharta in the Kharta Valley would be two days' march away from the Rongbuk Monastery. It has been rightly observed that "where distances are concerned all Tibetans are liars."

Their first halt was at Halung, eighteen miles away from Rongbuk. On the way Chödzong was crossed, where was found grazing many ponies on fine grassy fields. Cultivation of barley, the principal food-stuff of the Tibetans, was then in full swing. Halung was reached after negotiating a steep pass (12,000') above the valley and then descending down still steeper slopes. It is a prosperous village with well-built houses. A small glacier stream that runs through this valley has been turned to account in irrigating the fields. Wild flowers of all kinds decorate the banks of these irrigation canals. Small birds were found hard at work along the banks of crystal-clear streams. These were wonderfully tame. "\*\* \*\* these, when we were resting for lunch, hopped all around for food."

Then, Doya La, a seventeen thousand feet pass, was crossed. A quarter of a mile below the pass on the remote side grew Alpine flowers of various kinds on granite soil. The blue poppy was in abundance, while pink, yellow, and white saxifrages kept out of view the rocks on which they grew. The range on which Doya La lies acts as a barrier high enough to stop the way of the monsoon clouds and prevent them from penetrating into Tibet. This is why the region on the Tibetan side of the range is mostly dry and devoid of vegetation worth its name, while on the southern side the flora is in exuberance. Not far off was discovered a fine valley with a green lake.

The right bank of the Bhong Chu was then followed for ten miles, when the river was found rushing down a deep and terrific gorge. This river is not fordable.

Heron and Howard-bury did not proceed any further. They returned to Tingri via Tashidzom (south of Shekar Dzong) on July 11.

Then a move to Kharta on July 25 with all the stores of the Expedition. In the meanwhile, Wheeler came to take rest at Tingri and to develop photographs. He made a strenuous effort in taking photographs by climbing a spur of nearly 20,000 feet every day and waiting whole day in "icy cold winds and driving snow for the few opportune minutes when the clouds would lift. Seldom he was successful." Before leaving finally for Kharta Howard-bury made an excursion to the Hot Springs at Tsamda, about seven miles away to the north-west across the Tingri plain. Three hot springs were discovered. Of these one was quite large. It was a curious fact that a hot lake was detected high up on a frozen slope of Everest on the opposite side while assailing the mountain by air. This has been dealt with in the last but one chapter of this book.

Nezogu, some nineteen miles away from Tingri, was reached in one day. The first part of the go was across the wide Tingri Plain, the last, over tiresome moraine. Next stage was Rebu, fifteen miles away. Thereafter Chulunphu was reached after crossing the Doya La. Howard-bury climbed a rocky hill, 17,700 feet, near the pass. The wonderful scene that floated before the eyes finds expression in the following words: "Range upon range of snowy mountains extended right away to Kanchenjunga, and the course of the Arun could be traced wandering down through Nepal, while to the south towered up the great walls of Makalu." At Chulungphu

the Arun was one hundred yards in width. A mile lower down in its course, the Arun gallops in harness through the gorges "in which within a space of twenty miles it dropped from 12,000 feet to 7,500 feet, a drop of over 200 feet in the mile." Temperature during the day inside the tent was as high as 75°F. The village of Kharta was passed and then Samching Pass (15,000 feet) was crossed. A descent from this pass to some 500 feet brought them to a delightful level glen studded with small lakes. Fourteen lakes were counted, of which two or three were nearly half a mile long. All these lakes are of different colours "varying from a turquoise blue to green and black." Then appeared the steep pass, Chog La (16,000 feet), close to which were found three small glaciers. Across the top of the Chog La pass there was a wall built many years ago as a second line of defence against the Gurkhas, the first line being on the Popti Pass, further to the south.

On their way they were warmly entertained by the Dzongpen of Kharta Shiga. Great were the preparations he made to receive the Expedition. A large camp was pitched and on the ground inside was spread a beautiful Chinese carpet. The Expedition, however, regreted the lack of waterproof quality of the tent.

On August 2, Mallory and Bullock branched off with 32 coolies to explore the Eastern approaches to Mount Everest. Howard-bury and Wollaston took the fancy of visiting Gadenchöfel Monastery five miles up the Kharta Valley. The walls of the monastery were seen covered with paintings depicting scenes from the life of Buddha. "Cushions and tables were arranged for reception \*\* \*\*"

The Monastery was said to be 500 years old. Here Indian saints were represented by very dark and ugly figures. "Tibetans always despise the Indian and they therefore represent him as quite black and with the ugliest figures."

The Arun is not fordable anywhere except some 20 miles lower down Kharta near Lungdo, to the east of Mount Everest. The Popti Pass leading to Nepal is further to the south of Lungdö.

Kharta now remained the base headquarters of the Expedition until it was time to return to India in October.

Now we are to launch upon a discourse on the adventure through the Kama Valley in search of a possible route leading to the Eastern face of Mount Everest.

Nobody could say whether the Kharta river came down from Mount Everest. The shepherds, however, gave a clue to the effect that on crossing the Shao La or the Langma La, they would reach a valley called the Kama Valley which leads to Mount Everest. On the way to the Langma La a pretty turquoise-blue lake was seen. From the pass while looking to the west came into view "a most wonderful amphitheatre of peaks and glaciers." Three great glaciers were viewed meeting in the green valley below. It was a rare scene—the conjunction of a valley's green with the dazzling whiteness of a glacier. A similar spectacle greeted the vision of the aspirants to Nanda Devi in the Kumaun Himalaya at the foot of the mountain where lay the romantic basin carpeted with green grass that engirdles that Queen of mountains to a distance of some four miles and most jealously walled in all around by miserably steep mountains from all sides, the entrance

into which basin being the birth-right of a privileged few. One of the aforesaid glaciers evidently came from Mount Everest. One of the remaining two glaciers takes its rise from Kama Changri, a beautiful peak to the north of the Kama Valley, which was later on climbed by them. The white cliffs of Makalu and Chomolönzo (to the north of the former) which descended almost vertically to 11,000 feet into the valley below (Kama Valley) showed forth in all their glory and magnificence. On precipitous black rocks nestled a few dirty glaciers. Mount Everest being further off did not look as imposing. Their object was to approach Mount Everest as far as possible. So they descended to the valley. It was a steep drop of some 10,000 feet through luxuriant vegetation. Ultimately a grassy plain in the valley was reached called Pethang Ringmo (16,400'). It was then most delightfully bathed in sunshine and was already chosen as a Base Camp by Mallory and Bullock who had already arrived there. Pethang Ringmo stands "right under the gigantic and marvellously beautiful cliffs of Chomolönzo." Chomolönzo or N<sup>58</sup>, 25,413 feet, is a satellite of Makalu. A glacier here nearly one mile wide intervenes between the spot and the This is known as the Kangshang Glacier. The artillery of the Heights is here vigorously in operation. Avalanches of appalling dimensions thunder down its sides. day and night with deafening roar. Everest from here is far off and appears to fill up the head of the valley. A circle of immense and unassailable cliffs overhung by hanging glaciers form its most impracticable rampart.

Next morning they climbed the top of a ridge having

an altitude of 19,500 feet. Mount Everest from here was only three or four miles away. From this top to the southeast was seen a mighty array of towering peaks culminating in a 28,100 feet pinnacle so far unsurveyed. They christened the peak Lhotse which in Tibetan means the South Peak. Everest from this side looked impossible. Huge masses of ice detach themselves from the massif of Everest and thunder down into the valley below all the day long. From this point of vantage was discovered "a very curious conical peak" which was given the name of Pethangtse. On either side of this peak was visible two-very steep but not very high passes into Nepal. The rugged and immense cliffs of Makalu towered up to the south-east. Nearly one hundred miles away could be recognized Janu and Kinchenjunga.

Mallory and Bullock climbed a snow peak to the north of the Kama Valley. From the top (21,500 feet) they could spy a possible route up Mount Everest on the Eastern face. They surmised the existence of an alternative route from the next valley to the north of Mount Everest. They therefore intended to return to the Kharta Valley and to follow the Kharta river to its source.

The Kama Valley is regarded by the Expedition as one of the most beautiful valleys in the world. "We have explored many of these Himalayan valleys, but none seemed to me to be comparable with this, either for beauty of its Alpine scenery, or for its wonderful vegetation. We shall not easily forget the smiling pasture carpeted with gentians and every variety of Alpine flower that rise to the very verge of ice-bound and snow-covered tracks where

mighty glaciers descend among the forests which clothe the lower stopes." The luxuriant vegetation at the Kama Valley is due to the cloud-attracting power of the great massif of Makalu. "Makalu seems to attract all the storms, causing the moist monsoon currents to be drawn into this valley."

After reconnoitring the Kama Valley one party retraced their steps to Chog La, wherefrom without proceeding to Kharta on the north via Samchang La, the party struck off southwards to reach the Popti La via Sakeding and Lungdo. On the northern side of the Chog La was discovered a dark green lake called Ruddamlamtso regarded by the Tibetans as sacred. It "had wonderfully clear water; I could see every stone at a depth of 20 feet, and it was evidently very deep." Pilgrims walk around it, burn incense and throw spices into its water.

The next stage is Sakeding, a trade-mart. Further to the south is Lungdo where the great Arun gorge widens out into a flat valley which extends to a few miles. Within this space have cropped out a number of villages. Further to the south the Arun enters into another great gorge. For twenty miles above Lungdo up to Kharta the Arun runs through a similar-narrow gorge which is also impassable. Thereafter they crossed the Popti La (14,000'). Here was found a stone half-hidden in a pile of rocks with a notice thereon inscribed in Chinese character. This pass marks the boundary between Tibet and Nepal. Across the top of the pass was found a long defence-wall, mostly overgrown with grass. On the Nepalese side of the Pass was seen a fine black lake about half a mile long.

with an island in the centre. This Pass remains closed for five months. They then returned to Kharta.

On August 19, Heron came back to Kharta after exploring all the mountains north of Tingri and Shekar up to the Brahmaputra watershed. On the following day Mallory and Bullock returned after exploring the Upper Kharta Valley.

For approaching the North-east Ridge of Mount Everest, the Kama Valley was found useless. Lastly Mallory and Bullock followed the Kharta Valley till they reached the glaciers in which the Kharta Valley has its source. After exploring a number of valleys they found one which led straight to Mount Everest.

An advanced Base Camp was pitched in the Upper Kharta Valley at 17,350 feet. The spot has been designated—"a regular Alpine garden." "Overhead the great lammergeier or bearded vulture, sailed in graceful circles, while the big black raven croaked on the rocks by the camp." They passed red foxes on several occasions over 18,000 feet. A few yellow saxifrages were found growing at 20,000 feet.

They climbed a peak called Kama Changri. To the west Everest was close at hand still 8,000 feet above them. It was a glorious morning. A ray of sunshine was first caught by Mount Everest and then Makalu. "Such a sunrise has seldom been the privilege of man to see, and once seen can never be forgotten." From the 21,300 feet top of Kama Changri what they felt is best expressed in their words: "It was extraordinarily warm; there was not

a breath of air, and the sun seemed to shine with am intense heat." On their way at an altitude of over 19,800 feet they saw a hare and heard the notes of several ramchakors.

From the Camp at 20,000 feet a party of five climbers (including Mallory) started off at 4 a.m. with 26 porters. It was 22° of frost. Parties were roped up in groups. Lhakpa La (22,350') was climbed at 10-30 a.m. Mallory and other Alpine climbers, and the expert coolies were toproceed onwards. The rest had to retrace their steps to their 20,000 feet camp. On descending from the Lhakpa La on the remote side of the Pass, they reached a glacier, wherefrom they intended to enter the Rongbuk Glacier. It was a long and tiring reconnaissance on the ice-field between which and the Rongbuk Glacier there was a gap. Sometime ago the latter glacier could not be completely explored mainly by reason of bad weather.

Mallory's party was now opposite the loop which joins Mount Everest to Changtse (North Peak). It struck clever Mallory that this loop (Chang La or North Col, lying to the north of the North-east ridge of Everest) once reached would lead to the North-east ridge being the only practicable route to the summit. From the glacier below they looked askance at the Col. high up in the air. The way seemed very steep, and not very hopeful, but the adventure was a success—finally was gained a footing on the Chang La after a continual struggle with cold and rain, precipices and altitude for nearly three months. While at Lhakpa La camp, blueness of the surface of the body due to cyanosis of blood was noticed—the combined effect of

extreme cold and rarefied air. Tea, if not drunk at once, froze on Lhakpa La.

It was the discovery of this Col known as the North Col that enabled the subsequent climbing expeditions to assail the mountain. This Col ought to have been named "The Mallory Col" in honour of its discoverer, just as a similar Col on Nanda Devi was styled after the mountaineer who hit it.

"The size and destructive power of Himalayan avalanches is the first thing that should be studied when climbing in the Himalayas. A purely Alpine-trained mountaineer finds it difficult to appreciate the scale on which such avalanches occur. Mummery paid the penalty of not realising this when he made his final and disastrous attempt on Nanga Parbat. No trace of him and his two Gurkha followers was ever discovered."—F. S. Smythc.

"Everest has been described as a dull, if imposing mountain, when seen from the north and not to be compared with Makalu in grandeur or beauty. The latter is certainly a superb peak. \*\* \*\* Yet, grand mountain though it is, it somehow lacks the sovereign dignity of the World's highest summit."—F. S. Smythe.

'There has, for instance, been applied to the attempts to climb Mount Everest a stark materialism out of keeping with the idealistic nature of that enterprise, and it is impossible not to feel, however illogical it may seem in view of the bad luck with the weather that has so far dogged expeditions, that the mountain will not be climbed until it is approached in a different manner. To climb mountains safely and successfully it is necessary to possess something more than activity and skill; we must have what Mr. Winthrop-Young terms the "feeling" for mountains, and this "feeling" has a spiritual rather than material basis and significance."—F. S. Smythe.

#### CHAPTER X

# THROUGH A FAIRYLAND—THE GLACIER CAMPS

These ice pinnacles are not found on the Kangchenjunga Glacier, and are common only to those parts of the Himalaya exposed to the dry ars of Thibet. There is something attractively fantastic in them; their queer constructions, their cleanly chiselled walls, minarets and spires suggest a goblin city, the queer phantoms of a cubist's dream, or maybe a halted regiment of the Mountain King.

-THE KANGCHENJUNGA ADVENTURE, F. S. Smythe.

OUNT Everest is a rock-pyramid of bewildering dimensions. Round it reigns in utter silence the West Rongbuk, the East Rongbuk and the Kangshung Glaciers. These ice-streams having an average length of some twelve miles are moraine-covered for some three or four miles above the snouts, pinnacled for a mile or two by séracs and finally practically flat, although this flatness does not warrant an easy going, as will be seen later on.

The Kangshung Glacier lying to the cast of Mount Everest and north of the Makalu group of mountains has its snout at an altitude of nearly 14,600 feet above sea-level, while the East Rongbuk Glacier descends to about 16,500 feet on the north of the mountain, which, therefore, has a vertical zone of 12,500 feet of perpetual ice and snow. It may be noted here that from the point of view of the vertical length of glaciation, Mont Blanc, the monarch of the Alps, is at par with the King of Heights. The Glacier of Mont Blanc

which is nearly 16,000 feet high descends to within 4,000 feet from the sea-level. The West Rongbuk Glacier rises from the western side of Mount Everest and flows northwards for a considerable distance, while the East Rongbuk Glacier which also flows in almost the same direction has its source on the eastern flanks of the mountain. Between these two ice-fields mostly covered with tumbled moraines and a world of ice-pinnacles, a maze of spurs and lesser mountains jealously guard the approach to the mountain from afar.

When viewed from the north, say, from the Rongbuk Monastery or the Base Camp, four miles ahead of the lamasery, the mountain reveals two silent lines (ridges) of attack. These are the North-west Arête and the North-east Arête. And as a matter of fact only three main arêtes descend from the foot (28,000') of the final pyramid towards the glaciers below, and constitute the only routes leading to the summit. The third one is the South-east Arête which descends to the Kangshung Glacier on the Nepal side of the mountain. This last is mainly a bare rock-ridge, exposed to the west wind and is in all probability unclimbable. Besides it is in the jurisdiction of the forbidden land of Nepal, which is on all accounts hostile to any proposition for an assault on the mountain.

The final pinnacle of Mount Everest towers up from the western end of the structure, wherefrom an immense ridge runs down to the north-west at a difficult angle. This North-west Arête may not be completely unclimbable, but in the opinion of Mallory, it would be preferable, if the approaches to it would have been through easier ground. The ridge, however, being terribly exposed to the west wind, can be well calculated to offer tremendous resistance. A much longer arête descends to the north-east at a moderate angle for a distance of about two-thirds of a mile to a shoulder (at 27,400'), beyond which the ridge drops steeply down to the Rapiu La on the east.

Just below the shoulder of this ridge, called the Northeast Arête, a blunt ridge (the North Ridge) descends to the north at an average angle of between 35 and 40 degrees to a loop named the North Col, which is "the key to the whole ascent."

From this loop (North Col or Chang La) sweeps up another ridge right up to the summit of an outlying mountain, one of the satellites of Everest, the North Peak (24,730').

The tackling of the mountain, therefore, resolves itself into first reaching the North-east Arête and then following it up till is attained the foot of the "final pyramid", as we now call it; and there is no other way to get to it except through this depression, the North Col, to which a route was discovered by Mallory in 1921 from the Kharta Valley. In the same year, to approach the North-east Arête, the Kama Valley was found useless, a fact already discussed in the foregoing chapter. Although in 1921 this Col was reached via Kharta Valley, it was a round-about way involving a great detour from the north to the west of the mountain. The short-cut would be via the East Rongbuk Glacier, which means practically a southerly traverse over this glacier till the foot of the North Col is reached at a place where it meets the East Rongbuk

Glacier. It may be mentioned here that the Col may be approached from the west from the opposite side of the ridge that sweeps up to the North Peak as already noted, but that would at least entail a great struggle with the fierce west wind all the time.

These introductory observations will facilitate proper comprehension of the route adopted by the three climbing expeditions of 1922, 1924, and 1933 up to the North Col situated at a tremendous altitude of 23,000 feet, a height which even exceeds by 500 feet that of the heaven-kissing fairy-like peak of Siniolchu, the "Embodiment of Inaccessibility", which meets the eye of a spectator from Darjeeling due north. The summit of Everest was still 6,000 feet above Chang La and fully two and a half miles away from it.

The Base Camp (16,800') was established by each of these expeditions at a delightful spot four miles away from the Rongbuk Monastery up the valley of the Dzakar Chu. The traverse was over the debris of tumbled moraines, past a nunnery and hermits' cells. Finally the hard ice of a frozen lake was crossed, and the Base Camp was pitched at the foot of a terminal moraine, at the mouth of the West Rongbuk Glacier. Nearly one mile further to the south is the snout of the East Rongbuk Glacier. Mount Everest is still twelve miles away.

From the altitude of Rongbuk (16,000'), height asserts itself with no uncertain voice. Finding one's way into a sleeping bag is a tiresome, wriggling affair, while the lighting of a match is quite a business. Even the strain in smoking is violent. Human organism accustomed

to high pressure at about sea-level requires queer adjustment of the vital force which is achieved by a slow process of acclimatization. Men have to push on from one campto another after taking rest in each camp for a few days in order to enable the body to adapt itself to the novel environments—cold, altitude, and ever-decreasing quantity of oxygen in the air. Although two or three days' stay at a particular altitude is not at all sufficient to get oneself acclimatized, there is, however, no other alternative but to make haste, as the whole expedition is a race in earnest with the monsoon, which in this part of the Himalaya usually reaches about the middle of June.

The proper season for the climbing adventure is during May and the early part of June. Had it not been so, a longer period could have been devoted to the problem of acclimatization. On returning to the Base Camp after a sojourn at Camp III or in any higher altitude, the depressing and fatiguing feeling is not very pronounced. Norton who is one of the seven climbers who had attained 28,000 feet level said: "For some three weeks' acclimatization at each advance in altitude would be desirable—were it possible." Ruttledge endorses his opinion with these words: "He is absolutely right. Unfortunately it is not possible, and we have to make the best compromise we can."

It has often been argued that an earlier start would have ensured better prospect. This is far from truth as an earlier arrival at Rongbuk would have meant an exhausting campaign against intolerable cold of the plateau, to say nothing of the Rongbuk Valley, where icy cold blast of wind plays havoc all the year round. In the early spring it is extremely difficult to procure baggage animals to carry some thirty tons of stores and equipment of an expedition. Besides, after the lapse of a severe winter, animals are, what with cold and what with miserably insufficient fodder, reduced to a skeleton.

The 1933 Expedition left Darjeeling on March 3, nearly a fortnight earlier than their predecessors. It was a mere luck that mules were available in adequate number in March. But then, they were prevented from crossing the Sebu La Pass by snow, while in the alternative route, they luckily escaped a heavy fall of snow on Nathu La that threatened to bar the pass. At all events it is desirable that the personnel of an expedition—the climbers as well as the expedition porters should reach the Base Camp at the top of their form to enable them to tackle "the King Cold", although in spite of having taken all possible measures and precautions, promise of strength and endurance met a defeat every year before the rigor of the Tibetan climate.

At Rongbuk the sahibs had to say good-bye to their good little ponies, who offered their ungrudging backs for the large part of their journey of nearly 350 miles from Darjeeling. They were thereafter to enjoy their well-earned rest at a lower valley not very far off. The rough moraine shelves beyond Rongbuk is for these animals too-hard to negotiate. Yaks, however, carried loads up to the Base Camp. Onwards up to Camp II the task of carrying goods fell upon the local porters, to whom, however, beyond that camp, the going over the flat open glacier

is intimidating on superistitious grounds; devils are supposed to have found lodgement inside the crevasses of the ice-field.

Noel in his Through Tibet to Everest has very aptly written that the Base Camp stood at the gateway of "Thê Dead World". In the region below there is manifestation of life, while above is the most dreary zone of rock, ice, and snow, where life, if forced in, suffers lassitude and deterioration, being the combined effect of an array of devitalizing factors—cold, wind, altitude, discomfort, loss of appetite and of sleep. But, hereafter, everything has its redeeming feature—every step forward is a revelation.

Every step beyond the Base Camp is a step higher. Three more camps had to be pitched on the East Rongbuk Glacier—Camp I, Camp II, and Camp III, the last standing at the very foot of the mountain, while Camp IV was established on the North Col itself, while higher up were pitched what have been called the "Higher Camps." Camps, I, II, and III are known as Glacier Camps, while these three together with the North Col Camp have earned the appellative, the "Lower Camps", although—the comparison should be excused—the lowest of these Camps top the Alpine King by fully 2,000 feet.

Soon after a start from the Base Camp for Camp I, the way lies over a flat waste of stones. On the right of the route lies the West Rongbuk Glacier. Towards the end of the traverse appears the black (so is the colour of the ice) humpy snout of the West Rongbuk Glacier. Some distance away to the south from the snout, appears

the East Rongbuk Glacier which is here quite close to the West Rongbuk Glacier. It is here that the Expeditions selected their site for Camp I, wherefrom the snout of the East Rongbuk Glacier is only four hundred yards off. It is a sunny and delightful spot and is greatly sheltered from wind. Hereabout are seen "pillars of rocks fashioned by the wind almost into the shape of man." The trip to Camp I is painful and arduous. An ice-axe feels heavy. Norton says: "Walking is labour, and in the keenest air there is no exhilaration; rather is there an indefinable feeling of discomfort and distress." This certain striking unpleasantness is due to great lack of the vitalizing principle in the air—oxygen. From the Base Camp to Camp I (17,800') it is a three hours' journey for a laden animal.

The approach to Camp I is imposing. From the corner where the Dzakar Chu Valley meets the West Rongbuk Glacier, an array of picturesque, blue séracs running for miles to the west of Everest emerge to the view. From here is seen far to the south-west that Queen of lesser peaks with its white cupola and incredibly steep precipices. In the words of Ruttledge, "Pumori stands up alone, ivory-coloured, like a tooth of some gigantic tiger." Everest, however, is from here hidden from view by the spur of a group of mountains which culminate in the North Peak. Behind to the northern side stand guarding the Dzakar Chu Valley red, perpendicular rocks. In front comes into view the rugged grandeur of the rounded tongue of the East Rongbuk Glacier strewn with hard-featured boulders. It has been observed: "The

contemplation of such scenery tends to ease the first strain of life at these altitudes."

Although Camp I is a snug retreat, it is least used by reason of its great remoteness from the mountain. The climbers and porters liked this spot very much and did not feel inclined to leave it for the grim and perilous world ahead. Captain Bruce, one of the high climbers, says: "\*\* \*\* anywhere beyond the Base Camp may be considered as the 'danger zone.' From here onwards one must, because of the great intensity of the ultra-violet rays, use snow-goggles.

Camp II is a four hours' march away from Camp I up the East Rongbuk Glacier. General Bruce holds that the go is an easy one for the mountain people. As a matter of fact, although the distance to travel from the Base Camp to Camp III is long, the ascent is never steep. The expression of the renowned General, however, should be taken with a grain of salt. Ruttledge in 1933 writes: "I do not think that we should have gained much from an earlier arrival, for progress beyond Camp I is difficult enough even in the last week of April."

The way is for some distance along the rough stony bank (left) of the East Rongbuk Glacier. Thereafter the progress is over the Glacier itself which in this lower end is completely covered with stones. Ultimately the progress is along a medial moraine, thus avoiding some complicated region of ice-upheavel. In any way, reconnaissance was imperative before a way could be found along and between the tumbled moraines of the East Rongbuk Glacier. A trail had to be stamped out.

Boulder-hopping in this panting altitude is by no means an amusement, while deep snow lying between the tangled moraines is anything but a pleasant negotiation.

In 1933 the first reconnoitring party including that great mountaineer, Smythe, who went up to prospect on April 23rd reported heavy going. In that year, in the course of a second reconnaissance the old site of Camp II was found out and cairns were raised along the tangled moraines on the way to Camp II which lies at 19,800 feet on the western edge of the East Rongbuk Glacier. It is a pleasant sun-trap by day and is protected from the howling wind by high ice ridges on the west. But with the sundown the temperature falls down all of a sudden to an inconceivable extent. Noel's description in his Through Tibet to Everest is fascinating. "The tropical sun lowered itself behind the mountains. There is no twilight. Evening jumps to night. The mercury runs down as if you had made a hole in the bulb." One has not a moment to lose-it is the cordial call of the sleeping bags. "Fifty degrees of frost were our portion on the first night in the camp." (Ruttledge).

Noel points out that on Everest the wind factor is more overpowering than actual temperature which seldom goes lower than 30°F below zero (that is to say 62° of frost)—"no greater cold than the winter temperature in parts of America."

Here the regular porters of an expedition must take over charge for carries farther on from the local labour, as from Camp II to Camp III real mountaineering difficulties present themselves in the shape of crevasses on glaciers, claiming in places considerable care backed by experience.

From Camp II is seen to the north a reddish rock peak towering to a height of 23,180′, while the campitself is surrounded on three sides by a spectacular world of ice. It lies in the shelter of a perpendicular cliff some 60 feet high and is skirted by a frozen lakelet. Mount Everest is behind the scenes, being completely eclipsed by the huge edifice of the North Peak. By attaining a moderate height on a snowy precipice above the camp, is seen to the south-east over the distant, flat ice-field the broad high pass of Lhakpa La, from which Mallory's party had looked down the East Rongbuk Glacier in September, 1921.

The character of the traverse from Camp II to Camp III is something strikingly novel, while the scene that opens up is the most amazing in the theatricals of Mount Everest. Intricate and bewildering are the ways to Camp III which lies at the very foot of the gigantic massif. No doubt the séracs of the East Rongbuk Glacier extend to a considerable distance right up to Camp II, but they are flanked by moraine shelves which work well as a high-way.

Above Camp II lie huge masses of ice crowned with fantastic pinnacles or séracs varying in height from fifty to a hundred feet. Everest, unlike Kinchenjunga, here seems to be leniently disposed to its assailants. By a freakish fancy, so it seems, Mount Everest offers two deep ice-channels known as troughs which descend relentlessly from the upper reaches of the glacier. But for these troughs the making of one's way through this sea of ice

would have been difficult in the extreme. At all events, however, the progress from Camp II to Camp III is by no means easy. What is now demanded of the goers is skilful mountaineering.

Two problems now stand out in all their seriousness. To reach the edge of the trough, a traverse across the wilderness of séracs is imperative. The finding out of a route through these ice-pinnacles is no joke. Besides, the going is difficult. Moreover, the portion of the glacier skirting the region of séracs is treacherously seamed with concealed crevasses. Last but not least is the great riskiness of a descent down their icy sides of appalling steepness. The gravity of the situation is enhanced by the depth of the troughs which is on an average some fifty feet. This is, undoubtedly, quite abysmal at this tremendous altitude where every step is an exertion.

But once the bed of one of these troughs is reached, the promenade up the trough of a delightful gradient is an easy affair. For a distance of nearly two miles and for about one-third of the way up from Camp II to-Camp III, it is "an incredibly beautiful path."

Like life, these Himalayan troughs (this trough phenomenon is also noticed in the Alps) are no bed of roses. The smoothness is only apparent. At the head of the troughs lies the upper glacier, smooth and flat, appearing as if "laid out like a chess-board." The easy going up this lovely and warm high-way of Everest among these ice-towers of bewildering intricacy, nevertheless has its set-back. While marching along these glacier troughs.

one is affected with devitalizing lassitude, which Ruttledge ascribes to stagnancy of air. But it is not so much the stagnancy of air as the lack of orygen in the troughs held in solution by the ice slopes that is responsible for this state of things.

The expression of Noel—"The Base Camp stood at the gateway of the Dead World,"—nowhere so impresses one's memory as here, where the very breath of life is not. One can hardly advance one foot in front of the other. Acclimatization often helps to a certain extent, no doubt, in negotiating this depression, and wind sometimes may disperse the stagnant air and thereby bring in the lifegiving element—oxygen—in the troughs, but as a rule neither of these factors comes very much into play.

At the head of a trough one reaches the open, upper glacier where boulders are conspicuous by their absence, but then, crevasses come in to play their role in a treacherous way. Here is requisitioned glacier experience. Rope and crampons are of great need on this hard and crevassed ice surface. When one is roped on another, fall of one is arrested by the other, who can thereafter pull him out of the crevasse. By crampons is meant a kind of contrivance of "spikes which when tied to a boot enables one to walk on fairly steep ice without the trouble of cutting steps." The following lines of Smythe referring to the climb on the Jonsong Peak will throw some light on the subject. "Had we had not crampons, the mountain would not have been climbed that day, for without them the steep icy slopes would have involved several hours of step cutting. As it was, steps were seldom necessary

although it was a tiring work flexing the feet in order to drive the crampon spikes well home."

But neither rope nor crampon is of any avail against wind of hurricane force, which instantly pounches upon those who emerge on to the flat, upper glacier from the head of the trough. Wind and snow-drifts are here the rule and not the exception.

In 1933 three reconnaissances were turned back till on May 2nd Smythe, Shipton, and others with the pick of the porters were able to force their way up the glacier and establish Camp III on the site of the two previous expeditions at an elevation of 21,200 feet. In 1924 the temperature at night fell down to 53 degrees of frost. This Camp is in shadow at 3-15 p.m. The water in the trough is not frozen for a few hours.

Odell's description of this sérac-skirted trough is fascinating. The trough "will ever be remembered as a fairy scene, of the greatest beauty and highest artistry, by those privileged to use it as a high-way to the precincts of the throne of the great Goddess-Chomolungma. Imagine a corridor up to 50 feet deep and 100 feet wide with ice of exquisite tints of blue and white and green, and paved at intervals of ice-covering of charming glacial lakelets, out of the surface of which were growing here and there clusters of ice-pinnacles, themselvs sculptured into an infinity of forms." With a little modification of Ruttledge's depictive words it may be said that among these great ice-towers one feels as if one is "in an enchanted land where things undreamt of in one's philosophy may occur at any moment." Odell's expression is resonant when

he writes: "All is silence, save for the murmur of some little glacier stream wandering over the gleaming ice, and the occasional creak of a sérac."

The scenery here has admirably lent itself to photography, but none but an artist can reveal the play of colours. When the sun shines, these pinnacles appear to be of gleaming whiteness, while in shade they display colours. This trough phenomena commence at an altitude of 20,000', and after continuing uninterruptedly for a distance of nearly two miles, extend as far as the boulder-covered lower end of the glacier.

Camp III was in an exceedingly unpleasant spot, huddled among moraine boulders, at the edge of the open glacier below the North Col. Though the site was the only possible one for a camp, it was a prey to every icy blast that blew. Being an advanced base within sight of the summit, it seems as if Everest is eying it all the time with unabating indignation. Snow-drifts and blizzards play havoc with this icy region all the year round, and progress towards it up the open glacier is sometimes tantamount to ploughing knee-deep in soft snow. It is a place where one's spirits sink to zero. It is a "truly horrid spot."

On a very near approach to this Camp, Everest, practically speaking, so far masked by the North Peak, divulges its secret in no unmistakable terms. The climbers, all of a sudden, are brought face to face with the towering wall of the north-east shoulder of Everest, steeply rising to an altitude of 6,000 feet above the glacier with its amazing armour of striated slabs and avalanche-

swept couloir. Not far off to the right, on following the line of the ridge on which rests the shoulder, a white rock-strewn pyramid greets the vision with its cloud-banner running relentlessly to the south-east far across Nepal—from one forbidden land to another. It is the much-coveted summit, the be all and end all of the adventure.

The Lhakpa La, from which Mallory and his companions spied with delight to the west the North Col, the clue to the historic ascent, is to the left. In front, is a low pass called the Rapiu La resting on a narrow ridge that sweeps down the north-east shoulder. It is less than an hour's walk across the glacier to the south. Both the Rapiu La, and the Lhakpa La were climbed by a few members of the various expedition parties and were enjoyed, so to say, as a side-dish. Those who were lured away by the Rapiu La were rewarded by a mountain scene which, save Godwin Austin, comprises the five highest summits of the world. Before them rose Makalu, a mountain "incomparable for its spectacular and rugged grandeur," with its imposing satellite, Chomo Lonzo. To the right is seen the huge south-east face of Mount Everest lying between the North-cast Arête and "the marvellously beautiful though terrific" South Ridge. Far away to the south-east is recognized the great Kinchenjunga massif. From here prodigious seems to be the final pyramid of Everest, the dimensions of which can well be gauged from the conception of Mallory which finds expression in the following words: "\*\* \*\* I have thought sometimes following words: that a Matterhorn might be piled on the top of Everest

and the gigantic structure would support the added weight in stable equanimity."

Let us now retrace our steps from the foot of Everest, and endeavour to render in brief interesting accounts of some of the events of the climbing expeditions that presented themselves at the Base Camp, and at and on the way to the three glacier camps already described.

# 1922 EVENTS

In 1922 the yakmen ventured to proceed up to the snout of the West Rongbuk Glacier, wherefrom Camp I is just a short way off. Insistence to proceed any further led to a prompt strike among the local transport workers. It had been, nevertheless, wise on their part to have declared a strike, as further progress would have undoubtedly been disastrous in result. Local Tibetan coolies, however, carried loads up to Camp III, and thereby relieved the Expedition porters a great deal of the strain involved.

In the region around Rongbuk it is very difficult to procure porters. The Expedition requisitioned for ninety coolies through proper authorities, but could get only forty-five men, who after having worked for only two days said that their ration fell short and they must therefore go down to replenish their stock of food. The sahibs in order to make assurance double sure held back half their pay. But this trick had not its desired effect. The porters never turned up. It was their ploughing season.

Supplies of flour, meat, and grain for the Expedition porters had to be brought up from Chobo, Tashi Dzom,

and even other villages at least some forty miles off and still further down the Dzakar Chu river.

This 1922 Expedition was uniquely fortunate in getting later on quite a number of porters whose relatives also on getting the scent came over from Sola-Khombu, a very prominent Sherpa settlement at the head of the Dudh Koshi Valley in Nepal. On their way they had to cross the high Khombu La Pass which is 19,000 feet in height. It was an array of porters—men, women, and boys. What is all the more striking is that mothers often brought their children, even of less than a year of age. How these babies could bear the strain of the journey, and the effect of that high pass, the very home of blizzard, is inconceivable. "It is evidently a case of the survival of the fittest."

It is interesting to note that a girl of about 18 years of age once carried a tent weighing 160 lbs. from Sakiathang to Chokarbo over the top of a 16,280 feet pass called Chog La, the ascent being not only steep but rough. This journey, it may be mentioned here, was undertaken by the Expedition on their return march after making a very long detour via the Kharta Valley. It would be a very unjustified omission if it is not mentioned that the tent had been wet for the last ten days, so that it had at its credit a further weight of 20 to 30 lbs.

Leaving aside the load-carrying capacity of these fine people of the mountain, what is very very astonishing is their stamina to sit out all night at the altitudes of \$\mathbb{P}6,000\$ and 17,000 feet exposed to freezing cold and howling wind. With reference to the 1933 Expedition, progress

of the splendid fellows from Sola Khombu from the Base Camp to Camp II (19,800'), and their bivouac at the latter find very depictive expression in the words of Ruttledge. "They had come straight through from the Base Camp without a pause, superbly indifferent to altitude and the rough moraines. I have never seen a finer body of men. As to shelter for the night, anything would do. After a merry salute, and with no pause for rest, they fell to upon the moraine boulders, rolling them into position to make sangers."

For the laden porters the trudge over the hard ice of the glacier on the way to Camp III proved too slippery, as their nails were for the most part lamentably worn off making the going tricky. The sahibs, however, on realizing the gravity of the situation supplied them with crampons which they found to be of great use in negotiating the glacier.

May 6 was ominous for Mallory who while climbing a small peak above the left bank of the Rongbuk Glacier contrived to slip on a granite slab leaving there "an incredible amount of skin from the back of the right hand,"—his own words which run with a touch of humour. Higher up he met with another minor accident while negotiating a large boulder poised in unstable equillibrium which had suffered a dislodgment under his feet. Although the hurt was grievous, luckily no bone was broken. Are these accidents a presage of the future? Mallory himself writes: "But walking was very painful afterwards, and perhaps this accident had something to do with the fatigue I felt as we neared the summit."

Most of the members of this Expedition were for the first time in their lives over 21,000 feet at Camp III, which was established on May 12. No one felt at his best, although this year (1922) they reached the Base Camp with a clean bill of health—they were "remarkably fit."

Somervell with his exuberant energy undertook a solitary excursion from Camp III and traversed over the uncrevassed glacier as far as the Rapiu La, from which superb view-point he fell to transferring an image of Makalu on canvass—to be taken figuratively. Undoubtedly he had been crayoning that glorious massif. From Somervell's interesting work, After Everest, we find that his endeavour to sketch Chomal Hari twice from the Tibetan plateau failed, as the paint froze hard in the process of operation. At Camp III water in a state of boiling imparts to the hand no scalding sensation, and tea if not drunk at once freezes to the great disgust of its votary.

The weather encountered this year was something exceptional and had nothing to do with the monsoon. All over the Himalayas raged a series of storms which had not occurred within the memory of the oldest planter in the district of Darjeeling.

# 1924 EVENTS

In 1924 they arrived at the Base Camp two days earlier, having left Darjeeling one day earlier than in 1922. On their way to Camp I, they had to encounter whirling, powdery snow, which although in this country ushers in bitter cold, does not carry with it its wetting

factor. To get rid of the powder all that is needed is a little shaking and brushing.

In this Expedition 150 local Tibetans were recruited with the permission of the Shekar Dzongpen. Men were employed at a wage of 4 tankas (about a shilling) a day per head, in addition to which they were given some rations. One woman with a child round her arms carried a load of 40 lbs. from an altitude of 17,500 to 19,800 feet. The order of the Dzongpen was that they must not be employed on snow or ice, and that they must be released quickly as they had to attend to the sowing of the fields. They required no cover or blankets in open at 18,000 feet. Captain Bruce writes: "Had they been of a less hardy race, their maintenance in such a country would have been well nigh impossible."

There was something ingenious in the method of distribution of loads. A garter from each person had to be collected, and thereafter, shuffling all these tokens well, they had to be thrown one to each load. Such assignment by garters met their general approval so well that there had been no occasion for any complaint in the course of the earry.

Arrangements were made for telegrams to be sent from relations of Mallory in Colombo and from the meteorological department at Simla, to keep the Expedition, informed as to the progress of the monsoon, which generally takes at least three weeks to traverse the country from the extreme south (Ceylon) to the extreme north of India. The telegrams had to be carried by relays of mounted men or runners from Phari right across the

Tibetan plateau to the Base Camp. The first of these, however, reached them just too late when they returned to the Base Camp after the campaign was brought to a close.

This Expedition was fortunate in receiving quite a good supply of potatoes which were prudently brought from the far off Sola Khombu settlement by the hardy Sherpas. They were asked to bring more. On another occasion a messenger arrived from the Magistrate of Tashi Dzom with a disquieting news to the effect that they had beaten two of his subjects at Rongbuk, and that they had done it under no provocation. Karma Paul, the interpreter, was forthwith despatched to visit Tashi Dzom. Paul has been depicted very nicely and in detail by different writers of the Expedition books. We are here tempted to quote a few lines relating to the subject just touched upon. "This ambassadorial role exactly suited Paul's fancy, and as soon as he was able to procure a pony, he went off looking very important-a vain young man, but efficient. He carried out his mission very satisfactorily and came back a week later with all kinds of friendly messages from the Shikar."

This year there had been a series of reverses in Camp III and on the way to it. The first party of porters who marched up to establish Camp III was miserably stranded in the tent having at their disposal a little uncooked barley to eat. For covering their bodies they had only one piece of blanket. Such was the sorry plight they were in, when a terrible wind was blowing with a temperature of 54 degrees below the freezing point.

wreaking havoc with the souls inside the flapping tent. The second supporting party failed to reach the Camp with the result that the first party was marooned in Camp III. Snow and wind were lashing the tent with unabating fury, and it seemed that the rickety tent would at any moment give way. The porters had no other alternative but to hope for the best.

They did not know what to do for fully forty-eight hours, when sheer starvation drove them to make an endeavour to retrace their weary steps to Camp II. They staggered as they walked down. A similar fate also overtook the climbers. Weather did not improve. To proceed any further for the North Col was an impossibility, while staying any more at camp seemed unwise. The last word was then given for retreat to the Base Camp. So miserable was the weather that no hope of establishing the next camp on the North Col was left for at least a week more. Down the wind-swept glacier and the tumbled moraines they trudged on "with a melancholy procession of snow-blind, sick, and frost-bitten men, being shepherded down by their comrades."

Tamding (a porter) fell down with his load on the ice and broke his leg. Inspection of the fractured limb brought to light a secret—some missing garments were "borrowed" by Tamding. The Tibetans, it is said, are adept in this art, so much so, that they will take from you whatever they can without your knowledge, and sometimes offer you as a present, with higher motive behind, things which belong to others. Unfortunately we do not recollect which European explorer has written like this.

In any way all the Mount Everest Expedition parties had the opportunity of knowing quite a number of times how the wind blew on their journey en route to Mount Everest, and the loss they sustained could by no means be overlooked.

Shamser, a Gurkha Assistant of the Expedition, while being carried down on a stretcher died half a mile from the Base Camp. Thus was lost "a gallant and loyal young man" who had most ungrudgingly rendered hard and very useful work to the Expedition. The condition of Manbahadur, the cobbler, was most deplorable. Both his feet were frost-bitten up to the ankles. He succumbed a few days later. Their remains were interred in a sheltered spot near the Base Camp. Their cook Kanchadied of ptomaine poisoning.

It was now deemed worth while to apply to the Head Lama of Rongbuk to bless all their men. The blessing was calculated to have its desired effect in restoring their morale. On May 15, took place this blessing ceremony for which each man was given two rupees with which to make an offering to the Holy Lama. One by one the climbers, the Gurkhas, and the porters were all given benediction. It was a touch upon the head with a silver prayer-wheel held in his left hand.

May 16 dawned brilliantly fine—not a speck of cloud blighted the sky. The mountain seemed to change its mood and wear a face of joy. And by May 19, the Expedition was once more in full and glorious occupation of the glacier camps, that is, up to Camp III.

### 1933 EVENTS

Lastly going into the narratives of the 1933 Expedition led by Ruttledge, we find the following incidents of interest.

Ongdi, one of the "tigers", was down with double-pneumonia at the Base Camp. Five marches away to the Kharta Valley over the high Doya La Pass, Ongdi was carried in a stretcher. All hope of his life was relinquished. Four weeks later and against all orders he left for the Base Camp which he reached with a heavy load on his back. On the day of his collapse too the same tenacity to work characterized his actions—he carried with complacence a load to Camp I. Ruttledge delineates a trait of his character, the true Sherpa spirit, in his usual felicitous diction: "He is one of those rough characters, a sore trial to lovers of the quiet life, but a real thruster in time of storm and stress."

Wood-Johnson, who was also a climber in the 1930 Kinchenjunga Expedition, went down with a gastric ulcer at Camp III and had to retreat.

Wireless communication was a unique feature of this last climbing adventure, although it was financed and controlled by Mr. D. S. Richards independently of the Expedition. As a matter of fact, this wireless arrangement was an unprecedented organization in the history of the Himalayan Expeditions. A wireless transmitting and receiving station was set up at Darjeeling. This station was in direct communication for exchanging messages with a similar station at the Base Camp, some 110 miles away to the north-west as the crow flies. This line could also

be joined to that connected with Calcutta when required. It was first doubted whether the mechanism would work satisfactorily in carrying and receiving messages across the Himalaya. Extreme cold, sweeping wind, and ramparts of prodigious altitude were probably tentatively earmarked as the possible factors that might mar the efficiency of the wireless apparatus. The transmission, however, proved to be a splendid performance. This elaborate organization was principally utilized in promptly receiving information as to the progress of the monsoon and weather forecasts. The Expedition in its turn arranged for an extension of field telephone wire from Camp III right up to Camp IV on the North Col, beyond which it could never be carried.

"After climbing on Everest the climber may be forgiven if he feels as the superstitous natives once felt about Matterhorn: "There seemed to be a cordon drawn around it, up to which one might go, but no further."—F. S. Smythc.

"While the flyers were circling round the summit of Everest before returning to all the comforts of civilisation, the party of climbers were slowly creeping from camp to camp up the north-east ridge. The latter was a far desperate venture. The flyers could choose their day and weather, but the mountaineers, once they were in the grip of the mountain, were at the weather's mercy. That gallant enterprise had no single piece of good luck, though one of its members got to within a few hundred feet of the summit. The sympathy and admiration of the world must go out to them; for their failure was in itself a splendid achievement.—J. Buchan.

## CHAPTER XI

# ON THE THRESHOLD OF REAL ASCENT-THE NORTH COL

At long last, Mount Everest is tangible, no longer the fabric of dreams and visions.

—Everest, 1933.

HE ascent to the North Col from Camp III is the last chapter in the episode of the Lower-Campsacyenture.

The most difficult and awe-inspiring climb involved in the assault on Kinchenjunga was that of the vertical ice-wall, a barrier 600-800 feet high, extending over a distance of some three miles across the face of the mountain. Reaching the North Col of Mount Everest necessitated mountaineering of a similar order. The traverse leading to the North Col is said to be "the crux of the climb."

The North Col is just a mile and a half away from Camp III as the crow flies, and it is higher than the Camp by nearly 2,000 feet. For the first 1,000 feet (in altitude) the gradient of the ice-slope is quite gentle, but the next and the last 1,000 feet of the ascent is of appalling steepness.

It has been remarked that the slope looks steeper than what it actually is. We find a diametrically opposite observation made by Smythe with reference to the Kinchenjunga Glacier. "The angle at which the main

ice stream of the Kangchenjunga Glacier rises is deceptive. From the Base Camp the glacier looks practically flat, but actually it slopes downwards at a much steeper angle than at first appears, and we skimmed gaily down it for quite three miles with scarcely a stop."

The culminating forty feet of the precipice bordering on the edge of the shelf is, however, a vertical wall of ice, the North Col being some fifty feet above the shelf. In 1933 this shelf or ice-ledge having a maximum breadth of thirty feet, it should be mentioned here, was found not fifty but two hundred feet below, and some six hundred feet to the north of the Col itself.

The reason of this apparent anomaly is that the whole of the eastern face of the North Col referred to in the foregoing lines is a steeply falling glacier which is always on the move at a certain imperceptible speed, giving rise to variations in its formations. The negotiable route of one year may be vitiated, so to say, by crevasses, and barricaded by séracs the next. Consequently the route up the face varies from year to year.

It was on this ledge that Camp IV was pitched, and this is called the camp at the North Col, although as has been just pointed out, the actual Col itself is a bit higher than the Camp.

The first part of the traverse up to the foot of the North Col, wherefrom the final slope rises like the tower of Pisha, lies first over moraine boulders, and then on gently sloping hard ice which extends to a distance of a mile. Here is a sharp contrast between the abominable roughness of the boulder-strewn glacier, and the placid

smoothness of the hard ice, on which snow can hardly accumulate owing to hard gale that blows apparently from all directions at the same time.

There had been, however, occasions when fresh snow came rushing horizontally like a sweeping flood across the hard ice surface, and the climbers looked like men without legs which were completely hidden by the snow current.

The negotiation of this ice-slope is, without crampons strapped on the boots or nails under foot-gear, absurd. Ruttledge congratulated himself for having brought his crampons, which enabled him to walk with ease on this part of the grim ascent to the North Col. Others in spite of utmost care to keep up balance could not always maintain equillibrium.

Whether there had been occasions for roars of laughter, as it had been the case when Smythe had contrived to get his triumphant progress disastrously checked while gliding down the Nepal side of the Kang La in his "flying machine" (i.e., ski taken for a plane by the porters), we are not definite, but it is beyond all question that the great height, cold, and wind of this bleak and dreary region discountenance any emotional fit.

The final slope leading to the North Col is one of the most formidable armours with which Everest has equipped itself. And gaining the Col is as good as receiving a pass-port for the real, prospective climb. This steeply falling glacier can only be negotiated by stepcutting, a business not at all commendable at this height, where every step onward is exacting. An ice-axe which itself proves to be a no mean burden to its possessor at over 22,000 feet is called into play for step-cutting, an affair that must here tax the body-engine to an incredible extent. Side by side workers have to drive in pitons or stakes, round which are fastened rope which subsequently serves as a hand-rail. For the vertical wall already mentioned a rope-ladder had to be fixed.

In step-cutting, first of all the snow lying on ice is to be cleared away. Then is to be removed the flaky coating of ice beneath it. Lastly is to be cut a step into "the honest ice beneath." To form an idea as to what step-cutting is, we must turn to Smythe's observations on ice work at 21,000 feet on Kinchenjunga, as, to the best of the knowledge of the writer, no mountaineer has so nicely dealt with the philosophy of high altitude stepcutting. He says: "To the mountaineer who revels in the art and craft of icemanship, there is no music finer to his ears than the ringing thump with which an ice-axe meets the yielding ice, and the swish and tinkle of the dislodged chips beneath him. But æsthetical and poetical sentiments were not for us. We wearied of the dull thud, thud, as the pick struck the ice. The musical ring of pitons driven well home found no answering ring in our hearts. We felt no excitement, no enthusiasm, no hope, no fear."

It was a piece of good luck that the ice slope beneath the North Col referred to above is an east-facing one, and catches the sun as it rises to begin its daily fight with the clouds that envelop the Himalaya from end to end. Step-cutting and other ice-work is possible for some hours in the morning after which wind rises and drives the parties to their arctic tent where the rest of the day is to be spent. Next morning when the same work is taken up it is found that fresh fall of snow has obliterated the steps already made, necessitating good kicking to dislodge the snow and thereby remake the steps. But kicking business is by no means an easy affair at this altitude, when by all means energy is to be reserved as far as possible for higher climbs. Everywhere lurks danger of a collapse on the ice-slope right up to the Col from its foot strewn with boulders, the grim reminiscence of many an avalanche that had swept down this great ice precipice, a little less than 1,000 feet in height.

So far has been given a general idea of the route and the character of ascent to the North Col from Camp III. Now the proposition is to take up the subject of ascents of the three climbing expeditions one by one.

With reference to the 1922 Expedition it has been remarked that on arriving at Camp III most of them were played out. As a matter of fact very few of them ever attained a height of 21,000 feet on any occasion previous to this historic ascent. At least a day's rest at this elevation was recommended before undertaking the climb for the next 2,000 feet.

That east-facing slope was found to be the only ground up which a track was to be made with great care so as to avoid as far as possible the risk of an avalanche and crevassed surface. It would not simply do for a party somehow to reach the Col, but it was incumbent on the climbers to make the route negotiable to the laden porters for all their comings and goings. It was decided that under all circumstances all porters should be escorted by

Sahibs. And even it was clear that fresh snow lying on an ice slope would be a constant source of danger which could hardly be avoided.

This year the disintegrated substances at the edge of a long fissure made the climbing of the leading party easy, as without step-cutting the party could climb 250 feet of what appeared from a distance to be formidable ice. For the security of the future parties they fixed two lengths of rope, one of which was attached to a single wooden peg firmly driven into ice from which it hang directly downwards. Another was fixed on a series of pegs for traversing leftwards till the edge of a large crevasse was reached. The crevasse was with difficulty crossed by step-cutting on its walls and by fixing another length of rope. They trudged up the ice slope till it steepened a good deal for a short distance, to cover which they were obliged to cut a score of steps and fix another length of rope. They were ploughing up snow-covered ice, and were at times dislodging heavy crusts. Even when negotiating the steps, they were ankle-deep in snow.

It has been observed that an east-facing slope in the heat and glare of the morning sun lends a hand to the enemy, known in Tibet as La-druk (mountain-sickness). Although none of the three climbers was sick, their lassitude increased continually as they climbed up.

The route brought them to a place where mountaineering appeared problematical. Any further progress made it imperative to construct in the ice a "ladder of footsteps and finger-holds", and even then it was doubtful whether they would gain their ends in the long run.

Besides, at one place a 15-foot ladder was requisitioned to cross a crevasse. They, therefore, were obliged to retrace their steps and make a detour to the west. Thereafter, they tackled a snow-slope ascending towards a ridge of the North Peak. A huge crevasse stood on their way, which they were privileged to cross by a narrow bridge of ice, a weak point in the armour of the North Col of that year.

Soon was visible ahead the shelf, the existence of which so far was a matter of conjecture. "In a moment all our doubts were eased. We knew that the foot of the North Ridge, by which alone we could approach the summit of Mount Everest was not beyond our reach." Having started at 7 a.m. they reached the shelf where they pitched their Camp IV at 4 p.m. Of course they had indulged in a considerable halt on the way up.

There had been quite a number of ascents to the North Col in connection with the three attempts to reach the summit, and with the view of establishing and storing up higher camps in due course, but owing to varied conditions of snow that fell on the slopes, the character of the going differed a good deal.

Once when a party of five Sahibs and ten porters was struggling up the final slope, Strutt while panting for breath gave utterance to the very significant words: "I wish that—cinema were here. If I look anything like what I feel, I ought to be immortalised for the British public." The lines that follow are: "We looked at his grease-smeared, yellow-ashen face, and the reply was:

Well, what in heaven's name do we look? And what do we do it for, anyway?"

One favourable sign was noticed in the quality of the snow which seemed to adhere to the ice quite admirably, so much so that tramping over the snow in carnest, so as to test its faithfulness, evoked no resentment-snow would not slide down. When the steep and dangerous portion of the route was done, and the slope eased off a great deal, they trudged up without any misgiving. Mallory writes: "The thought of an avalanche was dismissed from our minds." The climbing party consisting of Mallory, Somervell and Crawford with fifteen sturdy porters left Camp IV from Camp III at 8 a.m. was the historical day of June 7th, 1922. The climbing party was some 600 feet below Camp IV. The weather was calm and bright. In the stillness of the scene. laboured and quick breathing was audible. Was it a full before a storm?

Mallory writes: "We were startled by an ominous sound, sharp, arresting, violent, and yet somehow soft like an explosion of untamped gunpowder." It was the growl of an avalanche. In a moment Mallory and Somervell found themselves sliding down as if on a sledge. The movement was slow, but all the same the end seemed imminent. Somervell after a while realised to his utter surprise that the avalanche had ceased to move under his feet. Crawford's experience was similar to that of Somervell. A miracle it seemed to him. But with Mallory events turned out otherwise. While sliding slowly down the slope, his motion was suddenly arrested

by reason of the tightening up of the rope which was attached to his waist. A wave of snow came rushing over him and he was buried. By thrusting his arms out of the snow and by some sort of swimming movement he could save himself.

When all was over, four of the fourteen porters, who were following the climbing members with loads, were found standing some 150 feet below Mallory. So it was conjectured that the rest must have been buried underneath heaps of ice and snow. The sahibs took the initiative, and all set to work to dig out the ill-fated men. Loosening the snow with the pick of an ice-axe and shovelling it with the hands required tremendous exertion. Nine out of ten porters were dug out. One body was not found. Six of the porters thus extricated had already expired. Three only survived. Of these three, one was buried upside down, but although buried for nearly 40 minutes, survived the casualty in a miraculous way. It was just before making this (third) attempt to climb Everest, that the Holy Lama of Rongbuk forebode evil.

In honour of these seven porters who lost their lives on this Everest's great ice slope, a cairn was built at the site of Camp III. Ruttledge in his charming book, Everest 1933, ascribes this unexpected snow-slip to the warm winds of the monsoon.

It was not money but a genuine enterprising spirit that dictated the porters to respond to the challenge of the heights. They had come in for a share in the enterprise. As Mallory has observed, "these men died in an act of voluntary service freely rendered and faithfully performed."

Later on, General Bruce, the leader of this Expedition, received a letter expressive of condolence from the Maharaja of Nepal. In this has been pointed out in felicitous diction that the people of the Hindu country of Nepal attribute the tragic consequences of this historic adventure to the divine wrath of the god and goddess, Shiva and Parvati, whose abode according to the Hindu mythology is on this highest snow-clad pinnacle.

The foregoing narrative of the ascent to the North Col relates to the 1922 Expedition. The next Expedition of 1924, which is the most eventful of all the climbing expeditions, has, however, for those who count casualties as romance, nothing thrilling about it, so far as the climb to the North Col is concerned. But, at all events, the 1924 ascent to the Col laid claim to mountaineering tactics of a supreme order.

Norton's description of the ice slope leading to the North Col is very clear. The "horrid spot" on which Camp III was pitched lay on the northern flank of the highest tributary glacier (the aforesaid ice slope) which takes its rise from the top of the saddle (the North Col) which connects the North-east Ridge of Everest with the long spur of the North Peak. This tributary glacier of appalling steepness (a hanging glacier), needless to add, joins "the more placid surface of the sea of ice," the East Rongbuk Glacier. The eastern face of the North Col being evidently sheltered from the direct assault of the

prevailing west wind, snow naturally accumulates to a gigantic extent up to the crest of the Col. There had been a great change in the formation of the glacier in 1924 during the past two years. In one place, as Norton pointed out, a great line of ice cliffs had been barring the place where in 1922 was met a narrow crevasse guarding the upper slope, to negotiate which Norton took the lead.

In this party was Lhakpa Tsering, "a wiry and active porter" who carried a load of Alpine rope and pickets. Norton asked him if he had the confidence in him to be a match for the climb. With "a fine scorn" he retorted: "Why, didn't I go twice to 25,000' two years ago?"

It was decided to avoid the easy-looking route of 1922-the scoop near some ice-cliffs in which snow and ice avalanched with disastrous results-but this year a large crescent-shaped crevasse, a quarter of a mile long, crossed the path of the assailants. On the higher and steeper portion of the climb they had to do the laborious work of cutting or stamping steps. They had then to encounter a big crevasse which could not be crossed. No snow bridge appeared on it. Finding no other alternative they got down into it. Although the descent was comparatively easy, the ascent of the wall of the crevasse on the other side was a difficult one as it was over an almost vertical precipice of broken ice. The wall was surmounted by step-cutting. Mallory took the lead. Norton writes that this eminent mountaineer here "climbed carefully, neatly and in that beautiful style that was all his own." He was backed up from below by Norton, who could admirably manage now and then to offer a foothold by means of his ice-axe.

This precipitous ice wall led up to a narrow crack or chinney, all the more menacing. Its sides consisted of smooth, blue ice, and it was a bottomless crack. The climb of fully 200 feet up this grim crack took an hour of exertion, arduous in the extreme. Besides, as Norton has pointed out, "it was something of a gymnastic exercise, and one is little fitted for gymnastics above 22,000 feet." Eighteen inches long pickets (very light hollow wooden pegs) were driven in the ice, and the route was establishd by a system of fixed ropes. Loads had to be pulled with ropes up this chimney by Somervell and Irvine who took their stand on the platform at the top of the chimney, so that porters would be able to climb the precipices without being hampered by loads. On the way up. a great sêrac or an ice-pillar was taken advantage of by tying a rope round it. Just above this sêrac appeared a 200-foot snow slope-"the steepest bit of the whole climb." This slope had to be traversed diagonally. At the top of this slope was the shelf on which Camp IV was pitched.

While establishing Camp IV, four porters were very badly marooned at that high desolate shelf. A diet of barley-meal only fell to their lot. It was decided to rescue them, but the party at Camp III consisted of so many convalescents. Mallory and Somervell were suffering from bad high-altitude throat trouble. Somervell later on in his After Everest wrote that the ailment for some time rose to such a climax, that had he not been able to hawk up quite a lot of morbid matter from the throat.

he would have succumbed then and there from suffocation. Irvine had an attack of diarrhæa. Odel had passed many sleepless nights. Porters were quite unfit for undertaking further work—their morale was seriously affected too.

Norton and Somervell started off to rescue the marooned porters. The route was obliterated by fresh snow. On arriving at the top of the chimney, Norton could see one porter standing on the edge of the shelf. Norton's repeated shouts elicited no answer. It has been observed that voice fails to travel a distance of 200 yards or under, in this land of utter silence and sheltered from wind. When they arrived at the foot of the final traverse. Norton lifted his voice but received no answer to his query: "Hi, Phu! Are you all fit to work?" This had to be repeated several times, and at long last Phu broke silence,-"Up or down?" He was not alive to the seriousness of the situation. "Down, ye fool." At this reply of Norton, Phu disappeared and soon after appeared on the scene with the remaining three. They reported that two of them were frost-bitten, and that of these two, Namgya had all his ten fingers badly frost-bitten, but that all were fit to come down.

But coming down from the shelf proved problematical. A 200-foot rope reached a point wherefrom the edge of the shelf was yet 30 feet off. The porters were constrained to take the risk of descending somehow this unbridged portion of the slope. At the foot of this threatening thirty feet of ice stood Somervell, who was to help each man as he would reach him (Somervell) in his descent

to the spot, where Norton and Mallory took their stand securely roped up with the "old friend," the big sérac.

The first two porters descended down the slope safely. Imprudently the last two started together down the edge of the shelf. They were seen suddenly slipping down on the backs, in an upright position, fortunately with legs pointing downwards. This involuntary glissade was occasioned by a big patch of fresh snow having avalanched under their feet. Norton writes: "For one paralysing second I foresaw the apparently inevitable tragedy, with the two figures shooting into space over the edge of the blue ice-cliff, 200 feet below; the next, they pulled up after not more than 10 yards, and we breathed again." The accumulated snow under their feet by reason of its having acquired an arresting consistency owing to the "cold of the early morning and the hot sun that followed," somehow held them up. The felicity of Norton's expression here is remarkable, and we are tempted to quote him once more: "Somervell as a cool cucumber, shouted to me, 'Tell them to sit still', and still as mice they sat, shivering at the horrid prospect immediately beneath their eyes, while quite calmly Somervell passed the second man across to us, chaffing the wretched pair the while-so that one of them gave an involuntary bark of laughter."

The unnerved porters had to be with great difficulty brought back to Camp III. They slipped all the way; the track thus ruined was more than a match for a most skilful mountaineer, but Somervell and Norton saved the situation by dint of dogged perseverance. It was a fine piece of mountain craft, which it is not possible to speak

too highly of. The difficulty of negotiating the chimney with the exhausted and depraved porters was, we should say, better experienced or at least imagined than described.

Professor Norman Collie, once the President of the Alpine Club, has observed: "It is the Englishman's love of sport for its own sake that has enticed him on to the battle with the dangers and difficulties that are offered with such a lavish hand by the great mountains." It is a sport, no doubt, as it appears from the very nature of the enterprise, but it undoubtedly embraces within its range altruism of no mean order. Otherwise who would prefer to take the risk of throwing his life overboard in his eagerness to save their lowly comrades, who are meant simply to carry their loads!

When Somervell rendered help to the porters in imminent danger, he was himself in a most deplorable state, as would appear from what Norton has written. He has fits of most violent coughing which seemed to "choke him in the most painful manner." The inclination of the slope on which he was taking his stand was so great that it appeared quite vertical to Norton, who was not very far off down the slope where that big sérac was towering up. After one or two of these fits of coughing, Somervell "lent his head on his forcarm in an attiude of exhaustion."

So far as the writer remembers, Somervell has left recorded in his After Everest that it would have made him happy if some of them lost their lives in the avalanche instead of the poor native porters. He has most faithfully given vent to his feeling; it does not at

all seem to the writer to be a momentary outburst of sentimentalism.

Climbing "the lords of sovereign heights" can never be truly undertaken by those who lack altruistic spirit. Mountaineering is associated with something more—it has its æsthetic, and above all, a spiritual aspect, as will be elucidated later on. Smythe writes: "After all, mountaineering is not to be classed with one of the modern crazes for sentimentalism, and record breaking at the possible cost of life and limb. It is an exact science, a perfect blending of the physical and the spiritual."

The 1924 Expedition thus ended in a tragedy, although more calamities were in store for them, as will be obvious in the chapter that follows.

In 1933 on May 4, Smythe, Shipton, and Boustcad left Camp III in order to prospect a way up to Camp IV. The slopes had undergone considerable change since 1924. On the following day Ruttledge with three companions and forty-five porters started off to establish Camp IV. Through a snowstorm they had to proceed. After proceeding for a distance, when the shining North Col slope and the North-east Aréte presented to the view, the fatigued porters burst with joy which found expression in "breathless snatches of song."

In place of the 1924 route was seen a glittering ice slope, at the foot of which lay boulders, the weird reminiscence of many an avalanche. The negotiation of this slope seemed to entail arduous step-cutting for weeks. Besides, the overhanging masses of ice was menacing and

threatened a collapse at any moment. To the south a maze of insurmountable precipices and great bulges stood as a barricade. The only feasible route lay in the general direction of the 1922 ascent, but the risk of avalanche was there. About one-third of the way up, a great crevasse; jealously barred the way. But every cloud has its silver lining—the crevasse was a safeguard against avalanches from above so far as the parties working below it were concerned.

In 1933 the parties finding the ascent to the Col very difficult had to cut steps and fix rope from the foot of the Col right up to the shelf, which this year was seen 200 feet below the actual Col. This meant an arduous and tactful mountaineering for an altitude of nearly 1,000 feet in order to reach Camp IV which was at 22,800 feet and 600 feet away to the south from the Col itself. At 22,500 feet they encountered a vertical wall of ice which rose to a height of 40 feet. It was highly disconcerting. The climb seemed doubtful.

In case the wall should defy an ascent, they would be obliged to go back to Camp I after evacuating Camp III and Camp II, and ascend the West Rongbuk Glacier to its head and then attempt to reach the Col from its western side. But such retracing of steps might prove suicidal in the interest of the adventure, as time factor is of paramount importance in the assault on Mount Everest. The first week of May was already over so that there remained only 4 or 5 weeks for monsoon to assail the Everest region. Besides, the western route to the Col was steeper, and considerably longer and more difficult than the Eastern route. And on

top of all this, the western side of the Col is directly exposed to the strong west wind.

How that big crevasse was crossed is not very clear from the accounts given by Ruttledge, who simply writes: "Unless it is well bridged by snow it will be difficult to-cross; \*\* \*\* ."

It was decided to use a rope-ladder on the ice-wall, but "who is to bell the cat" was the question. Climbing tremendous ice-walls of vertical steepness was the most marked feature of the Kinchenjunga adventure in which Smythe took part in 1930. The experience gained by this great mountaineer while assailing Kinchenjunga could be made good use of in tackling the aforesaid ice-wall forty feet high. Smythe, here, took the initiative and Shipton of Nanda Devi repute fell to backing him as he took tothe ascent. At the first instance Smythe drove in an icepiton as high up as he could reach, cut foot-and-hand-holds in the hard ice and thereafter managed to place one foot on the piton. It slipped off and the rider narrowly escaped falling backwards. Progress up the wall was mostly made by working with the ice-axe in one hand while the other clung to a treacherously slippery hold. With tremendous effort Smythe succeeded in reaching the top of the wall where he drove in a large steel piton to which was attached an end of a long rope, subsequently used by the two climbers in their descent. It was not only a fine piece of ice-craft but was exhausting in the extreme.

On the following day a rope-ladder was hauled up and fixed to the piton by Longland and Wager. The making of the route by step-cutting all the way up a slope nearly

1,000 feet high took fully eight days—so difficult was the nature of the work.

Smythe and Shipton, however, on May 12th, reached the shelf on which Camp IV was established on May 15th. In the meantime a message was received from the Base Camp to the effect that signs of an approaching monsoon off the coast of Ceylon were recognizable. This message had been communicated by the Alipore Obervatory to the Base Camp wireless station—it was disquieting. The span of the assaulting activities on Everest was thus deemed to be limited to nearly three weeks at least.

This year that eminent mountaineer. Wood Johnson of Darjeeling, who had been a climbing member of the great International Kinchenjunga Adventure, had to say good-bye to the Expedition at Camp III, which he reached by concealing all the time his growing illness. This was an instance of stoic indifference to bodily ailments characteristic to eminent mountaineers. But gastric ulcer at this telling height could not be long ignored. Ruttledge writes that the illness of "this strong, tremendously keen climber," was "a severe blow to the Expedition," as he was quite confident that Wood Johnson would be one of those few who would take part in the final assault.

While glissading down the lower slopes of the North Col, Greene struck against a patch of ice and strained a stomach muscle. Longland who shared in the amusing sport on the slope below that great crevasse quite safely reached the foot of the slope where they established a subsidiary camp named Camp IIIa.

The night of May 17th at Camp IIIa was very stormy. A similar night was spent on Kinchenjunga about the middle of May in 1930, when being completely demoralised by the devastating storm, Nagpa, the cook, left his tent and approached the tent occupied by Smythe with his constant wailing in pigcon English-"Sahib! Sahib! Tent go! Tent go!" As a matter of fact this storm which then reached a pitch of intensity not so far experienced by Smythe when camping, could not knock down any of the tents. It may be mentioned here that Smythe was "unwilling to have him as a bed-fellow." But he was entertained by Wieland and Schneider who "took him in not far love or charity, but simply as additional ballast for their own tent!" that as it may, in that desperate and boisterous night "like an express train racing through a tunnel," a sudden and strong gust of wind contrived to crack one of the struts of a strong arctic tent. Greene and Wager offered their service in doing some temporary repairs so as to save the tent from undergoing a complete collapse. They had to spend fully half an hour in the open, fighting all the time with bitter cold and terrible wind. Two Meade tents were finally blown down leaving the occupants to take care of themselves amid the fury of the raging elements-the strain was inconceivable.

The positions of the ice ledge on which Camp IV was established in the three different climbing expeditions have already been dealt with. The site of 1933 Camp IV was entirely different from that of the previous ones. As a matter of fact, the steeply falling glacier representing the east-facing slope of the North Col, being ever on the move

with its crevasses and ice-pinnacles at a snail's pace, not however, slower than molasses in January, may not in any particular year even present any ledge whatsoever below the North Col, where to pitch even a single tent. In 1933 it seemed that although the previous years' shelf was conspicuous by its absence, as good luck would have it, a fresh ledge, a hump-backed platform, some 16 feet wide and 90 feet long, made its appearance, perhaps to greet the aspirants in their pilgrimage to the lord of sovereign heights. Ruttledge writes: "Can this be the shelf used by the 1922 and 1924 expeditions for Camp IV, now carried down 200 feet by slow glacier movement?" Other shelf there is none."

This shelf is splendidly sheltered from the prevailing west wind, the fury of which spends itself as it lashes at the great jumble of séracs and mazes of snow ridges that most jealousy guard the final approaches to the North Col. But the Col itself is mercilessly exposed to the onslaught of fierce west wind, and as a matter of fact to every wind that blew in the region around. The finding out of the route onwards from the shelf to the actual col necessitated keen reconnoitring, and very careful examination of the traverse barred by many a concealed crevasse. In 1922 the direct route could not be negotiated in view of an impassable crevasse barring the way to the col. The ice scenery of this place as described in the Assault on Mount Everest, 1922 is amazing. "There the gigantic blocks of ice were darker than the snow on which their shadow was thrown. The cleft surfaces suggested cold colours, and were green and blue as the ocean is on some winter's day of swelling seas-a strange impressive rampart impregnable against direct assault, and equally well placed to be the final defence of the North Col on this section, and at the same time to protect us amazingly, entirely, against the unfriendly wind of the west."

The problem was solved by a longer detour which entailed the surmounting of a difficult ice-cliff that stood over the camp. In 1924 Odell who volunteered to reconnoitre the route happily succeeded in discovering an ice bridge that spanned the most formidable crevasse and which stood its ground throughout the campaign. In 1933 Smythe and Shipton had cut steps and fixed ropes all the way to the crest a few days before the starting of the parties to establish Camp V. Even then the negotiation of this established route required an arduous work of forty minutes. This year the crest was very narrow. Going in the teeth of gale required some confidence.

"The measure of the worth of mountaineering lies not only in accomplishment, but in the margin of safety over and above that accomplishment." -F. S. Smythe.

"Once the knowledge that Everest was 29.002 feet high, instead of a mere 29,000 feet, resulted in my promotion to the top of the form, where for a short time I remained, basking in the sun of the Geography Master's approval (for he was a discriminating man) before sinking steadily to my own level, which was seldom far from the bottom."—F. S. Smythe.

"Tibet has none to guard; and none guards Tibet."—Prof. N. Roerich.

## CHAPTER XII

## STRUGGLE FOR VICTORY

A BLIZZARD IN THE ALPS-

"The guide crouched under the lee of the nearest; \*\* \*\*

I asked him how far we were from the summit. He said he did not know where we were exactly, but that we could not be more than 800 feet from it. I was but that from Italy and I would not admit defeat. I offered him all I had in money to go on, but it was folly in me, because if I had had enough to tempt him and if he had yielded we should both have died. Luckily it was but a little sum. He shook his head. He would not go on, he broke out, for all the money there was in the world. \*\* \*\* \*\* But now I know that Italy well always stand apart. She is cut off by no ordinary wall, and Death has all his army on her frontiers. \*\* \*\* The Alps had conquered me. \*\* \*\* Indeed it is a bitter thing to give up one's sword."—The Path to Rome, Hilaire Belloc.

having gained a footing on the North Col (23,000') resolves itself into a climb up the blunt ice ridge (the North Ridge) that runs southwards to meet the North-east aréte (27,400'), at a point wherefrom, as has already been noted, the North-east aréte sweeps up at an angle much easier than that of the North Ridge for a distance of two-thirds of a mile and culminates in the summit, and secondly into tackling, if possible, the North-east aréte itself, which is for the most part very narrow as was seen from a photograph taken by the Houston Mount Everest Expedition, or traversing across the face of the mountain below this ridge and parallel to it in its upward sweep. On this great ridge, the North-east aréte, between the summit and the shoulder,

stand the first and the second rock steps. They are formed by the eastern ends of two horizontal bands of dark-grey lime-stone rocks, which run westwards right across the north face of the mountain. Just below the lower of these two rock bands there is a belt of reddish-yellow limestone, about 1,000 feet thick. This stratum begins at an altitude of some 26,800 feet and rises up to some 27,800 feet, at which altitude is the base of the first-step. Both the steps being of appalling steepness are very difficult to climb. The second step is almost unclimbable.

The north face of the mountain is composed of a series of limestones, mostly of a greenish-black colour. Ruttledge writes that the strata dip northwards at an angle of some 35 degrees. Odell says that the general slope of this face above 25,000 feet is about 40 to 45 degrees, and the slabs are nearly parallel to the slope and are "often sprinkled to a varying degree with debris from above, and when to this is added freshly fallen snow the labour and toil of climbing at these altitudes may perhaps be imagined." One can easily set one's wits to work in realizing the difficulty in negotiating these strata which shelves downwards. The slabs being smooth the securing of adequate foot-holds is a task which is all the more formidable. Ruttledge notes that here "handholds and belays are non-existent, and careful balanced climbing is necessary." And last but not least is the thin, hard crust of ice that sometimes most deceptively plaster the slab and prove abominably treacherous when trampled on.

The reddish-yellow stratification of limestone already mentioned is indeed a gigantic picturesque belt of the mountain that cleaves its way almost horizontally through the steeply sloping greenish-black slabs that produce an effect of a mighty array of tiles on a steep roof of fabulous dimensions. It is a marked feature of the mountain. This yellow-hued belt and the two grey bands above it, it may be said, constitute a befitting regalia of the King of Heights, which are worn on the northern face of the mountain, or correctly speaking on the north-eastern face as well as the proper north-face of the mountain, both of which being above the Main (West) Rongbuk Glacier. It may be noted here that the north face is slightly concave whereas the north-eastern face is remarkably so.

The two rock steps adjoin the crest of the North-east aréte. The foot of the first or the lower step is at 27,800', whereas the base of the final pyramid is at 28,300'. And within the range of these two heights, that is within 500 feet in altitude, are these obstacles of Everest to climbers intent on the final dash for the summit. The second rock step is quite 100 feet in height and is for most part almost vertical and even overhangs in its upper portion. The first rock step is formed by two massive rock towers and is of a height almost equal to that of the second. The upper end of the second rock step lies a short distance below the base of the final pyramid. The lower or the first rock step is about an equivalent distance again to the left. The first rock step need not be climbed as it is easily turned on the north face. The second rock step, which is the last armour of Everest, seemed from a distance as if it were obliquely furrowed and eventually not very difficult to negotiate, but on near approach the furrow proved a delusion.

## ATTEMPTS, 1922

At a high altitude the Primus Stoves do not behave well. From Camp IV onwards they could use either absolute alcohol in the spirit-burner or "Meta", a kind of solidified spirit generally prepared in cylindrical shape. Its performance was splendid. Moreover it burns without any smoke.

As regards porters it has been written: "We had confidence in our porters, nine strong men willing and even keen to do whatever should be asked of them; surely these men were fit for anything."

A tent weighs 15 lbs. only. It was decided that for high altitude climbing the loads should not exceed 20 lbs. each in weight and that one load should be alloted to two men, to facilitate the carry.

It was the morning of May 20. The sahibs were shivering outside the porters' tent. The task of rousing men from the snugness of their cosy sleeping-bags between 5 and 6 a.m. was anything but pleasant. They had devitalized themslyes during the night, huddled together as they lay in their "hermetically sealed" tent. Fresh air and tea were now of paramount importance. They were not at all well and would not respond to queries. Five out of nine porters were mountain-sick. Only four were fit. With great difficulty the climbers were able to make a start at about 7-30 a.m.

The morning was calm and fine, but it can hardly be said that the exercise of going up Mount Everest was enjoyable. In the breeze that sprang up from the west as they

traversed up the steep North Ridge was recognized the most bitter enemy—the devastating wind of Tibet. "The wolf had come in lamb's clothes."

After gaining an altitude of 1,200 feet, the party halted for a while to put on the spare warm clothes. While Norton was seated with his rucksack poised on his lap, inadvertently a jerk was communicated to the rope with which he was roped up with another climber, with the result that the poor little thing with its precious burden not being able to stand the shock, went down the mountain side leaping from one ledge to another, and as it soon gathered momentum, the short leaps grew to exasperating and 'magnificent' bounds and evidently went for a sail to the West Rongbuk Glacier covering an altitude of some 9.000 feet.

They were trudging up to attain a height of some 25,000 feet. The surface was covered with hard snow and the angle soon became steeper. Here there is urgent need for step-cutting. The party here pined for crampons, with the long steel points of which the going would have been easy. And yet, it has been observed, they had been right to leave them behind, as the straps of this device while bound tightly round the boots would have retarded circulation of blood, and the chance of saving their toes from frostbite would have been very little. They had to accomplish the arduous work of step-cutting for some 300 feet. At last at 11-30 a.m. they reached a height of 25,000 feet as shown by the aneroid. The climb from the North Col (23,000') of 2,000 feet had taken them in all three hours and a half. They intended to pitch tents at about 26,000 feet, but no ledge

was visible above the point attained which was adequate for the purpose. A strong wind came sweeping along. A severe wind is certainly demoralizing in its effect and their morale was more or less affected. The porters were sent down to Camp IV at 12-30 p.m., as it was not deemed wise to keep them exposed for any considerable period.

The party then began to search for some place sufficiently flat and commodious. It took nearly two hours to find out a place of some sort which had to be levelled. Though apparently level, it was sloping to a certain extent and for that reason risky. Another tent was somehow or other pitched near by. These two small tents were precariously perched on the vast mountain-side of snow-bound rocks. In spite of all that had been done to make the berth comfortable Mallory had to lie on a certain boulder obstinately immoveable and excrutiatingly sharp. One ear of Norton had been severely frost-bitten, so that only one side was available to lie on. The place seemed not colder than that of Camp III. The thermometer confirmed their guess, the minimum reading for the night being 7°F.

The morning of May 21 broke with "the musical patter of fine, granular snow" on the canopy of their tents. They grunted in turn, "I suppose we ought to be getting up." To deny oneself the warmth of "those friendly bags" in the early morning hours and come out of them to make preparations for a start are by no means pleasant from whichever view-point the adventure is gazed upon.

The starting seemed not very propitious—a second rucksack containing their breakfast slipped down from the

ledge where it was perched. In prolific leaps down it went the great mountain-side. Nothing on earth, it seemed, would arrest its ever-increasing momentum. By a miracle, so it appeared, it was hung up on a ledge 100 feet below. The bag with its valued stores was recovered by Morshead.

At 8 a.m. the party consisting of Norton, Morshead, Mallory, and Somervell was ready to start. The last act of preparation was the roping up, and they roped up in that order. Apart from the security roping up ensures, it has its moral effect too. It has been held: "a roped party is more closely united; the separate wills of individuals are joined into a stronger common will."

Morshead who had looked most fresh and lively among the climbers just a few days ago, did not evince signs of health on the previous day, although he ignored his ailments and wore a face of cheerfulness. But he could not keep up form any longer. After ascending a few steps he realized fully well that he was not fit to proceed with the climbers. He had to slowly retrace his steps.

Fortunately the going did not involve any 'gymnastic struggles' necessitating 'strong arm-pulls,' 'wedging themselves in cracks,' and 'hanging on finger-tips.' Were they to contend with such mountaineering difficulties, they would have no other alternative but to relinquish the project of conquering Mount Everest. The progress up this tremendously high mountain slopes demanded neat and rythmical movement, while transferring the body weight from one leg to the other. They had to proceed by spells of twenty or thirty minutes before halting for four or five minutes to enable them to be restored from

terrific exhaustion. Mallory writes: "An effort of will was required not so much to induce any movement of the limbs as to set the lungs to work and keep them working. So long as they were working evenly and well, the limbs would do their duty automatically, it seemed, as though actuated by a hidden spring." These words are very significant and depictive.

The rate of progress ,considering the height of the summit to be attained that day was not satisfactory. It was 400 feet an hour, not taking into account halts. And even then it decreased a little as they went up. It then became clear to the climbers that that sort of progress would mean that even after nightfall they would have to wrestle upwards. Mallory writes: "We were prepared to leave it to braver men to climb Mount Everest by night." He further notes: "By agreeing to this arithmetical computation we tacitly accepted defeat." None of them cared much to attain any altitude lower than that of the summit, as it was not their intention to break any world record in matters relating to the attainment of heights.

The intelligence and reasoning faculty as they approached 27,000 feet got dulled, and more so, as the supply of oxygen diminished. Mallory observes: "\*\* \*\* within a small compass I was able to reason, no doubt very slowly. But my reasoning was concerned only with one idea; beyond its range I could recall no thought." Although Mallory was keen about views, no view seemed to interest him. He had not even the desire to run the eye over the North-east Ridge of Everest, wonderful though such an experience would be. At other times he would have been

glad to reach the North-east shoulder, but at this paralysing altitude he had "no strong desire to get there and none at all for the wonder of being there."

It was deemed wise and fair to descend to Camp III with Morshead in order to make him comfortable; discomfort at the highest camp (Camp V) was lamentable. On the assumption that they could treble their speed on their descent, it was calculated that they must start down at 2-30 p.m. if they were to reach Camp IV that same day.

At 2-15 p.m. a remarkably steep slope was climbed, and they were on the edge of an easier slope that sweeps up to the North-east shoulder. Naturally they took advantage of this position with relief, and took some food which they needed very badly. They now attained an altitude of nearly 27,000 feet so that the North-east shoulder was still some 400 feet above them and might have taken nearly two hours more to reach that alluring place. But the shoulder was not their objective; moreover it was clear that the store of strength then at their disposal was already meagre enough. Furthermore, it was doubtful whether by spending the last portion of their energy in their ascent to the shoulder, they would be able to get down in safety.

They did full justice to the food they had with them in their rucksacks, such as chocolates, mintcakes, raisins, and prunes. So long they had no desire to devote their mind to any view, but as nourishment made itself felt, they looked around.

To the west was the broad expanse of the North face of Everest, and down it in the abysmal region lay the West Rongbuk Glacier. The North Peak which was perceptibly below them still seemed to make a figure in the panorama that spread before them. Two peaks, however, stood out in bold relief. They were the great twins, Gyachung Kang (25,910') and Cho Uyo (26,267').

Gyachung Kang from this height evidently lost its respectability. Cho Uyo, however, had to be regarded "respectfully" before they could be sure of the height they had actually attained. Their aneroid was reading 26,800', and it seemed as if they were looking over the top of its head. But such appearances are often deceptive as we shall see later in this chapter. Thereafter when the height of the point reached was triangulated, it figured out at 26,985 feet. So they could boast of having climbed at least 100 feet higher than the highest neighbour of Mount Everest.

At 4 p.m. they reached Camp V where Morshead was awaiting their arrival. He was then feeling well and ready to descend with them to Camp IV. They all roped up and continued their descent. It took only one hour and a half for the party to descend 2,000 feet to Camp IV. For a further descent of 2,000 feet from Camp V to Camp IV, they had nearly three hours' daylight left. The time at their disposal seemed quite enough, but then, ever-increasing exhaustion proved a menacing factor. To boot fresh snow had fallen, and the track traversed was not discernible.

As the exhausted climbers were making their weary descent, one man lost his footing, and as he slipped he pulled off the balance of two others one after another, as none could check the downward progress. The inevitable result was that these three men were desperately speeding down the great mountain-side, 3,500 feet below which, the

ice-field of the East Rongbuk Glacier was awaiting to arrest the goodly momentum that would be produced at the end of this terrific involuntary glissade.

The leader who was moving ahead could see nothing as to the state of affairs behind him. Some unusual signs warned him that something was wrong. He was at this moment moving too. Anticipating some danger he at once struck the pick of his ice-axe into the snow, and hitched the rope round the head of it, and at the same time kept the shaft of the axe well pressed in the snow. It has been observed that in circumstances like this, disaster is unavoidable. The rope suddenly tightened, but could not pull down the axe—the weight of the three men had not come upon the rope with a single jerk. The storm was over and no one was hurt—surprising indeed!

On their way down to Camp IV they were overtaken by night. Fixed rope in the difficult sections of the descent was all deeply buried, while the tracks themselves were obliterated by snow that fell in the meanwhile. Fortunately some one in the party managed to hitch up the rope to their great relief. At long last they reached Camp IV.

But as ill luck would have it, the cooking pots were conspicuous by their absence. Presumably the porters carried them down to Camp III by mistake. So they had to pass the night supperless. Lastly an ice-cream was made with strawberry jam, frozen milk and snow, and they managed to swallow down a little of this queer preparation. It was Dr. Somervell who on the following day on reaching Camp III made good the liquid deficiency in the system to a remarkable degree by taking several mugfuls of tea.

The first attempt to reach the summit in 1922 was thus brought to a close.

On May 24, Captain Noel (the photographer of the expedition), Lance-Corporal Tejbir, Geoffrey Bruce, and Finch left Camp III, and reached the North Col where they camped for the night. On the following morning at eight o'clock they proceeded up the long snow-slopes leading towards the North-east shoulder of Everest from which undoubtedly the country to the south (Nepal) would be visible. Twelve porters were carrying oxygen cylinders, provisions for one day and camping equipments. Finch, Tejbir, and Bruce followed them an hour and a half later, and although each of them carried a load of over 30 lbs., appreciably exceeding the average weight borne by the porters, Finch's oxygen party overtook them at about 24,500 feet. The porters appreciated the advantages of what they called "English air."

They intended to pitch their tents at about 26,000 feet, but hard gale attending with snowfall, practically speaking, prevented them to climb higher than 25,000 feet. Although they could use their best endeavour to go higher, it was considered unjustifiable to strain every nerve of "these cheerful, smiling, willing men, who looked up to their leader and placed in him the complete trust of little children." The porters could perhaps reach the desired altitude that day, but then, as they had to return to the North Col the same day by all means, it was not deemed advisable to ask them to proceed any further, as the long descent entailed thereby would in all probability be fraught with danger.

A spot for shelter had to be selected on the crest of the ridge itself in preference to its windward side, as it has been known by experience that wind does not blow so severely on the backbone of a ridge as it does on its windward side. In this case the leeward side had to be ruled out as no camping site within reasonable distance was discernible. Their camping site, therefore, overlooked the East and the West Rongbuk Glacier reached on either side by the tremendous precipices of this North Ridge of Everest. It was undoubtedly a sensational site.

Wind was raging as if with a vengeance. At sundown it gained strength to an alarming extent. Finch writes: "Terrible gusts tore at our tent with such ferocity that the ground-sheet with its human burden was frequently lifted up off the ground." After mid-day on the 26th May, the gale attained its maximum fury, so much so that the flaps of the canvass of tents roared like a machine-gun. Dawn came at last, but the wind continued with all the fat in the fire as before. Either advance or retreat was not to be thought of. In the interludes of short lulls, ropes had to be tightened up. Falling of wind now seemed to be a vain expectation. But at one o'clock the wind dropped mysteriously as it came, and showed no sign of freshening up. Nothing but retreat was advisable, but they decided to hang on in view of a desperate climb under contemplation. They were now, however, on starvation diet.

Waking up early they managed to start at 6-30 a.m., Finch and Bruce carrying loads well over 40 lbs., while Tejbir shouldering a burden of about 50 lbs. This sturdy Nepali gentleman carried two extra cylinders of oxygen.

It was decided that Tejbir should climb as far as the North-east shoulder and then return to camp. The breeze soon intensified itself. The intense cold began to tell upon Tejbir's "sturdy constitution," and he collapsed at 26,000 feet. Tejbir (nick-named Burah Thoki) who at the time of writing this book is said to be living in Nepal, however, maintains that he was not allowed to proceed any further by the sahibs, lest to his lot should fall the unique honour of having attained the highest summit in the world. Who can come to any decision at such a point of contention? Tejbir was then asked to return with enough oxygen on his back to the high camp.

Climbing along the crest of the ridge was not very difficult, the angle being easy. By a steady ascent they reached a height of 25,500 feet. From here they saw that the climbing right up to the shoulder was a plain sailing. But meanwhile wind gained such strength that tackling the crest of the ridge seemed to be fraught with danger. The great north face of Everest had therefore to be negotiated. For a distance the going was quite easy, but presently the general angle steepened a great deal. Besides, climbing proved all the more exasperating in view of the peculiar stratification of rocks which shelved downward, causing footholds insecure—the slabs were not only of apalling steepness, but of notorious smoothness. A thin hard crust of snow lying on a slab though seemingly helpful is treacherous in the extreme as they nastily slip when trodden.

As they trudged along this greenish black face of Everest they were to their great delight nearing the summit, but such traverse had not much effect in gaining height. The aneroid barometer was being from time to time consulted, till at last it read 27,000 teet. They now changed the plan of progress and began to climb diagonally upwards towards a point on the superbly high North-east Ridge midway between the shoulder and the summit.

As they were making headway Bruce's oxygen apparatus became accidently inoperative. The situation was saved by Finch who soon connected him on to his apparatus and made necessary repairs. This accident took place at a height of 27,300 feet. They were now too weak from hunger and exhaustion. Finch writes: "Indeed I knew that if we were to persist in climbing on, even if only for another 500 feet, we should not both get back alive."

It was now midday. They were just below the reddish-yellow rock-band of Everest, the most conspicuous feature of the mountain. Pumori, the Queen among lesser peaks, could not be now recognized without difficulty, so high was their position. It figured like an insignificant "ice-hump" lost in the Rongbuk Glacier. Without gazing downwards, the only peak that was visible was that of Mount Everest. In the first attempt the climbers reached a point 26,985 feet in height, and one and one-eighth of a mile from the summit. In this second attempt, however, was reached a point at a height of 27,300 feet, and less than half a mile away from the summit in a horizontal distance. Finch and Bruce roped together and descended safely and without a break to Camp III. It was a great feat and it was possible with the help of oxygen.

Thus ended the second attempt on Mount Everest in 1922. The third attempt on the mountain was nipped in

the bud as the party was proceeding to the North Col. How in this attempt a party of climbers and porters were swept in an avalanche has already been described. It has been very rightly observed: "The problem of reaching the summit is every time a fresh one."

## ATTEMPTS, 1924

The first attempt was made by Norton and Somervell who reached Camp V without incident. On the previous day (June 1) Mallory and Bruce had established this camp for them. This advance party made the route recognizable by strips of coloured cloth to serve as sigh-posts. On June 3 Norton and Somervell were up at 5 a.m. The previous night some stones had fallen from the platform of the climbers' tent and cut Lobsang Tashi's head and Semchumbi's knee. The porters were all found in a comatose condition and "were packed like sardines" in their tent. None showed the slightest sign of getting up and holding on his course. Norton induced them to be up and doing by saying: "If you put us a camp at 27,000 feet and we reach the top, your name will appear in letters of gold in the book that will be written to describe the achievement." At long last Narbu Yishe, Lhakpa Chede, and Semchumbi agreed to climb up to establish Camp VI. The weather was fine. They proceeded along the North Ridge and after midday they passed the highest point reached by Mallory, Somervell, and Norton two years ago in 1922.

On the North Ridge of Everest no place could be found measuring six feet by six feet on which a small tent could be pitched without having to build a platform with

loose stones. Camp VI was established at about 26,800 feet. Just two years ago the scientists debated as to the possibility of the existence of human beings without oxygen at 25,000 feet. But what is all very well in theory may suffer deviation in practice. Norton spent a very good night at a Camp VI.

An hour's journey beyond Camp VI brought them at the bottom of that reddish-yellow band of sand-stone that crosses horizontally the whole North face of Everest. This was easily traversed by crossing it diagonally as it was made up of broad ledges. Towards noon they reached the top of that majestic reddish-yellow band. They were now approaching the big couloir or gully which vertically seams the mountain side and runs down the great northern shoulder till it cuts the base of the final pyramid. They had been all the time following a line of approach which was nearly parallel to and some five hundred feet below the crest of the North-east Arête.

At midday Somervell was in a deplorable state. His throat trouble rose to such a climax that had he not been able to hawk up bloody morbid matter from the throat, he would have been suffocated to death. It was an awful predicament. Somervell seated himself under a rock just below the topmost edge of that yellow rock-band.

Norton followed the top edge of the band rising up in a very easy gradient till he reached the big couloir, the final rampart of Mount Everest. On the way he had to turn the end of a formidable buttress by following the lower route without endeavouring to climb it up. This is called the second rock step. For some distance the going was precarious as the foothold ledges here were perniciously narrow, not more than a few inches in width. The whole face of the mountain was found to be composed of slabs resembling a tiled roof. The couloir was filled up with powdery snow into which Norton sank to the knee, and in places to the waist. So loose was the snow that it was absolutely useless to offer any support in the event of a slip. The going beyond the couloir gradually worsened to an alarming extent. The progress now depended upon "the mere friction of a boot-nail on the slabs." Even here Norton unfurls the banner of optimism. He pens these words: "It was not exactly difficult going, but it was a dangerous place for a single unroped climber, as one step would have sent me in all probability to the bottom of the mountain." What with exhaustion and what with eye trouble which was getting worse, Norton was miserably overpowered. It was almost clear to him that an ascent of some 200 feet would bring him to the north face of the final pyramid whence, it was surmised, the summit would be easily accessible. It was now 1 p.m. The summit was still some 800 or 900 feet high up. Norton was defeated.

The height of the point from which Norton had to retrace his steps was subsequently fixed by theodolite as 28,126 feet, an altitude which is 24 feet below the height of Kinchenjunga, the third (probably the second) highest point in the world. In the author's book, Wonders of Darjeeling and the Sikkim Himalaya, it has been shown how Kinchenjunga claims to be the second highest peak in the world.

Two hours' solitary climb on that difficult mountains side unnerved the great mountaineer, so much so that while attempting to cross a patch of snow in the course of the descent, Norton to his great astonishment found himself utterly helpless. He shouted to Somervell for aid which was readily given. Soon after they had started down, Somervell's axe slipped from his benumbed fingers and went down the steep slopes below. That day they had to reach Camp-IV, on nearing which Norton had to shout in order to be escorted through the intricate route to the Camp. He shouted, "we want drink," but his "feeble wail seemed to be swallowed up in the dim white expanse below glimmering in the star-light." Camp IV was reached at 9-30 p.m. It was June 4. They reached the same place two years ago at eleven at night in an empty and deserted camp.

On the following day preparations were made for Mallory and Irvine's climb. Norton writes: "On June 6 at 7-30 a.m., we said good-bye to Mallory and Irvine, little guessing that we should see them no more. My last impression of my friends was a handshake and a word of blessing." Norton, now completely blind, had to be escorted by Hingston and two porters, and reached Camp III with great difficulty. The next four days at Camp III were spent by Bruce, Noel, Hingston, and Norton in great suspense and anxiety. The results of the historic attempt of Mallory and Irvine were, being awaited.

It was the second attempt of Mallory and Irvine. At 8-40 in the morning of June, 4, they were off with oxygen apparatus. Eight Sherpa porters accompanied them from Camp IV, each porter carrying 20 to 25 lbs. After establish-

ing Camp V on that day, four of the porters returned to Camp IV at 5 o'clock.

On June 7 Mallory's party was to go on to Camp VI, and Odell that same day with Nemu followed up in support to Camp V. When Odell reached Camp V, four porters of Mallory were found coming down from Camp VI, (the highest camp). They brought a letter from Mallory, the last sentence of which is: "Perfect weather for the job!"

On June 7 while Mallory and Irvine were spending their night at Camp VI being the highest camp wherefrom they were to set out for the summit on the historic day of June 8, Odell was that night occupying Camp V, 2,000 feet below Camp VI. Odell's porter, Nemu, was affected with mountain sickness, and had therefore to be sent down. Odell was consequently the monarch of all he surveyed—he was nestled into this high camp in majestic isolation.

After doing the day's work the sun was just bidding adieu to this side of the hemisphere. To the west heaving above the West Rongbuk Glacier, were seen wild mazes of peaks culminating in the towering Cho-uyo (26,750') and Gyachung Kang (25,910'), "bathed in pinks and yellows of the most exquisite tints." To the eastward, one hundred miles away was seen "floating in the air," the snowy top of Kinchenjunga, while only some twenty miles away to the east "the beautifully varied outline of the Gyankar Range that guards the tortuous passages of the Arun in its headlong plunge towards the lowlands of Nepal" presented to the view. Odell pens these words: "It has been my good fortune to climb many peaks alone and witness sunset from

not a few, but this was the crowning experience of them all, an ineffable transcendent experience that can never fade away from memory."

That night Odell slept almost well. On June 8 he got up at six, but could not start earlier than eight. Carrying some provisions in a rucksack he made his solitary way up the steep slopes of snow and rocks and ultimately reached the crest of the North Ridge. While Odell was now bound for Camp VI, Mallory and Irvine were making their historic ascent to attain the world's highest summit. It was the eighth day of June, 1924.

While proceeding to Camp VI Odell at about 26,000 feet climbed a little crag nearly 1,000 feet high. As he reached the top, by a freak of nature the whole atmosphere cleared off. Odell noticed a tiny object moving on a snow slope and approaching a rock step. A second object followed the first, which latter was seen climbing to the top of the step. It was indeed a dramatic scene. Odell was not quite sure whether the second figure joined the first on the top of the rock. Undoubtedly these figures were of Mallory and Irvine. Odell was greatly surprised to see them so late as 12-50 p.m. at a point which, if it were the second rock step, they ought to have climbed by 8 a.m. at the latest. Had it been the first rock step, they ought to have tackled it much earlier. Odell saw a considerable quantity of new snow covering some of the upper rocks near the summit ridge. Possibly therefore, snowfall might have caused delay in the ascent! Mist and cold, and to a great extent snowcovered and debris-sprinkled slabs might have impeded their progress!

At 2 p.m. Odell arrived at Camp VI which was in a concealed position walled in one side by a small crag. Snow commenced to fall, and Odell thought that under the prevailing conditions the climbers would experience considerable difficulty in finding out the camp. So he scrambled up the mountain side to a height of about 200 feet, and whistled to attract their notice in case they should be within hearing. Soon a driving blizzard made it imperative for Odell to take shelter for sometime behind a rock. Any use waiting for Mallory! Through deep fog Odell retraced his steps to Camp VI. After a while the fog blew away, and soon the whole north face of Everest burst upon the view bathed in sunshine. No trace or any indication of Mallory and Irvine could be made out.

An idea suddenly struck Odell as quite possible; he remembered the request made in his last note to the effect that Odell should evacuate Camp VI that day and return to the North Col Camp, and if possible, to Camp III, as he himself wished to reach the North Col, and even Camp III in case the monsoon should suddenly break. Besides all this, the small tent at Camp VI being just sufficient to somehow accommodate two men, Odell had no other alternative but to evacuate it by all means, as should Mallory and Irvine return from their crowning adventure to Camp VI, bivouacing would evidently fall to the lot of one of them, and sleeping outside exposed to the full rigor of the King Cold at that tremendous altitude would simply be courting a disaster.

Odell left Camp VI at 4-30 p.m., and while descending the solitary slopes on his way down to Camp V off and on

cast the eyes in vain on the upper rocks for some signs of the climbers. A steady descent and finally a standing glissade brought him to Camp IV at 6-45 p.m.

It was then surmised that Mallory and Irvine being far behind their scheduled time when last seen might have succeeded in reaching Camp VI or possibly Camp V before darkness. The evening was clear, and they had been watching late at night for some signs of Mallory and Irvine's return, or if the worst would come to the worst, an indication by flare of distress.

The day of Mallory and Irvine's attempt to reach the summit was now lost in the dead past. The tiny tents of V and VI were now watched through field-glasses. No sign of movement anywhere till noon when Odell decided to climb the mountain once again in search of the party. A code of signal was planned, under which was arranged the placing of sleeping bags in different ways against the snow in the daytime, with the view of communicating different news. For the night a code of flash signals was arranged.

Accompanied by two porters Odell left Camp III at 12-15 p.m., and reached Camp V in 31/4 hours. During the ascent two sherpa porters faltered a good deal. Mallory was not there. What now remained to be seen was Camp VI. There was no time to proceed to Camp VI that evening even if the porters could be persuaded to climb up. That night wind was boisterous, and threatened to blow away their small tents. Owing to intense cold and wind Odell was unable to sleep even inside two sleeping bags.

June 10 dawned with raging winds. The porters at Camp V were disinclined to stir. They simply showed

signs to the effect that they wanted to descend. So they were ordered to go to Camp IV. Odell with great difficulty went up against terrific wind and cold, now and then taking shelter behind rocks. He had with him oxygen cylinders and apparatus, but he derived no benefit therefrom. He took larger quantities and longer inspirations, but the effect seemed almost negligible. What Odell writes is very significant: "I wondered at the claims of others regarding its advantage, and could only conclude that I was fortunate in having acclimatized myself more thoroughly to the air of these altitudes and to its small percentage of available oxygen." So he proceeded with the apparatus on his back without taking any advantage of the apparatus. As to the strain involved in breathing, Odell's words are graphic. He writes: "I seemed to get on quite well, though I must admit the hard breathing at these altitudes would surprise even a long distance runner."

At last Camp VI was reached with the hope of finding Mallory there. Bitter disappointment was in store for Odell. What more was humanly possible for poor Odell! What more remained to be done! Hoping against hope Odell proceeded further up along the probable route Mallory and Irvine might have taken. He struggled on for nearly two hours and continued the search on that "vast expanse of crags and broken slabs." This most bleak and inhospitable region seemed to turn a cold shoulder upon this solitary traveller climbing in search of the missing party. Further search was not possible for a single man. Finding no other alternative Odell had to retrace his steps and on his way back dragged two sleeping

bags from Camp VI. Placing against a steep snow-slope two sleeping bags in the prescribed form of the letter T, Odell signalled down to Hazard at the North Col Camp the fact that no trace of the missing party could be found. The signal was distinctly noticed from the North Col, 4,000 feet below Camp VI. Hazard's answering signal owing to bad light could not be made out by Odell.

While leaving Camp VI Odell cast a glance at the towering peak. Here the words depicting his feelings are replete with philosophy of a high order. "It seemed to look down with cold indifference on me, mere puny man, and howl derision in wind-gusts at my petition to yield up its secret-this mystery of my friends. What right had we to venture thus far into the holy presence of the Supreme Goddess. \* And yet as I gazed again another mood appeared to creep over her haunting features. There seemed to be something alluring in that towering presence. I was almost fascinated. I realized that \* who approaches close must ever be led on, and oblivious of all obstacles seek to reach that most sacred and highest place of all. It seems that my friends must have been thus enchanted also; for why else should they tarry?"

Odell returned to the Norfon Col and was pleased to find a note from Norton that he should return and not prolong his search in the mountain.

The point of the second rock step at which Mallory was last seen was at an altitude of 28,230 feet as subsequently determined by theodolite from the Base Camp by Hazard. In case the above point was on the top of the first rock step, Mallory had attained a height of not more than 28,000 feet.

In the latter event Norton must be said to have made the known altitude record by climbing up to 28,100 feet.

On the supposition that they had climbed the second rock step, they had about 800 feet of altitude to ascend and some 1,600 feet of horizontal distance to cover in order to reach the summit. If Odell's observation be true, then Mallory ought to have got to the top of the mountain by 3 or 3-30 p.m. In the note of Mallory sent to Noel at Camp III he expressed the hope of reaching the foot of the final pyramid (about 28,300 feet) by 8 a.m. From all the foregoing data it is evident that if the climbers were on the topof the second rock step at 12-30 p.m., they ought to have reached the summit by say 8 p.m., and in that case it would have been impossible for the party to come back to Camp V that night. And Mallory was not such a fool as to definitely venture their precious lives by undertaking the risk of climbing the summit so late. In any case Mallory and Irvine could not either come down to Camp VI after making an attempt to reach the summit, or they fell down either in the course of their ascent or descent. In the former event the party must have succumbed to the telling effects of bivouacing on that tremendous height. The failing of oxygen apparatus, resulting in the waning of vital force and consequent inability to return, is in the opinion of Odell not a feasible argument. Odell holds that they met their death by being benighted. Has Mount Everest been climbed? We think not. But Odell writes: "But bearing in mind all the circumstances I have set out above and considering their position when last seen, I think myself there is a strong probability that Mallory and Irvine succeeded."

But even more than all these perplexing controversy is the question: "How is it that they had been climbing the second rock step so late as noon?" Besides, how is it humanly possible to climb that steep and high rock step in some five minutes? Odell says that the figures were undoubtedly of Mallory and Irvine. Who else would contribute to the movies at that high region, 28,000 feet above the world? Can it be ascribed to any optical illusion? We shall see later on.

# ATTEMPTS, 1933

Camp VI of 1933 was 600 feet higher than Norton's Camp VI of 1924. It was also 400 yards horizontally ahead of the 1924 Camp. Camp VI of 1933 was about 400 yards east of the first rock step. Its altitude was 27,400 feet as determined by means of the aneroid and the study of scaled photographs. The final dash for the summit, therefore, meant the gaining of an altitude of 1,600 feet, keeping in reserve time sufficient to return to Camp V after reaching the summit. It would not do to return to Camp VI on that day of the final attempt to reach the summit, as that camp was to be occupied by the next party that was to proceed in the wake of the first.

This year before establishing Camp VI at that higher altitude, all of a sudden came into view Norton's Camp VI of 1924. Nine years of exposure had evidently played havoc with its strength, but it looked astonishingly new. The men were elated with joy at the discovery of the old.

tent at that bleak region, prey to every wind that blows. Soon thy found out two articles reminiscent of the bygone expedition. One was a folding candle-lantern and the other was a lever-torch which latter readily responded to a touch.

It may be mentioned here that while Longland led his party of porters down from Camp VI after having established it, he was overtaken by a blizzard which made route-finding a difficult task. All of a sudden it struck him that he was probably descending in a wrong direction which would perhaps bring him to the ice-slopes of appalling steepness above the East Rongbuk Glacier. In the teeth of the gale it was a heavy going and the porters had from time to time to sit down. No landmark was visible through the driving snow. Longland was in a dreadful plight. It was, however, a piece of good luck when he sighted Camp V from a distance. Two long and anxious hours were now over.

Three well organized parties were now sent one after the other in a wave against the towering pinnacle of Mount Everest. The wave was a ripple, no doubt, but behind it was the surging spirit of man.

Wyn Harris and Wager were in good form when they reached Camp VI. The floor of the tent sloped downwards with the result that Wager who, so to say, occupied the lower berth, was at a great disadvantage as his companion kept sliding down upon him. At about 6 a.m. they managed to get out of their tent. The sun had not so far reached them. Excessive cold of the early morning hours threatened frostbite. As the sun appeared after nearly one hour's traverse towards the north-east ridge, Wager was

obliged to remove his boots and rub his feet to establish circulation of blood in those numb extremities. Soon after this, when they reached a spot some sixty feet below the crest of the North-east Ridge and 250 yards east of the first step, Wyn Harris, who was leading, happened to come across an ice-axe, on which so far much ink has been spilt with the view of arriving at some definite conclusions as to its ownership.

The climbers left the ice-axe on the spot where it was found, and ascended to the foot of the first rock step, wherefrom the second rock step was some two hundred yards away. Their first idea devolved on turning the first step, and climbing straight up on to the North-east Ridge. They, however, soon made out that the ridge would be a difficult tackling. Finding no better alternative, they traversed along the top of the yellow band. On arriving under the second step, they were surprised to find that not only the second step was unclimbable from this side, but that it was invincibly guarded at its foot by a smooth darkgrey precipice.

They were now in search of the gully, which appeared to them from a distance seaming obliquely down the step in a north-easterly direction. On a nearer approach this gully could not be traced; the gully was evidently a delusion. But some 200 yards further away came intoview a gully inviting an ascent. It seemed to cut through both the first and the second step. If it could be climbed, the party would easily reach the ridge at a point wherefrom the summit could be easily reached by following a direct straightforward route. They, therefore, made for the

bottom of the promising gully, which was reached at about 10 a.m. Too much time was taken in the traverse which was a difficult one. More than four hours were thus spent in making a detailed survey of this part of the great north face of the mountain.

Hope ran high, but soon their spirit was damped when they discovered that the gully was a mimicking one. It was "a mere shallow scoop in the smooth walls." The going from this place proved treacherous owing to the smoothness of the rocks. So the party roped up here.

The impracticability of the ridge route was now past dispute. They, therefore, proceeded upwards in a westerly direction. The progress was very much impeded by some terribly difficult going over snow-clad sloping slabs. After doing a horizontal distance of 150 yards they came upon a big couloir which cut through the great mountain side till it reached the West Rongbuk Glacier, 10,000 feet below.

This great couloir seemed to bar the way to the final approach to the King of Heights. It was deeply covered with powdery snow which gave no support to the feet and slided down at a touch. The negotiation of the coulcir threatened a fatal slip at every moment. "It was a sensational crossing."

The rocks forming the remote walls of the couloir were steeper than those already crossed in its eastern walls. Providence that day was in their favour.

After crossing the couloir the party proceeded creeping for a further distance of 150 feet. They now reached a point some fifty feet above the top of the yellow band. Here another small gully intercepted the route. Wyn Harris

was determined to cross it, realizing at the same time that should the snow slip away, Wager who was precariously balanced on a slab would not be able to hold him on the rope. Ruttledge's words are here very expressive: "Suddenly came realisation that the limit of reasonable climbing had been reached, if not passed."

It was now half past twelve. Wager was under the impression that he might continue the climb for an hour more. But it has been held: "Except in the last necessity, a man should not be left alone, either to wait or to climb, on ground like this."

The height attained was something over 28,100 feet. Norton reached approximately the same place in 1924. There remained, therefore, about 1,000 feet to reach the summit, to attain which it would have taken at least four hours. But in the existing conditions of snow the ascent would be fraught with danger. Besides, they could not afford to spend four long hours in the ascent if they at all meant to return to Camp V, at least, before dark.

On their way back to the North Col the same day, Wager with great difficulty climbed the North-east Ridge at a point east of the first step. He is, therefore, the only climber who was uniquely fortunate in catching a glimpse of the stupendous snow-clad south-east face of the mountain that overlooks the low hills of Nepal.

While approaching the North Col Wyn Harris taking short views of things glissaded down a snow-slope. He was, however, expert in undertaking such glissades in the Alps. But the forgot to take into consideration his exhausted condition which did not certainly warrant ventur-

ing a glissade at this stage. As ill luck would have it the slope was humpbacked, and before one can say 'Jack Robinson' Wyn Harris found himself sliding down the great precipices overlooking the East Rongbuk Glacier. North Col. his destination, seemed now to bid adieu for good. It was a shocking moment. Years of guideless climbing in the Alps and elsewhere made him an expert in rising to the occasion in a situation like this. He soon turned over on to his face and thrust the pick of his iceaxe into the ice slowly, while grasping the weapon firmly with the hands pressed well beneath the chest. The acceleration was thus retarded and he was soon brought to a standstill, on the very edge of the precipice of appalling steepness and height. If the thrusting of the pick of the axe were done quickly, he would have at once lost grip of the axe, and nothing on earth could have saved him. In the words of Ruttledge: "It had been a very near thing." Unnerved and exhausted to the last degree, Wyn Harris somehow or other dragged himself up till Wager could extend a helping hand.

Wyn Harris did all that was humanly possible. They explored the possibilities of Mallory's ridge route by attempting to climb the steps with the view of gaining the ridge, and made gallant efforts to attack the mountain along Norton's route.

Let us now revert to the amazing subject of the axe that was found lying on the mountain some 250 yards east of the first step. As has already been mentioned, an ice-axe suddenly dropped from the numb fingers of Somervell when he and Norton were descending to Camp VI. So it would appear that the axe belonged to Somervell. But for two reasons this is not so. Firstly, Somervell and Norton traversed by a lower line direct towards the great couloir. Somervell's axe went cartwheeling down a great precipice till it was out of sight. Undoubtedly, the axe belonged to either Mallory or Irvine. The maker of the axe was Willisch of Täsch who was a master crastsman, to whom, it has been held, first-rate amateurs like Mallory, who do their guideless climbing, would naturally go for a high class axe. Ruttledge later on came to know that a number of Willisch axes were supplied to the climbers of the 1924 So the ownership might as Expedition. well attributed to Irvine. It is, therefore, quite possible that the axe slipped from the hands of either of them in the course of a descent or an ascent which ended in a catastrophe. If what Odell saw while ascending from Camp V is true, that is to say, the climbing of the second step by Mallory and Irvine, then they in all probability fell on the descent. And as a matter of fact a fall on a descent is far more probable than a fall on an ascent.

But what Odell saw on the second step, separated from him by a vertical distance of some 2,000 feet and a horizontal distance of some 600 yards, will always remain a mystery. Although it cannot be argued that vision directed to such a height would be absolutely lost in the process, yet that it had been possible for them to surmount the second step in such a short time as five minutes is a question which cannot be easily answered. The four climbers of the 1933 Expedition, who had the opportunity of making a thorough survey of the rock steps, were of

opinion that this step is almost impossible. At all events, they held that no man, however skilful, could complete the ascent in five minutes.

Ruttledge at long last says: "But Odell's firmly-held opinion is entitled to the greatest respect, and perhaps the affair will always remain a matter for conjecture." One is now apt to proceed a little further and say that the dramatic scene might then be an illusory one.

Referring to Odell and a similar illusion to which Shipton was involved in the second attempt to climb Everest in this year, Smythe points out: "Is it possible that he was similarly tricked by his eyes?" Smythe further writes: "The effects of altitude, tiredness, and the strain of climbing combine to impair the efficiency of vision. It was 12-50 p.m. when they were seen. Why were they so late? No one could probably climb the second step in the short time that he saw them; it is quite 100 feet high, vertical for the most part and even overhangs in its upper portion. It is probably unclimbable and certainly desperately difficult."

The second attempt on Mount Everest in 1933 was made by two eminent mountaineers who had already assailed the Himalaya. Shipton of Nanda Devi, and Smythe of Kamet and Kinchenjunga repute were proceeding upwards from Camp V on their way to Camp VI on the day on which Wager and Wyn Harris were climbing to reach the summit. When nearing Camp VI Shipton suddently stopped and burst out: "There go Wyn and Waggers on the second step." Both the climbers stared hard at two little dots which might well be said to be on the move.

But soon they realized that they were rocks. Two more rocks were seen perched on a snow-slope immediately above the step. Smythe writes: " \* \* these again looked like men and appeared to move when stared at."

Smythe and Shipton passed an uncomfortable night at camp VI. The floor of the tent was far from being smooth. Smythe writes: "The sharpest stones in Asia had inserted themselves cunningly beneath the tent." There was again that sliding business; Smythe kept on rolling on Shipton who occupied the lower berth.

The morning of May 31 broke at long last. Both the climbers felt tired and depressed. Meanwhile with the dawning of the day, wind rose and it was snowing. An assault on Mount Everest was now to be thought of. So they consigned themselves to the care and comfort of their sleeping bags. By the afternoon wind and snowfall gave place to a veteran blizzard. Both of them realized how their attempt was going to be futile, but none preferred to give voice to his feelings to the other. If the boisterous weather maintained its course or the monsoon broke, descent might be thwarted. Food they had only for two or three days, while fuel was to last for only two days. Besides there was the more serious question of deterioration, the process of which at that tremendous altitude was rapid and decisive. Grip of cold and altitude was appalling. Smythe here brings out a very significant point. Altitude has the effect of keeping a mountaineer too much engrossed in matters relating to his present existence. One is apt to be hardly conscious of the needs of the future. The sarcastic expression in

this connection of Smythe, "But in one respect altitude is merciful; \* \* " is indeed menacing.

By a freak of nature, the morning of June 1 dawned fine. After an exhausting fight with their windproof clothing and boots "frozen to the consistency of granite," the party headed for the great couloir. Before long, Shipton succumbed to his stomach trouble he had complained of prior to his starting. He was, however, fit enough to retrace his steps to Camp VI.

Smythe continued the ascent alone. On a near approach to the couloir, a ledge that was being followed by Smythe narrowed to such an extent that the going over it proved extremely critical. He writes: " \* \* I felt that an extra deep breath might topple me off backwards down the couloir to the Rongbuk Glacier 9,000 feet beneath."

It is a surprising fact that on entering the couloir Smythe had to encounter hard snow for a distance, on which a dozen of steps had to be cut—a very weary task at that breathless altitude.

A subsidiary couloir of fair promise was near by. It was the only breach in the unclimbable black band of rock that runs in continuation of the second step across the northern face of the mountain. The sight of this couloir from afar was encouraging to Smythe, who by climbing which, easily expected to reach the foot of the final pyramid, wherefrom the assailing of the summit would be in all probability not difficult. Smythe writes: "It is the one weakness in the most formidable of Mount Everest's defences, and in it lies the key to the ascent."

Smythe remarks that while as far as the great couloir the climbing had been more dangerous than difficult, beyond it, it proved both difficult and dangerous.

After three hours' climb the western wall of the couloir was reached at 10 a.m. Smythe got to about the same place as did Wyn Harris and Wager on May 30.

Smythe writes: "The bitterness of defeat was brought home to me, but it was a bitterness mercifully dulled by altitude. I remember glancing at the summit. How pitilessly indifferent, how utterly aloof and detached from my futile gaspings and strugglings it appeared!"

It will be of interest to narrate here one of the twocurious phenomena which were experienced by Smythe during his solitary climb. Smythe ascribed all this to the effect on both body and mind of unusual strain of high climbing. Besides, a great deal of delusion is due to the effects of oxygen-lack on the brain. While he was climbing alone he was under a strong impression that he was being accompanied by a second person. Not only that, it seemed to him as if he was tied to his companion by a rope, and that in case of a slip he would be held by the unseen person. The phenomenon appeared to him to be of unimpeachable reality, and he constantly glanced back over his shoulder. The thought of his companion was so vivid and uppermost in his mind that when on reaching his highest point he stopped for a while to eat some mint cake, he divided it so that both of them might partake of the same. He even turned round with one half in his hand-so much haunted was his mind. He was surprised to find no one behind him to share the cake with him. He felt the friendliness of his invisible comrade who followed him in his return journey till Camp VI was sighted, when the connecting link was snapped, and he forthwith felt alone, although Shipton and the Camp were at a stone's throw.

The second attempt on Everest in the year 1933 thus ended in a failure. With the view of recuperating, the whole expedition was back at the Base Camp on June 7. On June 15 the party reoccupied Camp III with the view of making a third attempt on the summit. Heavy fall of snow all the time made it imperative to defer the assault. Snow now showed no sign of melting and consequently the snow-covered slabs of higher slopes would be impossible to negotiate. Heavy avalanches were heard one day thundering down the North-east Ridge below the shoulder.

The word was given for retreat. Between June 21 and 23, Camp III was evacuated. The whole expedition soon returned to the Base Camp which was established on April 17. During these two months a great change had taken place. The Rongbuk Valley was wearing a face of joy. Thrills of life made themselves felt everywhere. Grass and flowers were up again, and birds and insects were on their wanton wings. It was a new world.

The Expedition left the Base Camp for the return march on July 2, crossed the Sebu La on July 19, and thereafter passing through the most lovely part of Sikkim, then ablaze with flowers, returned to Darjeeling on July 26 amid cheers and hospitality.

#### CHAPTER XIII

# TRIUMPH BY AIR AT LONG LAST

"Higher still and higher,
From the earth thou springest;
Like a cloud of fire
The deep blue thou wingest,
And singing still dost soar, and soaring ever singest."
—Shells

HILE the hardy mountaineers of the 1933 Expedition were pushing ahead in their desperate struggle for the summit of Everest from the Tibetan (northern) side, the last stronghold of Nature was being assailed from the Nepal (southern) side by aeroplanes. The idea of flying over Everest first flashed upon Major Blacker. Colonel R. T. Etherton, a born organiser, espoused the cause of Blacker. The Council of the Royal Geographical Society endorsed the plan in due course, and through proper authorities it was brought home to the stern authorities of Nepal that the purpose of the Expedition was austerely scientific-that its success in mapping an impassable region extending to nearly twenty miles south of Everest with the help of air cameras would not only place before the world at large important knowledge of this stupendous fortification of bewildering intricacy, but also pave the way to efficient survey of impenetrable region from the air in other parts of the earth's surface. The Government of Nepal proved sympathetic, and the enterprise at once sprang up into action.

The Committee of the Expedition approached Lady Houston, D.B.E., whose munificence had already made a noise in the world of British aviation. The ambitious project appealed to her and although contributions were to a certain extent forthcoming from the public, it was her open-handedness that at last brought the dream within reach.

It was not an easy adventure. The problems before them, all scientific in character, were too many to mention. A series of scientific experiments most problematical and highly technical in character had to be carried out, not only in the laboratory, but also in cold chambers of intensely low temperatures, and also in steel chambers of highly reduced pressure.

The Expedition was principally to be a fight on the one hand with altitude, almost fringing on the stratosphere as they were to fly over the summit of Everest at an altitude ranging from 30,000' to 33,000', and on the other hand with wind of hurricane force, the velocity of which near the summit could not be determined, although meteorologists persistently endeavoured to do so from observation made on the velocity of inflated India-rubber baloons, let loose from the foot of the Himalaya.

It was not a fight of the nature similar to that encountered by the climbing party, so to say, strengthened and made fit by a process of acclimatization in the course of their ascending marches from camp to camp. Here the pilot as well as the observer had to bear the terrific effect of both cold and altitude almost at a moment's notice. In less than three quarters of an hour, temperature would

change from the sweltering heat of the plains to inconceivably low temperature, reigning supreme at an altitude almost verging on the stratosphere, that is to say, from a sun temperature of nearly 180°F to some 120°F of frost,—a tremendous difference. And within that short time, a man subjected to the pressure at sea-level is to undergo an abnormally reduced pressure of the extremely rarefied air. This abrupt change in pressure is apt to cause rup ure of blood vessels of the body and bleeding from various outlets of the human organism as well as cerebral hæmorrhage.

The following were a few of the many problems science had to solve before wings could be put in action on Everest.

- (1) To supply pure oxygen as obtained by separating it from liquified air.
- (2) To eliminate every trace of water-vapour from oxygen thus prepared (this proved to be highly problematical) as otherwise it would freeze while passing through the valve, which would then be clogged, resulting in the failure of the oxygen apparatus, and immediate disaster would ensue.
- (3) To arrange for electrically heated clothes, goggles, and all other equipments.
- (4) To arrange for a special protection of films in the camera, as otherwise the heat in the cock-pit of the aeroplane would be sufficient to bring about an explosion of the same. (This problem was solved by means of a mica-covering.)

- depends on speed and direction of wind en route to the summit. (The weight of every equipment and materials had to be cut short to an ounce with utmost care in order to give the machines best chance to surmount the peak.)
- (6) To guard against the petrol freezing in the carburetter. (Petrol was of a special quality. To this Benzol was not mixed to any appreciable extent, as is usually done, by reason of the fact that benzol freezes at -60 C. Benzol was practically ruled out, and tetra-eth, lead was substituted.)
- (7) To arrange for a microphone for facilitating communication between the pilot and the observer while passing through the din and roar produced by the sweeping wind dashing against the 'plane, and of the engine itself. (Microphone, however, did not behave well at those tremendous altitudes.)
- (8) To arrange for parachutes. (But in case of engine failure, these would be of no avail. So these were ruled out).
- (9) To be on the look out for a sufficient drop in the wind-velocity over Everest.
- (10) Necessary fall in the wind-velocity should also be made to synchronize with clear atmosphere, as clouds or mists enveloping either the mountain, or even the low valleys would frustrate scientific observation—i.e., the taking of a series of overlapping vertical photographs,
- (1) To arrange for air cameras wih devices for automatic exposures which could be regulated as to the intervals between two consecutive exposures. These

intervals, again, had to be determined with reference to the height at which the 'planes would be flying through different regions.

For the flight over Everest, two very big and most scientifically equipped æroplanes were designed, while for the purpose of reconnoitring and bringing in news of the conditions prevailing over Everest region, three small æroplanes were utilized. While bound for the ærodrome at Purnea (in Behar) wherefrom the Expedition was finally to start for the epic flight, wonderful glimpses of the mountain was caught for the first time from Gaya.

On the memorable day of April 3, 1933, the velocity of wind fell to 57 miles per hour at 33,000 feet, and the scouting 'planes reported the mountain and the valleys free from clouds. This velocity is still appalling, although not so great as to produce disastrous results.

The die was cast. A few minutes after leaving the ground, Blacker, the Chief observer in the Houston-Westland, had many irons in the fire, or in other words, had not a moment he could call his own, as he had to make a number of vital checks to ensure success of the enterprise. These were in connection with the various electrical connections, film and ciné-cameras, instrument to watch for change of drift, instrument to inspect pressure gauges, etc., etc. It was incumbent on the observer to make a list of such tasks, trivial though they were from the view point of manipulation. Each observer had a list of these duties which numbered forty-six, as the rarefied atmosphere at very high altitudes has a tendency to affect the memory. Blacker writes that constant inhalation of oxygen tends to so engross

the thoughts on the idea or task that comes uppermost that everything else loses its share of attention.

The machines soared aloft and sailed for the unknown. From Purnea it was a distance of fully 160 miles to cover as the crow flies. Actually they had to do a distance of nearly 215 miles at an average speed ranging from 108 to 156 miles per hour.

They expected to get over the brown dust-haze at 5,000 feet, but it was only beyond 10,000 feet that the crystal-clear atmosphere came into view, and with its appearance a few peaks of the Everest group, and the great massif of Kinchenjunga peeped out of the horizon against the azure sky. But as ill luck would have it, they could not discern the confluence of the two rivers near the Komaltar ridge (120 miles from Purnea) which guards Nepal on the North. As this landmark, wherefrom their air survey was to begin, could not be identified, this Expedition was practically a failure from the standpoint of science.

At the 128th mile from Purnea, they crossed a ridge, 8,000 feet in height. From here peaks after peaks towered aloft to greater and greater heights till culminating in that of the King of Heights. The crossing of the vast sea of snowy mountains was a spectacle thrilling in the extreme.

Blacker writes that soon after they emerged from the haze, straightway Kinchenjunga showed forth away to the right in all its gleaming whiteness silhouetted against the blue. And for a few minutes nothing else came upon the stage. Thereafter the top of Mount Everest heaved in sight. Blacker writes: "Just a tiny triangle of whiteness, so white as to appear incandescent, and on its right, a hand's breadth.

another tiny peak which was Makalu." Gyachungkang and Gaurisankar also broke through the clouds.

Blacker now depicts in words the scene that emerged to the view as the 'plane was approaching Mount Everest. "I was not long able to remain watching these wonderful sights, for soon the machine soared upwards, unfolding innumerable peaks to right and left and in front, all in their amazing white mantles, but scored and seared with black precipices." It may be noted here that these dark precipices are nothing but granite battlements of the Himalayan giants of appalling steepness where snow cannot precipitate.

Soon after to their dismay came into view the ice-plume of Everest, that long pennant of cloud and snow that was flying from the summit of the sovereign peak away to the east towards its sister peak, Makalu.

And then! Blacker writes: "Up went out machine into a sky of indescribable blue, until we came to a level with the great culminating peak itself."

What an illusion! The distant snowy peaks, beyond Everest and rearing their crests up on the vast expanse of the Tibetan plateau far away to the north, looked larger than the master-peak—an inexplicable phenomenon.

As they were just essaying to pass over the South Peak (called Lhotse by the Tibetans) of the Everest group the aircraft was forcibly drawn vertically downwards to a distance of 1,500 feet, owing to a great down-draught of the winds in this region. It then seemed that the clearing of the peak of Lhotse was a vain expectation, but the splendid aircrafts managed to stem the current, and soon after

approached the much-coveted summit and the characteristic yellow-red bands of the mighty peak.

Hope ran high! Imminent seemed the victory.

" \* \* our aeroplane came to the curved chisellike summit of Everest, crossing it, so it seemed to me,"
Blacker writes, "just a hair's breadth over its menacing
summit." The strain of suspense and dismay is still held on
in the thrilling expressions of Blacker who writes: "The
crest came up to meet me as I crouched peering through the
floor, and almost wondered whether the tail skid would
strike the summit." Then he writes: "I laboured incessantly, panting again for breath to expose plates and films,
each lift of the camera being a real exertion."

Glorious moment! Soon they flew over the highest summit in the world ,clearing it by 100 feet, although it produced a queer impression of extreme proximity on Blacker.

Three circuits were made around the summit. While passing through the leeward of the peak, they entered the 'plume' of Everest. The aircrafts battled their way into this region of flying fragments of ice, which literally bombarded the 'planes and "rattled violently into the cockpit."

In spite of electrically heated devices, the metal parts of the camera were contracted by cold, and certain manipulations called for energy amounting to a struggle.

Sailing home at last! The downward movement of the needle indicating oxygen pressure did not warrant any more lingering on the top of Everest.

While returning they had the unique opportunity of running the eye over one of the most beautiful scenes in the world—the Arun gorges that cut across the great mountain sides from an elevation of over 16,000 feet. In the words of Blacker: "We came back towards the terrific Arun gorges over a bewildering medley of peaks, ranges and spurs, interspersed with broad grimmy glaciers littered with moraine, scree and shale."

While returning, the film in the ciné-camera was found frozen over, and the oxygen masks too were deplorably covered with a solid mass of ice.

Now let us deal with the amazing phenomenon of the 'plume' of Everest.

. Most spectators from Darjeeling have probably noticed a distinct and oblique line of clouds rising from the crests of Kinchenjunga and pointing towards the east. Similar phenomenon has been observed with respect to Mount Everest. The writer so long attributed it to the cloud-attracting power of the three highest peaks of Kinchenjunga, or to blizzard swept along the windward direction.

This crowning cloud wreath is generally called a 'plume' in common parlance. The appellative given to it by the aerodynamical experts is 'burble'. The eminent writer of The Kangchenjunga Adventure, Mr. F. S. Smythe, writes in one place:—"A silver lock of clouds was trailing from Kangchenjunga." So it did not fail to attract his attention, but no one has so far been able to probe into the mystery of this 'silver lock'.

The epic and epoch-making Houston Mount Everest Expedition of 1933 by aeroplanes throws some light on this

enigma. The Expedition party gave voice to its unique experience and amazement thus: "We were thrilled beyond description by what we had seen; but of all we had seen through, our passage into the heart of the plume or jet of ice particles was the most intriguing." In another place again: "Here is no drifting cloud wisp, but a prodigious jet of rushing winds flinging a veritable barrage of ice fragments for several miles to leeward of the peak." They consider it to be due to a zone of reduced pressure "which tends to draw up the air from the Tibetan side and with it great masses of old snow and fragments of ice." But why should there be a reduction of pressure, approaching a vacuum?—a great mystery indeed.

April 4th dawned fine over the mountains, and meteoroligists forecasted that the favourable weather might not last any longer. An attempt to assail Kinchenjunga was hastily planned. The first sight of this majestic and prodigious massif from the air was supremely enthralling. A height of 34,000 feet was attained.

Everything looked promising. They intended to first reach the well known confluence of the Great Rangit below Tashiding monastery.

On his way to the Great Rangit in 1941, the writer came to know from the people at Singla Bazaar (near the confluence of the Great and the Little Rangit) that nearly a decade ago, two 'planes flew over this confluence. These were evidently the aircrafts of the 1933 Expedition. From this place, the Tashiding confluence is a few minutes' flight towards east. By the way, it may be of interest to note here that the right bank of the Great Rangit river at

Singla Bazaar, a day's journey from Darjeeling, is a scene of the fairyland. It is at a valley verging on lovely Sikkim. Stones and pebbles of variegated colours lie strewn all over its right bank. It is to be seen to be believed.

From the confluence below the Tashiding monastery, they intended to start taking a series of overlapping vertical photographs straight on to the mighty summit. But partly owing to clouds shrouding the valley, this confluence could not be noticed. It may be noted here that this confluence is nearly seventeen miles away as the crow flies to the north of and four days' march from Darjeeling.

Fellowes writes: "I wondered if I would be able to recognize it, hampered as I was by goggles and oxygen masks." And his surmise was right. To one who had the opportunity of travelling through these regions of Sikkim seamed with and furrowed by many a valley amid bewildering mazes of blue mountains capped with a number of monasteries, it would appear how embarrassing would be the task of finding out this particular confluence from the air. Besides, there are quite a number of confluences in these regions.

In any way, they decided to take a series of overlapping vertical photographs of the snowy heights of Kinchenjunga.

As the mountain was drawing nearer and nearer and a distance of nearly thirty miles separated them from the summit, the mountain-top looked blurred. The scene that now presented itself before the aspirants has been nicely described in the words of Fellowes, who writes: "Then a look round revealed a wonderful scene. I was amazed. Behind lay the plains of India, cut in all directions by the broad and winding sand-courses of the many river beds-

flowing from the Himalayas and constantly forming new channels for themselves. Directly beneath the aircraft was a sea of clouds and looking forward as the mountain came nearer and nearer, great peaks of over 20,000 feet upreared themselves from the main range. We were now looking down on scenes never before viewed by the eye of bird or man." Fellowes' further description which is rather made up of negatives is, however, supremely impressive. Kinchenjunga is "mighty beyond imagination, bounded on all sides by such awe-inspiring scenery as human eye can rarely gaze upon. To attempt to describe it by saying that in these directions lay a stretch of snow peaks, glaciers and tumbled valleys, giving the appearance of a terrific sea, imparts little idea of the unspeakable reality of what lay beneath us. Still less can the camera convey the wonderful impression of the illimitable magnificence and immensity of the scene."

Ultimately they penetrated into the immense mass of clouds that formed on the top of the mountain. Soon they began to circle the great peak. But while flying round this 28,156 feet pinnacle, they gradually lost height for reason which could not be made out. Fellowes ascribed it to "slightly inaccurate flying or to a down draught." Soon after they had to confront a "severe disturbance" which Fellowes for reasons best known to him does not describe. It was of course wind, but possibly something else—perhaps something supernatural.

The virgin peak could not be crossed. The pilots seemed to lose all control of the ailerons and rudder, and were at their wit's end. Fellowes, one of the pilots, writes:

"The machines rocked, twisted and shook in a way I had never experienced before in eighteen years' continuous flying."

In the meantime, cablegram was received from Lady Houston, by whose name the expedition was designated, advising Lord Clydesdale to eschew any further adventure over the mountains.

A second attempt on Everest, however, was made on April 19th. Owing to some western disturbance, the velocity of wind was too terrific to warrant any flight over the snowy mountains. On April 19th, wind-speed was 88 miles per hour at 24,000 feet; and certainly much greater at higher elevations. It would be sheer folly to encounter such infuriating wind. A plan was very ingeniously worked out by McIntyre (second pilot) under which the 'planes were to fly in a direction slightly north of west at a height of about 3,000 feet for nearly 100 miles. It would mean sailing under favourable wind, as at that low elevation, wind blows almost westward. Then, they were to reach a height of 18,000 feet and head eastward (i.e., towards Everest), when again wind would be behind them at that higher altitude. This ingenuity barred out any wrestling with the wind. The attempt was a great success. Many vertical photographs in a systematic way could be taken.

These photographs disclosed a heart-shaped black patch, high up on Everest. In a vertical photograph of a snow-clad mountain a black patch evident cannot represent a bare rock. It can be nothing but a sheet of water. Undoubtedly it is a lake fed by hot springs. The discovery of such springs to the north of and not far off from

the foot of Mount Everest, as made by the party of the 1921 Expedition, is very significant in this connection. It is a thrilling discovery of this epic flight over Everest.

Aerial science thus came off with flying colours—the last stronghold of Nature at least yielded to reconnaissance from the air, "the uninterrupted navigable ocean that comes tothe threshold of every man's door."

"Other mountains may be climbed by an application of mere forceand skill but Everest will ever remain a pilgrimage of the spirit as much as an adventure of the body."—F. S. Smythe.

"But the most imposing face of Mount Everest is its southern, or Nepal face. No European has ever stood beneath it. Were he to do so, he would find himself looking up the grandest mountain wall there is. The north-west face of Nanga Parbat rises 22,000 feet from the Indus Valley. It is possible that Everest's southern face does not exceed this height, and it is probably less, but no other mountain can show a face to rival its unbroken general angle, combined with its length."—F. S. Smythe.

"It was Makalu, Everest's 27,790 feet high neighbour. When Everest has been climbed, Makalu may defy many generations of future mountaineers, for it is one of the most terrific peaks in the world."—F. S. Smythe.

#### CHAPTER XIV

### **EPILOGUE**

"We ourselves die, but the fair fame never dies of him who has carned it."—A LAY OF ODIN.

APID narration of events carried us in high gear from the blue foothills of the Himalaya right up to the Rongbuk monastery at an elevation of 16,500 feet, the highest permanently inhabited place in the world, covering a ground of over 400 miles, lavish in its display of every phase of Himalayan scenery. The battle zone was entered while heading southwards on leaving Rongbuk, wherefrom the stupendous massif was still sixteen miles away, although it seemed to be within call.

From the Base Camp ownards, through snow, ice, rocks and boulders, skirting moraine shelves, the stony embankments of Everest, making headway along amazing channels called trough, through mazes of fantastic ice-pinnacles of enchanting hues, and lastly across boulder-strewn glacier, spread up like a gigantic chess-board, we had followed the expeditions till we reached Camp III, that miserable spot at the very foot of the Monarch of mountains. We could thereafter visualize the trying and hazardous climb up the eastern ice-slope of the North Col of appalling steepness representing an immense hanging glacier, the great threatening ladder of Mount Everest, the ascent of which is a fresh problem every year.

After having gained the top of this ladder, prolific in hurling down avalanches on a whole convoy on being trodden, we reached the North Col, the key to the whole ascent. From here we caught a glimpse of the Main (West) Rongbuk Glacier and the mazes of mountains including the three snowy minarets that decorate the western domain of the King of Heights. While stationed at that romantic Col we had the privilege of running our eyes over the parabolic sweep of ridges culminating to the north in the North Peak and to the south in the crest of that knife-like classic North-east Ridge of Everest, that driving its slow length along meets the snowy crown of the world, wherefrom blows away to the east that storm-lashed streamer of snow and ice that is both fascinating and awe-inspiring at the same time.

But much as yet remains to be seen, observed and studied on the wonderful high plateau of Tibet that led us to Everest, and in the amazing environs of this superb mountain, and, last but not least, in the wrestle with cold, wind and altitude of the frail frames of the aspirants to Everest in their nerve-racking efforts to attain the supreme height. The following subjects need, therefore, be touched upon in this concluding chapter.

## ACCLIMATIZATION AT HIGH ALTITUDES

Cold may be to a great extent combated on the high Himalaya by proper clothing no doubt, although in spite of utmost care there had been cases of very bad frost-bite. I saw with my own eyes an Everest porter deplorably in-capacitated by frost-bite. Most of the finger-tips were in a precarious state; they not only fell off but involved sepsis to

an alarming extent. Amputation was recommended but the porter was not agreeable to the proposal. Fortunately I was able to cure the malady under Homœopathic treatment by prescribing Arsenic album, which remedy saved many patients under similar circumstance, and thereby, I should say, saved me as well.

What to say of higher altitudes, even at Camp III in the early part of May, the temperature was 53°F of frost at night. What is terribly trying in matters relating to temperature is its incredible range which in May was observed to be 50° to 60°F, while under sand the daily range of temperature was some 100°F. But in Tibet the cutting icy-cold wind is to be dreaded far more than the temperature itself. Fierce wind as it blows penetrates into layers of heavy woolen clothes in such an abominable way that one feels as if nothing has been worn. Wind-proof clothing is, therefore, indispensable while travelling on the plateau. The Tibetans use skin of animals as overcoat.

In Tibet wind begins to blow at about 10 a.m. Sand and pebbles on the plateau rapidly get heated under the terribly scorching rays of the sun which include mercilessly intense ultra-violet rays. The warm air rises up and in order to fill up space thus vacated, intensely cold air comes rushing on from the snowy range, often with a hurricane force.

Human frame not accustomed to such intense cold and wind can somehow adapt itself to it, but to those, who move and have their being on the sea-level, find it very trying to exert themselves at these high elevations.

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At the Base Camp even the act of unlacing a boot or lighting a cigarette was quite a business, what to say of wriggling oneself into a sleeping-bag, and what is more astonishing is that so long as one keeps quiet one does not feel the effect of the height, but as soon as he takes to some trivial work, he is surprised to find himself weak beyond expectation. And this lack of strength is due to great rarefication of air being the effect of reduced atmospheric pressure, which diminishes with the increase of altitude, a fact which is known to many.

With the increase of altitude, therefore, comes deficiency of oxygen in the air,—that life-giving principle. Exertion inevitably calls for consumption of carbon in the body, but where is sufficient oxygen to keep on the chemical action between these two elements required to propel the body-engine?

The higher one rises, the more one gasps for breath. In connection with the ascent to the North Col (23,000') Dr. Somervell writes: "I shall never forget our ascent upthat accursed slope of snow and ice, each step a hardship, every foot a fight, until at last we lay almost exhausted." But a curious fact is that when the same ascent was made two times more, there was no discomfort of breathlessness. This is due to what is called a process of acclimatization. He has further written: "Below the North Col I took three breaths to a step, while at 26,000 feet I was taking five complete respirations." At 27,000 feet he had to "take seven, eight, or ten complete respirations for every single step forward." This last is a quotation from Dr. Hingston, who accompanied the 1924 Expendition. One can now well

imagine the effort that was required in high altitude climbing.

At all events, the ascents beyond Camp III were very much facilitated by a process of gradual adaptation of the human frame to exotic conditions. Slow advance from Camp to Camp is therefore advisable. But then, time factor becomes derogatory to such a dilatory process, as it has already been explained elsewhere in this book how the expeditions were a race in earnest against the monsoon. In the course of very inadequate time they had at their disposal, nothing could be done to any appreciable degree in this direction, but even then, the results achieved were almost unprecedented and beyond expectation as we shall shortly see.

Ruttledge's remarks have thrown much light on this subject. He writes that had it been possible to winter an Everest party on the Tibetan plateau, they would have far better chance of success.

It is abundantly clear from what Ruttledge has written that the process of acclimatization ceases at about 23,000 feet. He writes: "Every man who made more than one ascent of the north arête found that he went better the first time than the second. This is clear evidence that the limit of beneficial acclimatization had been passed."

That hardy mountaineer of superb health and spirit, Somervell, however, writes: "We were enabled, however, to prove conclusively that acclimatization does go on to greater heights; in fact I do not see a theoretical limit to any elevation below the top of Mount Everest."

There appears to be truth in both these statements. They can be reconciled when the factor of deterioration is subjected to examination. Deterioration makes rapid strides in and beyond Camp IV, as a result of cold, wind, loss of appetite, loss of sleep, discomfort, and last but not least monotonous food.

It was predicted by scientists that existence beyond 25,000 feet would be out of the question. But Somervell says that he felt perfectly well at 27,000 feet, and he writes: " \* \* I have no doubt there are many people, if only they can be found, who can get to the top of Everest unaided save by their own physiological reaction to a life at 21,000 feet for a few days." By "a few days" he means "a fortnight or so", as is evident from what follows.

Of course, the use of oxygen apparatus, may rule out the necessity of acclimatization, but then, danger of collapse lurks at every step. Somervell in his very depictive style writes: " \* \* \* but the danger of an attempt by non-acclimatized men with oxygen apparatus is that a breakdown of the apparatus might lead to serious consequences, while a fully acclimatised man is probably just as capable of standing a height of 29,000 feet unaided, as you or I would be able to stand the height of Mont Blanc to-morrow."

Somervell is of opinion that the chance of climbing the mountain is probably greater for a non-oxygen party. Somervell, Norton, Shipton, and Smythe who attained the highest points did not use oxygen.

Odell who used oxygen while climbing to Camp VI in support of Mallory and Irvine in 1924 derived very little

benefit from its use. This means that he was well acclimatized to very high altitudes in the natural way.

While concluding this subject which may appear rather dull to some readers, it will be of interest to note how acclimatization works wonders in animals not accustomed to such telling heights.

Apart from the eight "tigers" (pick of the porters) who most gallantly rendered service to the expedition of 1933 in establishing the higher camps, a Tibetan mastiff accompanied the expedition up to the height of 22,000 feet to reach which altitude she had to climb a rope ladder, which she managed to climb splendidly like a practised mountaineer. Several times she was packed off to the Base Camp, but she always managed to make her way up. She was used to bivouacking under this terrific Himalayan rigor. Every morning she was found snow-clad all over. One day she was missing. Probably in the course of a solitary ramble, she succumbed to a fall into some crevasse in the glacier.

### NATURAL HISTORY

Holdich in his *Tibet the Mysterious* writes: "No country in the world has exercised a more potent influence on the imagination of men or presented such fascinating problems for solution to the explorers as Tibet; \* \* "

That this statement is true can be to a great extent realized from a study of the natural history of the land.

If in a very few words one is desirous of knowing what sort of country Tibet is, then he must read the following lines of Major Hingston of the Indian Medical Service who accompanied the 1924 Everest Expedition. "The plateau of

Tibet is a great desert at a height of about 14,000 feet. It is a broken desert, a Sahara elevated and crumpled into mountains, with characteristic features of its own. \* \* \* The vast empty spaces, the brown barren hills, the tracts of loose and crumbling sand, the cloudless skies, the penetrating light, the wide extremes of temperature, the scanty rainfall, the dry air, the fierce winds, the low thorny monotonous vegetation: these are the most impressive features in this cold and elevated tract."

Lastly, the characteristic keynote in the descriptions of the fascinating upland is, in just one word.—contrast. It is a land of striking contrast. Besides, a great deal of paradoxicalities enter into its queer history.

Contrast! A traveller may get sunstroke and frost-bite at the same place and at the same time. We are tempted to quote the following lines of Landor from his work, Tibet and Nepal. "When you travel in Tibet you see, in the daytime, men and women garbed in heavy skin coats; only one sleeve at a time is put on while half the chest and the other arm are left bare. As I have elsewhere explained, the heat of the sun in Tibet is very greatespecially in southern Tibet,-the latitude being not many degrees north, and the power of the sun's rays is even intensified by the clearness of the rarefied air. On the other hand, owing to the immense elevation, the cold is intense wherever the sun does not strike, so that it is not uncommon to feel absolutely roasted on the sunny side and frozen on the other."

The atmosphere of Tibet is crystal-clear. It has to be seen to be believed. But during storm that daily rages at

10 a.m. and totally subsides at sundown, the atmosphere is enveloped in a cloud of sands and grits. In either aspect Tibet stands second to none. On account of the extreme clarity of its atmosphere, distant landscapes both far and near lose their perspective character to an incredible extent. The art of photography therefore cannot store up its unique sceneries by mere clicks of shutters.

Here is paradoxicality. Nobody is keen on photographing Tibet, and Tibet is not interested in photographing other lands. Professor Roerich has written: "Tibet has none to guard, and none guards Tibet." Tibet boasts of its yellow-capped Pope King, the Dalai Lama, but by a freak of dispensation the disciples of His Holiness belong to the red-capped sect. As a matter of fact a whole chapter may be written on Tibetan paradoxicalities.

As against its perfectly transparent atmosphere, the display of colour in Tibet is astonishing. In the distance, a whole amphitheater of snowy summits rears up in gleaming whiteness, relieved by yellow, yellowish brown or dark coloured bands that lend a fairlylike embellishment to the scene. Below is the limitless expanse of the naked honey-coloured plateau, on high is the celestial canopy of the deepest blue, while in the foreground the bare and undulating rocky mountains of not more than 3,000 feet in height of variegated colours creep on like a huge reptile.

Such is Tibet, a land of colour, a land of contrast, a land of paradoxicalities, but, deplorably bare, barren, and sternly inhospitable, but again, at all events, amazing, fascinating and soul-stirring.

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Grass there is very little. Vegetation is conspicuous by its absence. Low, thorny bushes at places seem to deepen the sense of barrenness.

Yet Tibet teems with fauna. Feathered-songsters pass and repass through the air, spring up and soar aloft in wanton wings. Insect life thrills with joy. Extreme rigor of the climate appears to leave no seal on the animal kingdom, although the process of wintering does not lend itself to description.

Insufficiency of fodder in the winter reduces the domisticated animals, particularly the yaks to a skeleton. The poor animals drag on their miserable existence till summer brings in its train some vegetation which fattens them nicely-a redeeming feature. The small animals and insects, such as mice, butterflies, etc. in their cosy shelter beneath sands and in fissures of stones eke out an existence by subjecting themselves to a process of hibernation. winter they remain totally inactive, eat and drink nothing, do not stir in the least, till rigor of the climate wears off, when they slowly begin to thrive by partaking of what little food they have kept stored up in their home. It is of interest to note that small birds knowing and taking advantage of these facts take shelter in such fissures during the winter and play havoc with the grains stored up by other animals for their subsistence after the hibernating period is over. Men can do the same thing by practising what is known in India as Kumbhak-Yoga.

Grazing on the Tibetan plateau is a brisk scene—a scene that invites cinématography. Blades of grass are few and far between. A grazing flock of goats or sheep by

their brisk movement multiply themselves to the eyes of a spectator from a distance.

The sleekness of the animals, their clean bill of health, their agility and liveliness, all clearly betray the real character of the land they inhabit.

In the distance every minute thing draws attention, so distinctly is everything visible from afar, and there is nothing to obstruct the vision. Dr. Longstaff has written: " \* \* for a distance of a couple of miles a prowling wolf was easily discerned." Slightest movement anywhere at once attracts the notice of an observer. All this would have been highly deleterious in effect for animal life, had not Nature stepped in with its ingenious plan of protective colouration.

The weaker animals are all protectively coloured. The shades of their skin or feathers resemble that of the region or the rocks they frequent. Protective colouration is, however, denied to the stronger animals and birds who can protect themselves. On the other hand some of the birds that prey upon other birds and animals have inner sides of their wings brilliantly coloured, so that they may serve as, so to say, a flash-lamp against the blue. Nature thus affords protection against undue ravaging by protective colouration in two different ways.

Tibet is, therefore, guarded by an unseen hand. Is thorniness of Tibetan plants another aspect of the plan of protection?

Wild sheep roam about on the plateau, and they inhabit regions having elevations up to 17,000 feet. They were seen roaming about near the Base Camp. A small

herd of Burhels or the blue sheep of the Himalaya were seen by Longstaff at 17,000 feet near the Rongbuk Glacier. Among the mammals, therefore, they reach the greatest heights.

Tibetan gazelles are very common on the plateau. Wollaston writes that the hills between Phari and Kampa Dzong are the home of big sheep (Ovis hodgsoni).

The Lammergeyer or bearded vulture is a magnificent bird that wheels through the Himalayan atmosphere. A specimen of lammergeyer is to be found in the museum of Darjeeling. It is generally seen flying at an altitude of 22,000 feet and even 23,000 feet, which is equal to the height of the North Col of Everest. Wollaston, however, noticed lammergeyer wheeling at a record altitude of 24,000 feet. Hingston had the opportunity of noticing fifty-six different kinds of birds at altitudes upwards of 14,000 feet.

Mountain finches were constantly on the wings at the Base Camp. The region of Camp I was found inhabited by ravens and hill-pigeons. Overhead was found lammergeyer wheeling through the air. Pigeons and choughs were the only visitors to Camp II. Camp III at 21,000 feet had its visitors too. Here were seen choughs and jungle-crow. At the appalling height of Camp IV at the North Col choughs were the only visitors, and choughs are probably the highst inhabitants of the earth. Hingston writes: "Somervell saw choughs around the summit of Kharta Phu at 23.640' and these same birds followed the climbers in their ascent to the immense altitude of 27,000 feet.

Hares, observes Hingston, are very common at 16,000 to 17,000 feet. At the North Col, Noel in the course of

his vigil saw a small bird fly above him. It was being carried by the westerly gale. Butterflies have their being on even 17, 000 feet passes.

Frogs were met in the pools and marshes up to 15,000 feet.

Snakes were, on the way to Everest, conspicuous by their absence.

Fish is available in the streams and pools on the Tibetan plateau. Wherefrom they get their substinence is an enigma.

Spiders are generally found up to 15,000 feet. While plant life ceases beyond 18,000 feet, animals thrive at even greater elevations. Minute spiders somehow eke out an existence in their permanent habitation at an altitude as high as 22,000 feet. Hingston writes: "They lived amongst rocky debris, lurking in fissures and hiding beneath stones. I cannot think on what they feed at such a height where nothing exists but bare rock and ice. Other creatures may occasionally reach these altitudes, such as bees, butterflies, and moths. But these are only casual visitors carried by winds from their ordinary course. It seems to be the natural home of these spiders, which are therefore the highest permanent inhabitants of the earth."

Hingston seems to have been highly privileged in witnessing a unique spectacle that ever greeted the vision of man. On the deeply fissured Rongbuk Glacier where grass grows very sparingly, one day he saw wild sheep resting peacefully, surrounded by fantastic pinnacles of ice and stones.

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#### IN PERSPECTIVE

Everest Expeditions, man's supreme adventure to reach the highest pinnacle of the globe, are now things of the past. But these are adventures which are likely to stand the test of time far better than any literary gymnastic, only if the survivors would care to preserve the records in various languages of the world. It may be that the chance of climbing the mountain was given to the few, and it may be that few will be privileged to even catch a glimpse of Everest through the avenue of the Rongbuk Valley where the curtain rises freely before an aspirant, but the stirring episodes of Everest adventures are likely to inspire men of today and tomorrow in fulfilling their life's mission, no matter if obstacles crop up on the way-obstacles which are "the birth of possibilities." Everest has not probably been climbed, but all the same, the adventure has been a glorious failure.

At all events, the study of Everest ascents tends to infuse life and spirit into the weakly. It creates energy—"Energy of application in action. Energy of dissatisfaction giving birth to the eternal striving which brings man into the cosmic rythm."

Colonel Younghusband's immortal lines still ring in our ears. "Few can be Everest climbers, but all can be inspirated by a deed like Mallory's and Irvine's last climb. And many there are who, on hearing of it, have felt themselves helped in battling with their own stern difficulties. And Mallory and Irvine will for ever live among the great who have helped to raise the spirit of man."

Peace be to the struggling humanity!

### CHART

## Showing Altitudes of Different Regions of Mount Everest

# (Recorded in order of Heights)

		Al	titude	in feet
Summit of Mount Evere	st			29,002
Foot of the final pyrami	d			28,300
${\it Kinchenjunga}$		• •		28,156
Highest point attained		• •		28,100
Makalu				27,790°
Second Rock Step )	between			28,100
	and			27,800
Top of Yellow Rock Band				27,800
Foot of Yellow Rock B	and			26,800
Gaurisankar	,	·		23,440
North Col				23,000
Siniolchu (the n				
range	as seen fro	m Darjeelin	g	22,520
Base Camp	• •			16,800·
Rongbuk Monastery	- • •			16,500
Mont Blanc			•	15,781
Tibetan plateau	(average	altitude)		14,000

#### HEIGHTS OF A FEW WELL-KNOWN HIMALAYAN PEAKS

Mountains		Altitude in feet	Remarks
Mount Everest		29,002	Accoring to Burrard-29,141'
Kinchenjunga		28,156	,, ,, ,, 28,225'
Godwin Austin (or	$K_2$ )	28,250	,, ,, ,, 28,191'
Makalu		27,790	A Satellite of Everest
Cho Uyo		26,867	Do.
Gyachung Kang		25,910	Do.
Dhaulagiri		26,795	
Nanga Parvat	• •	26,620	-Vainly attempted by Dr. Kellas, Dr. Longstaff and Mummery.
Gosainthan		26,305	
Gauri Sankar		23,440	-These three peaks are men-
Badrinath		23,399	tioned in the Hindu scriptures
Kailas		22,028	of great antiquity.

### HIGHEST PEAKS OF DIFFERENT CONTINENTS

Europe: Mount Elburz (In Russia)	 18,465
Africa: Kilimanjaro	 19,710
North America: Mt. Mckinley	 20,464
South America: Aconcaqua	 23,081
Asia: Mount Everest	 29,002

# OTHER WORKS OF THE AUTHOR

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