THE KUMAON HIMALAYAS
The Kumaon Himalayas

M. S. Randhawa

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FROM TIME immemorial the mighty ranges of the Himalayas have evoked the awe and wonder of the people of India. Our Aryan ancestors had great reverence for Kumaon, and they sanctified its rivers, glaciers and high mountain peaks. Gangotri, Jamnotri, Badri Nath, Kedar Nath and Nanda Devi are the holy places of the Hindus in Kumaon. The Aryans penetrated even into western Tibet and discovered the picturesque Kailash, the axis of their world and the throne of their gods, which provided the model for the architecture of the great temples of Ellora, Bhubaneshwar, Khajuraho, Tanjore and Benares. “There”, says one of the Puranas, “are the regions of Swargya (Paradise), the seats of the righteous, where the wicked do not arrive even after a thousand births. There is no sorrow, nor weariness, nor anxiety, nor hunger, nor apprehension; the inhabitants are exempt from all infirmity and pain, and live in uninterrupted enjoyment. The goddess never sends rain upon them, yet the earth abounds with water. In these regions there is no distinction or succession of ages, and Time is no more.”

There are many valleys in the western Himalayas which have a charm of their own like Kulu, Kangra and Kashmir. However, Kumaon Himalayas have their own grandeur. “Is there any region of the Himalayas or even of the world, to excel this region of the Himalayas in beauty and grandeur?” asked Smythe. “Where else are there to be found such narrow and precipitous gorges, such serene vistas of alp, forest, snow-field and peak?”
Yet for a long time Indians of the plains were oblivious of the sublime and beautiful mountains of Kumaon, as the malarious Terai was a serious barrier. Frightful solitude prevailed in the Terai in the months from April to October when even monkeys forsook the forests. Even tigers used to migrate to the hills and antelopes and wild hogs invaded the cultivated plain. Bishop Heber who travelled in this area in 1823 records: “Persons, such as dak bearers, or military officers who are obliged to traverse the forest, agree that not so much as a bird or animal can be heard or seen in the frightful solitude.”

Gradually the Terai was tamed and its scourge, malaria was controlled. In the nineteenth century hill-stations became popular with the British, and later on with the Indians. The Himalayan expeditions also did much to popularise the scenery of the Kumaon Himalayas.

My interest in Kumaon Himalayas dates to 1939, when I was posted as a Sub-Divisional Magistrate at Fyzabad. I read a glowing account of Uday Shankar’s “Culture Centre at Almora” in the Illustrated Weekly of India. It stirred my imagination. In the summer of 1939 I was transferred to Almora. There I spent six months which were long enough to enable me to explore the district with some thoroughness. I studied its vegetation and discovered many new algae. I studied the social life of the people, and their history and culture. Above all I got an opportunity for a journey to the Pindari glacier in September 1939. I had already acquired a taste for hiking in the Himalayas when I was a student of Botany with Professor Shiv Ram Kashyap in Government College, Lahore from 1926 to 1930, and became acquainted with the Himalayan flora. This training proved to be a tremendous asset in the exploration of the Kumaon Himalayas.

During my travels in the Kumaon Himalayas I made detailed observations on the people and their surroundings. Later on, when I was posted as Deputy Commissioner at Rae Bareli, I took a month’s leave in May 1943 when the Second World War was going on. Accompanied by my friend Dr A.C. Joshi, who was then Professor of Botany in the Benares Hindu University, I again travelled to the Pindari glacier. This trip, apart from the relaxation which it gave me, also provided an opportunity for completing my travel diary of the Kumaon Himalayas.

It is the people who are as important as the scenery. A countryside
otherwise attractive may be rendered uninviting by rough and uncouth people. In this respect Kumaon is fortunate. The Kumaonis are modest, gentle and honest in their dealings and are remarkable for their love of truth.

As a record of the Kumaon Himalayas from 1939 to 1943 some of the observations recorded in this book are merely of historical interest. Many changes have taken place in the life of the people. However, a good bit of the Kumaon Himalayas still retains its pristine beauty in spite of the onslaught of modern progress.

This book is divided into three sections. In the first is given an account of Nainital, Ranikhet, Almora and the places on the way to the Pindari glacier. I have made extensive use of notes in the log books of Phurkia in my account of the Pindari glacier and its surroundings. The second section deals with the people of Kumaon and their culture, including their folk songs. The third deals with flora and fauna.

I feel that for those who can afford time for a hike to the Pindari glacier and other places in Kumaon, this book will provide some guidance. As regards the less fortunate ones who may not be able to travel to this enchanting land, the account of various places and the culture of the people will be a source of information and pleasure. They will undoubtedly get a feel of the beauty and grandeur of the Kumaon Himalayas in the pages of this book.

I am grateful to Dr W.G. Archer and Mrs Mildred Archer for so kindly going through this book and for their helpful suggestions, to Miss Phul Malhotra for preparing the index.

M.S. Randhawa

May 30, 1970

Garden House
Kharar
Near Chandigarh
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MOST OF the Indian hill stations were developed under the patronage of the British officials and merchants in the early part of the nineteenth century. Coming from a country with a temperate climate, they found the scorching heat of the Indian plains enervating. Besides, cooling devices like electric fans, refrigerators and airconditioning plants which modern science has discovered, were still unknown in those days, and a trip to England was a lengthy as well as a costly affair. Where could they find a tract in India to spend the hot part of the year? The malarious swamps of the Terai stood as a barrier between the white-man and the Himalayas for a long time. It was only slowly that this barrier was surmounted and the Himalayan hill resorts discovered by the British pioneers. J. H. Batten, B.C.S., who retired as Commissioner, Kumaon in 1877, has left an admirable account of the early history of the hill stations of Kumaon. In those days the climate of the hills was considered to be unhealthy, and Englishmen did not regard them as particularly inviting. Batten writes: “Kumaon was conquered by the British from the Gurkhas in 1815 and the Honourable Edward Gardner who was subsequently promoted to the Residency of Nepal was the first British ruler of Kumaon. Mr. G. W. Traill who was then an Assistant under the Resident of Delhi was first offered the appointment of Commissioner of Kumaon, and he hesitated as to its acceptance on the score of health and bargained that he might have the option of returning to the plains of Hindustan in case the hills
should be found unsuitable to his constitution. Almora at 5,400 feet remained for many years the highest of English hill stations, and was quoted as the only sanatorium by Bishop Heber in 1824. Dehradun and Sabathu owing to their low elevation were the headquarters of the Civil and Political Officers, while the social and sanitary importance of Major Young's potato-garden at Mussoorie and Captain Kennedy's 'hot weather' bungalow at Simla was still undiscovered. Nainital, the summer capital of the United Provinces, was discovered and established as a European station in 1843. Ranikhet, now a large European cantonment, was visited by Bishop Heber in 1824. The principal site originally selected for this military station was a tea-garden belonging to the Troup family."

In course of time these sites of tea and potato gardens, and 'hot-weather' bungalows proliferated and developed into hill stations of the present day with their hotels, boarding houses, cabarets, cafés, slums and bazaars. In summer they were crowded with British and Indian officials, absentee landlords, mill owners, businessmen of the upper strata, and their wives and daughters. While in hot months they were full of upper middle-class Indians and Englishmen, in winter they were lifeless and looked like the dead cities of Pompeii and Taxila.

During the summer of 1939 I was transferred from Fyzabad to Almora. I decided to visit Nainital as it was near the Almora route, and motored up from Lucknow to Bareilly. Frightened by the noise of the car, many foxes and jackals were slinking into the clumps of dry leafless bushes. This belt is the *Bhabar*, the porous drainage tract of the sub-Himalayas.

Passing through Haldwani with its stacks of timber and sawmills, I reached Kathgodam at the foot of the outer Himalayas. Kathgodam, like Haldwani, as its name indicates, is a town known for its timber, and is also a terminus of the Oudh Rohilkhand Railway, and of motor lorries going up to Nainital, Ranikhet and Almora. It is a small town with a number of houses and small bungalows built of stones. The place is damp and depressing. The people looked pale and unhealthy on account of the ravages of malaria, which was common on account of the abundance of anopheline mosquitoes. It was with considerable relief that I said good-bye to Kathgodam with its gloom and depression.

From Kathgodam, a steep climb begins and the hill sides are covered with thick jungle, infested with wild animals. My
motor-driver told me that even tigers were sometimes attracted by the head-lights of the cars on the road late in the night. Talking about tigers and their nocturnal adventures on the road, I forgot that we were negotiating a very steep climb with the car going in first or second gear. The radiators of the passing lorries were steaming, and the drivers would stop at a road-side spring near the tenth mile to pour water into their radiators to cool the over-heated engines. We also followed suit. This welcome pause gave an opportunity to the poor victims of nausea and giddiness who were holding their heads with both hands out of the windows of the lorries and bringing up their morning meals, to rest a while. I also purchased some hill pears from a boy and ambled about for some time.

After a few minutes' rest we resumed our journey. When we had gone a few miles up from the spring, Nainital, the summer capital of the United Provinces, now Uttar Pradesh, came in sight. The red-painted tin roofs of the Nainital houses were visible for some minutes till they disappeared behind the high mountains to the left again.

A purple patch of jacarandas framed by the greenery of the forest marked out Jheelkot from the other hill villages. The coral trees were a blaze of colour. Their leafless branches, bearing clusters of crimson flowers, appeared like the numerous arms of the goddess Lakshmi, holding gleaming lamps of gold. The Bauhinias had just flowered, and their withered petals reminded us of their faded splendour. Spreading over branches of trees was a tangle of rope-like Bauhinia varilla climbers with giant twin leaves. The hillsides were covered with massive pine trees and bushes bearing yellow flowers.

Watching the trees and flowers we reached Nainital. This picturesque town is the queen of hill stations. Guarded by giant mountains is a beautiful lake, with numerous weeping willows growing on its sides. The pendulous branches of the willows dangling in the air in a languorous manner give a touch of perennial repose to this hill resort where people come to escape the heat of the plains. As soon as the lorries stopped, a swarm of coolies surrounded the vehicle and began to snatch the passengers' luggage. A struggle ensued and only when a police man appeared on the scene was order restored. After watching the water of the lake slowly trickling down a gap we decided to walk up. The hillsides were covered with a luxuriant forest of fir, oak interspersed with tin-roofed houses painted red or green, constructed on shelves
of rocks. The slopes of the secretariat and Municipal office are covered with turf and circular beds of Acaulis lilies, digitalis, poppies and anchusa. Nainital is an ideal place for planting rhododendrons, spiraeas, double flowering cherries and peaches. We climbed up and up occasionally looking with awe and admiration at the Cheena peak, which stood gaunt and bare in front of us. In winter it gets heavily covered with snow. After resting at the roadside to recover breath, we resumed our climb again, and reached our destination at last—a cottage built in English style, which we could occupy for a couple of weeks.

The vegetation of the Western Himalayas reminds one of Europe. Oaks, chestnuts, maples and pines are the characteristic trees, and strawberries and spiraeas are not different from those of Europe. To see European plants side by side with sub-tropical plants of India was a sight which could hardly leave unmove any person sensitive to beauty in Nature. Bishop Heber who was one of the earliest Englishmen to visit this place thus records his impressions of Nainital and its environs: "I am not ashamed to say that the tears were more than once in my eyes as I rode through thickets, the very air of which breathed England, and by streams and little mountain lakes, as cold, as black, as clear and noisy, as if they had issued from Snowdon, though the spell was dissolved from time to time by the sight of mountains such as Europe has not to shew, and by the occasional glimpses of the still lower valleys, dark with the exuberant foliage of an Indian wood, and abounding in the usual eastern accompaniments of monkeys, gigantic snakes, and malignant vapours."

The people seemed to have nothing to do except shopping and promenading along the banks of the lake. It was great fun watching the white sails of the yachts bulging out with the force of the wind. After we had had our fill of the view of the lake, we turned our attention to the road, to watch the unending procession of humanity. A monocled Englishman with bristling moustaches and wearing a bottle-green hat, a yellow shirt and a check coat, sat bolt-upright in a rickshaw. Puffing out clouds of smoke, holding a cane in his gloved hands, he seemed like a ghostly reminder of the fast-vanishing Anglo-Indian era. By his side was his spouse looking grim and taciturn. The rickshaw coolies were pushing their aristocratic load uphill with all their strength (Fig. 1). The Raja of Pankhapore was going to the club near the lake in a magnificent rickshaw drawn
by liveried rickshaw coolies wearing blue uniforms with golden waist-bands. A fat Rani painted and powdered draped in a gold embroidered blue sari and wearing smoked glasses followed in another rickshaw. A young blonde Anglo-Indian maiden precariously perched on a horse followed next. A twenty-stone spinster carried by four coolies in a dandy, a chair-like contrivance, painting her lips carmine red with lipstick, oblivious of the world and its worries, and also of the puffing and panting coolies, followed close behind (Fig. 2). Jammed in a crowd of soldiers on leave and vendors carrying tin boxes full of cakes, pastries, and biscuits, was an Anglo-Indian beauty in beach pyjamas attracting the amorous glances
of the soldiers, leading a spaniel and closely followed by a small boy carrying a parcel, one lb. in weight (Fig. 3). Indians on the whole predominated, and the replacement of white bourgeoisie by brown was conspicuous. After the round of cinemas, restaurants and shops they flocked to their clubs whiling away their time at cards.

One day we decided to meet the Hungarian artists Madame Sass Brunner and her daughter Elizabeth whose acquaintance I had made through their beautiful book *Mystic India* which contains a selection of their paintings. As the Second World War was still on, both the mother and daughter were interned in a house called St Cloud. After a stiff climb we reached the summit of the hill and a wooden pavilion called Snow-View facing the Nandadevi Trisuli group of peaks. A light mist and white clouds were obscuring the peaks. After resting for a few minutes I continued my search for St Cloud. A faded notice-board "Parole Camp Limit" reminded me that I was not far off from it. At last I discovered the house. In the verandah sat a burly Frenchman with a sedate appearance calmly
sipping tea. He was the Consul of the Vichy French Government interned in this camp. A couple of white hens were cackling nearby. I proceeded further and entered the southern verandah. Peering through the glass-panes I saw on the walls a clump of palm trees, a langur, a snake charmer and a brown Hindu woman wearing rainbow coloured clothes sitting in a seductive pose facing the doorway. This, I was told, was the work of an Italian prisoner of war, who was interned in the house before the Brunners. I knocked, and a lady appeared and opened the door. The sad smile on her face, and her blue penetrating angelic eyes at once impressed me. She was followed by a tall girl with big blue eyes, a broad bulging forehead, a thin face, a sensuous mouth and a small chin. She was wearing an embroidered Hungarian blouse with red, orange and yellow flowers, brown flannel trousers and a scarlet red coat. I could at once guess that the short lady in the knitted brown Japanese dressing gown was Madame Sass Brunner and the tall girl was her daughter Elizabeth. They met me cordially, and I immediately felt at home. It appeared as if we had known each other for years.

In fact, we had. It was in 1939 that I read Sass Brunner’s book *Mystic India*, and fell in love with her paintings, ‘Four Aspects of the Moon’ and ‘Buddha in Meditation’. My visits to the Brunners were quite a memorable feature of my stay in Nainital.

I got tired of Nainital with its cafés, cabarets, and clubs. Vegetating in a hill-station had little charm for me. My legs were already aching for a long trek, and my eyes were thirsting for a glimpse at close quarters of the snow-peaks of the inner Himalayas. So I moved on to Almora. After passing through Bhowali, a sanatorium for tuberculosis patients, we descended again. For many miles the road ran parallel to a mountain stream and ascended again after crossing it over an iron-bridge at Khairna. The stream demarcates the boundaries of Almora and Nainital Districts.

The sight of a grey military lorry lying upside down in a khud reminded us that the military station of Ranikhet was not far off. The pines of Ranikhet were enveloped in thick misty clouds. There was also a noticeable fall in temperature, and I felt the necessity of putting on warm clothes. Ranikhet with its broad tarred roads and rows of well-stocked shops is one of the most attractive hill stations in India. There are a number of cottages and little bungalows with red-painted sloping roofs, surrounded by green-painted pailings, nestling in clumps of pine trees.
We stopped for a few hours at the house of Mr L. H. Niblett, the Sub-Divisional Magistrate of Ranikhet, who was also an author, poet and *shikari*. He showed us his collection of Kumaon stones which he had placed in the grotto of the local Roman Catholic Church. If we had seen his collection by ourselves, probably we would not have been able to appreciate its worth, for it was the ingenious collector alone who could point out the resemblances of the stones with various articles of domestic use. There were stones, maunds in weight, which Niblett had hauled from deep and inaccessible *khuds* simply because they had a design akin to the stripes of pyjama-shirts, or had a fancied resemblance with chunks of raw beef. Inspecting these stones we had a welcome pause and got an opportunity of stretching our legs after the long drive from Nainital on a road winding like the trail of a snake. After resting for a while on a circular stone whose resemblance to a stool I could appreciate better, we said good-bye to our host.
2. Almora

WE RESUMED our journey to Almora, passed along a road with rows of shady horse-chestnuts, and emerged on a beautiful plateau which is used as a golf-course. After some miles, there is a gentle descent to the bed of the Kosi River. The town of Almora, with its white bungalows scattered over the spur of a huge mountain, was in sight at last. Below the town are some villages, whose inhabitants supply milk and ghee to the citizens of Almora, and early in the morning the road is crowded with milkmen carrying tincans full of milk.

On account of recent rain, the Kosi was in full spate. We crossed it by an iron bridge, and passing by a few dirty tea-shops, which had pretentious signboards, we climbed again. After paying tolls at the municipal barrier, we reached Almora, which was to be our home for the next six months. We cannot blame the owners of these tea-shops alone. Western civilization has penetrated most phases of our lives; and in this transitional phase, the middle classes indulge in awful puerilities, revealing our immaturity as a nation. In no other town have I seen such abominations displayed in such an ostentatious manner as at Almora. People make small private houses with no particular architectural merit and call them villas. A semi-educated man makes a wretched, filthy stinking inn and calls it Imperial, Royal or Grand Hotel. You pass by a small druggist’s shop and find it labelled a Medical Hall. All our cinemas must be Royal, Regent, or Rex. A money-lender builds a few small
houses on a ridge and calls the colony an estate or a nagar with his own name proudly prefixed. Some of them have even designed coats of arms with flags, crowns, swords, spears, tigers, lions and whole menageries of animals unknown to science.

As compared with anglicized hill stations like Simla, Nainital and Ranikhet, Almora claims the distinction of being a purely Indian station, which existed long before the arrival of the British conquerors. It was the capital of the Chand Rajas of Kumaon, and was founded by Raja Kalyan Singh who shifted to this site from Champawat about A.D. 1560. According to local inhabitants, the name Almora is a corruption of Kilmora, which means red sorrel, a species of Oxalis, which grows abundantly here. Previously serving as a seat of Government of the Chand Rajas and catering for the social and economic needs of the Kumaon villagers, Almora is still the chief distributing centre of the Kumaon Himalayas and also a residential centre of the Kumaoni middle classes. It has a permanent population of about ten thousand people, and by hill standards it is a fairly big town, indeed.

Almora is the headquarters of a vast district whose boundaries extend from the plains to the border of Tibet. Besides the district courts, it had an Intermediate College, two High Schools, a hospital and a jail. On account of its comparatively dry climate and peaceful atmosphere, it has attracted, besides consumptives, a number of persons of international fame in the realms of arts and science. Bosh Sen, a talented disciple of Sir Jagdish Chandra Bose, is carrying on interesting experiments on the vernalization of crops and the structure of protoplasm in his well-known Vivekananda Laboratory, which is equipped with most up-to-date microscopes and apparatus. By forcing the growth of seeds and shortening their periods of growth, the Russian scientist Lysenko was able to grow wheat in the frozen lands of Siberia, and, thus, brought under cultivation millions of acres of land, which were lying waste. Bosh Sen is attempting to adapt this technique to Indian conditions.

The main thoroughfare of Almora is the solitary tarred road, known as the Mall, on which are situated all the decent grocery shops, hotels, the District Board Dak Bungalow, the lorry-stand, the Intermediate College and a cinema. Plying on this road are seen numerous lorries and cars, and one may also see intrepid cyclists hurtling down the sloping pathways into the traffic on the Mall and often colliding with pedestrians and motor-cars.
The Mall Road of Almora has its charms. On the bend below Beckett House, you hear the shrill noise of gramophones which are played incessantly in grocery shops to attract customers. Just above the Post-Office, which has the appearance of a Gothic Church, is the smallest public park in India—a triangular plot of land, 20 feet at its widest and about 15 feet diagonally. This park was made by a public-spirited Sah to immortalize a past Commissioner of Kumaon and incidentally to improve his property. Passing by a couple of shops, one proceeds through a bazaar-like portion with shops full of small flat wicker-baskets, containing flour, pulses, rice, hill-cucumbers, red chillies, sugar and raw apples. Above these shops are the so-called hotels which do not appear very inviting. Behind the shops is the District Board Dak Bungalow where most of the travellers stay. Further on is the ‘Palace’ of the Raja, looking very much neglected with its tank full of blue-green algae and its walls, which had not been whitewashed for some years, covered with mosses, myxophyceae and a growth of unicellular green plants. The last of the Rajas died some years ago. Close by is the clock-tower which has a personality of its own. It was built by a District Engineer, who has displayed his name ostentatiously on a piece of stone. This engineer seems to have taken his inspiration from the temple of Nandadevi which his creation resembles so much with its barrel-like sides and its pagoda-like roof. This hybrid of the Burmese and Hindu styles of architecture is one of the prominent landmarks of Almora. After the town, the stairs of the court building used to confront me. When I had climbed the stairs for about a month, a brother magistrate came to my rescue. He told me about a shortcut which not only short-circuited the climb, but also avoided the bazaar. In a small town, it is not very pleasant for a magistrate to go through the bazaar, for he causes inconvenience to so many shopkeepers, who stand up and salute, leaving their work.

We settled down in a beautiful house called Summer Leaze, situated below Ramsay House. Ramsay House was built in the early nineteenth century by Sir Henry Ramsay, the popular Commissioner of Kumaon, about whom so many stories are current in the Kumaon Hills. Gangi, the chowkidar with heavy gold ear-rings, willingly related anecdotes about Sir Henry. Sir Henry Ramsay was one of the most romantic figures among the early British administrators, and is still affectionately remembered for his acts of generosity and philanthropy. He was also fortunate in his name, which is
distorted by the Kumaoni villagers into ‘Ramji’, the epic hero of the
Ramayana, who is universally worshipped among the Hindus. He was
the Commissioner of Kumaon in the non-regulation days and ruled
as a benevolent despot who could do as he liked and would always
remain an envious example to the present generation of civilians
who are so much bound by red-tape and the bulky Manual of
Government Order.

The Local High School and the Leper Asylum were started by
Sir Henry. Apart from these, he is remembered for innumerable
little acts of charity. He used to distribute change worth Rs. 8
every Tuesday among the poor people. On the eve of his retirement,
he gave one thousand rupees to his bearer, and three hundred
rupees to Gangi, his syce, and presented his private house to the
Government for the use of officers. In the compound of Ramsay
House are a number of fine old deodar trees growing on a velvet-
like turf.

Another officer who has left affectionate memories among the
Kumaonis is Mr. G.W. Trail who succeeded Honourable Edward
Gardner, the first British ruler of Kumaon. Bishop Heber during
his travels in Kumaon in 1824 met him near Almora. “I was met
by Mr. Trail about half a mile from the town, mounted on a
little pony like that which he sent me,” writes Heber. He continues,
“It is pleasing to see on how apparent good terms Mr. Trail is with
all these people. Their manner in talking to him is erect, open, and
cheerful, like persons who are addressing a superior whom they love,
and with whom they are in habits of easy, though respectful inter-
course. He says he loves the country and people where he has been
thrown, and has declined, as Sir Robert Colquhoun told me, several
situations of much greater emolument for the sake of remaining
with them. He has probably, indeed, chosen wisely, since, though he
may not return home so rich a man, he is far more likely to take
with him the power of enjoying life and property. Almost the whole
of the dry season he is travelling about in the discharge of his official
duty, and it was a mere chance which gave me the advantage of
meeting him now at Almora.”

On the top of the spur is a long bazaar paved with stones. It is
like the vertebral column of the town and houses are located on
its sides. The bazaar terminates near the barracks of the Gurkhas
on one end and near the Nandadevi temple on the other (Fig. 4).
Recording his impressions of Almora, Bishop Heber writes, “I found
Almora a small but very curious and interesting town. It chiefly consists of one long street, running along the ridge of the mountain from the fort westward to a smaller block-house eastward, with scattered bungalows, chiefly inhabited by Europeans, to the right and left hand on the descent of the hill. The main-street has a gate at each end, and, on a small scale, put me in mind of Chester. The houses all stand on a lower storey of stone, open to the street, with strong square pillars, where the shops are, looking like some of the rows. Above, the buildings are of timber, exactly like those of Chester; in one or sometimes two very low storeys, and sur-
mounted by a sloping roof of heavy grey slate, on which many of
the inhabitants pile up their hay in small stacks for winter con-
sumption. The town is very neat, the street has a natural pavement
of slaty rock which is kept beautifully clean; the stone part of the
houses is well whitewashed, and adorned with queer little paintings;
and the tradesmen are not only a fairer but a much more respecta-
ble-looking race than I had expected to see, from the filth and poverty
of the agricultural Khasiyas."

The temple of Nandadevi is an interesting building, and on
its outer walls are a number of erotic sculptures obscured by a
coat of lime. At this temple a fair is held in September, and a buffalo
is sacrificed as an offering to Nandadevi on the occasion of her
birthday. There is a story current among the people of Almora
that Tairil removed the temple of Nandadevi from its original site,
and while on tour in the inner Himalayas was struck with snow-
blindness. Believing that it was due to the displeasure of the goddess,
he built her a temple on return to Almora and his eyesight was
restored.

The hills around Almora look barren, though the ridge on which
the town is built has been recently afforested. The avenues of horse-
chestnuts with their broad translucent palmate leaves and erect
panicles of white flowers mottled with red or orange streaks appear
very attractive in May. Crepe myrtles which are merely shrubs
in the plains grow into tall trees with ebony-white stems free of
bark and are laden with bunches of red flowers in the rainy months
of July and August. The crimson red flowers of pomegranates near
the peasants' cottages are a delightful sight in May. The datura
shrubs laden with white bell-shaped flowers appear very charming
on moonlit nights, and are seen in abundance on the waste land
along the Mall. Some of the houses are covered with creepers like
Tecomas bearing deep orange-red flowers, and Solanum wendlandii
with blue bunches in May. In the windows of the houses are earthen
vessels and painted tin canisters with red and orange pelargoniums
as in the villages of Austria and Bavaria.

From our house we had a view of the khud below the Almora
spur, and the upper part of the Nandadevi Trisul snow-peaks,
which were not obscured by the Kalimat. In front was the winding
road to Ranikhet on which lorries appeared like small mechanical
toys. Just above the road in front of us was the village of Katarmal,
which is famous for its ancient temple of Shiva and its beautiful
Naik girls. Katarmal was one of the supply centres of the red-light areas of the towns of the United Provinces till the Naik Girls Protection Act put an end to this evil. Just above Katarmal is a peak which has recently been afforested, and its top appears like a green skull cap, in contrast with its lower barren part. On the left side is the conical mountain of Siahi Devi, covered by a dense forest, contrasting with the neighbouring bare mountains. In July, fleecy clouds rise from the khud below Siahi Devi like the fluff of cotton-wool from the harp of a cotton-wool carder.

Long walks towards the Granite Hill, and the Kalimat occupied our evenings. Dharma Vira, the energetic Deputy Commissioner of Almora, who was a mountaineer and hiker, often accompanied me and his cheerful company was a boon in the loneliness of Almora. From the terrace-garden of his house we used to watch the snow-peaks of Nandadevi and Trisul bathed in the golden light of the setting sun. Watching the snow-peaks of Nandadevi was one of our major pre-occupations at Almora. From the crowds which used to gather on the road near Brighton Corner, it was obvious that the people of Almora were not blind to the charm of the snow-peaks.

On our way to the Granite Hill, we used to meet the Swamis of the Rama Krishna Mission climbing the slope from their ashram on their way to the town. An old man in saffron robes with a small beard, a kindly face and beaming eyes, wearing a cap with ear flaps, used to meet me almost daily. The radiant smile on his wrinkled pale face was cheering. The Granite Hill is mostly barren, and its huge block-like granite boulders covered with black lichen give it a grim appearance.

The Granite Hill lost all attraction after I had explored it for some weeks. To relieve boredom I had to seek diversion in some other direction. A barn-like black building on the Ranidhara hilltop often intrigued me. One day I decided to explore it, and after walking a couple of miles found myself in Uday Shankar’s Culture Centre. I had seen Uday Shankar in a London theatre in 1933, and remembered the applause which greeted him when he came on the stage. With his orchestra of drums and cymbals, and his exotic Rajput and Bih dances, he brought something new to Europe. His spectacular dances full of grace and rhythm took the theatre-going public by storm. Apart from his personal success, he raised the honour of this country in the eyes of foreigners, and
showed them that India too had something great to contribute in the realm of choreography. Deriving his inspiration from the dances of South India and the drum orchestra of Bengalis, which he synthesized into a harmonious whole with many creations of his own, Uday Shankar created a new style in Indian dancing. He had imbibed in full measure the local colour, and created a number of colourful dances out of the folk-dances of the picturesque Bhils of Central India and the romantic Rajputs of Rajputana. One of his major achievements is that he made dancing respectable, and the girls of the middle classes could take lessons in this graceful art without compromising their respectability.

In the dance-hall constructed with scented pine-logs that were painted black outside, Uday Shankar and his troupe of dancers and students used to rehearse their dances in the summer months. Grim and forbidding outside, the dance-hall was quite cheerful inside. At the entrance door we were met by Uday Shankar who was then a handsome young man in his late thirties, with magnetic eyes, a finely shaped mouth, and a wealth of black hair touching his shoulders. Unassuming and simple, he was accessible and polite to visitors.

Our visit synchronized with the end of an interval. The artists including Uday Shankar and his partner Simkie, a French girl, assembled at the other end of the hall. Wearing beach-pyjamas and vest he was sitting in front of the artists like a drill-master, studying and directing their movements and occasionally joining them. He is a hard taskmaster, and easily detects a clumsy movement or an ungraceful gesture. There are few people who understand the poetry of motion as he does. He made his artists repeat the various movements again and again till they acquired that grace which had become the envy of all great dancers, and commanded the admiration of connoisseurs. Those who saw his perfected ballets could hardly realize the amount of labour spent on every movement, and the worry and bother undergone by the artists. To be a good dancer one must be capable of taking infinite pains. It was indeed a revelation to me.

There are some people who say that Uday Shankar was too much engrossed in the past, and had been resurrecting the dead ghosts of Hindu mythology. His ballets “Rhythm of life,” and “Labour and Machinery” were based on contemporary problems and give the lie to this charge.
During my evening visits, I saw the “Rhythm of Life” evolving from day to day till it was perfected and placed before the public when the Governor came to Almora. This dance-drama was an objective study of Indian social, economic and political life in the twentieth century. The melodrama of an Indian peasant’s life is presented in the form of a dream of a young man. After a mythological prelude with Shiva, apsaras, and sacred warriors, the story unfolds. The vicissitudes of an Indian peasant’s life governed by capricious Nature are shown. The harvest season came, the crop was bountiful and everybody was happy. The rains followed and women sang the songs of the Sanam and there was merriment all round. But all this happiness was transitory. Next year, the monsoon failed, the paddy crop failed to germinate. There was not a blade of grass for the cattle who roamed about like phantoms nibbling at thorny bushes. People died of disease and starvation, and misery and desolation stalked the land. The wail of the wopenfolk and the sad clatter of huge cymbals gave us a glimpse of a helpless, emasculated people, in the grip of Destiny. Oppressed and exploited by the landlords and petty officials, and misguided by the priestly class which lives by exploiting ancient superstitions, they appeared to be lost beyond hope of redemption. Ultimately, Siegfried discovered his soul, the dead mass of people began to pulsate with life. The blind agony of the people found an outlet in a national struggle. Leading the peasants with a national flag in hand, the young dreamer sought the help of the superman, who was Mahatma Gandhi. At last we could see the miracle of organization, discipline and leadership welding an incoherent mass into a nation. The superman consoled the peasants and promised them liberation and a free life.

During our stay at Almora we spent many happy evenings at Uday Shankar’s centre, which along with Shantiniketan of Tagore and Preet Nagar of Gurbux Singh in the Punjab was a real contribution to the cultural life of India.
3. Divine Justice

IN THE compound of the District Courts at Almora there is a Hindu temple, which is very popular with the litigants who are staunch believers in the efficacy of prayers, like schoolboys who have neglected their books throughout the year, and who become suddenly pious when the annual examination draws near. Those who fail to get justice in the law courts seek redress at the temple of Goll Devata at Chitai, a village about five miles from Almora. Aggrieved persons tender their applications in this divine court, and the pile of such applications with the priest of the temple is daily growing. Unlike the plains, criminal cases in the Kumaon Hills are investigated and prosecuted by patwaris, who not only keep land records of villages in their jurisdiction but also exercise the functions of Sub-Inspectors of Police. When the ingenuity of the patwari fails, and the stolen property as well as the thief remains untraced, the victim of the theft seeks the aid of Goll Devata of Chitai. Standing before the ‘Devata’ he invokes his wrath on the thief, his ancestors, and his progeny, asking the god to destroy his family and property. Among superstitious hillmen, a curse of this type uttered in the presence of the god is more effective than law courts and in some cases thieves quietly return the stolen property.

On our way to Jageshwar we stopped at the temple of Goll Devata at Chitai (Plate III). The sky was overcast with threatening clouds and by the time we reached the temple it started raining. Our servant who
was bringing a parcel of groundnuts and hill-pears from the Chitai bazaar was thoroughly drenched by the time he reached the circular verandah of the temple. An Singh, the squint-eyed Rajput priest of the temple, also arrived soon after. Usually Brahmins act as priests and it was a surprise for us to see the member of a warrior caste as a priest of a temple. Big drops of rain were pattering over the corrugated iron sheets of the verandah like a hail of machine-gun bullets and the narrow verandah roof was no longer a protection against the slanting rain on the western side. We moved to the eastern side. A blood-stained block of wood and a curved broad-sword were lying in a corner. These explained the mystery of the warrior-priest. The priest of Goll Devata is also the chief butcher, and he slaughters the goats brought by the devotees.

![Fig. 5. Temples at Jageshwar.](image)

The insecurity of the verandah against rain gave us an opportunity of exploring the temple. After making an offering of four pice, thus securing the good-will of the priest, we entered the sanctuary. The abodes of gods, whether in the East or West, are dimly lit and ill-ventilated, to create a sense of awe and mystery. There was a small marble table lying on a platform on which the image of Goll Devata was engraved. It was thickly plastered with vermilion by the devotees. Goll Devata was shown as a good-looking young man wearing a dhoti and riding a horse with a drawn bow in his hand. In front of his image were a pair of tridents and brass lamp-stands in which
ghee was burnt. Goll Devata, who is also known as Goril in some parts of Kumaon, is a god of royal descent as is borne out by his noble features and warlike accoutrement. There is an interesting story connected with his name and the following account is based on the narratives of Atkinson and Tara Dutt Gairola.

Once upon a time, hundreds of years ago an illustrious Katyuri Raja, by the name of Jhalu Rai, ruled at Champawatgarh, the ancient capital of Kumaon. He had seven wives, but, in spite of this matrimonial prodigality, had no children. One day he went for a hunt in the forests near the Kali river. After a long and fruitless chase, he reached the village of Dubachaur tired and thirsty. Two buffaloes were fighting in a field in the sight of the Raja. He tried to part them but could not succeed. He sent his servants to fetch water to quench his thirst which had become intense after his vain efforts to stop the fighting between the two buffaloes. The servants heard the noise of two water-falls and going in that direction entered a hermitage where they saw a beautiful woman, Kalindra by name, lost in contemplation. One of the servants awoke her from her trance and asked her permission to take water for the Raja. Not endowed with too much intelligence, the Raja’s servant placed a pitcher, bottom upwards, under the water-fall, thus liberally spraying Kalindra. Drenched with water she rose and remarked that it was no wonder that everything was done in a topsy-turvy manner by the servants of a Raja who was not strong enough even to part two fighting buffaloes. Amazed at her omniscience, the servant asked her to accompany him and to attempt the feat herself. She agreed. On reaching the field where the buffaloes were still pushing each other, and invoking the aid of her deity, she rushed forward, caught the buffaloes by their horns and parted them. The Raja who was captivated by her beauty at first sight, was astonished at her strength and prowess. He asked her who she was. She told him that her name was Kalindra and that she was the niece of a Raja, who was maimed by leprosy, and they were both busy propitiating the deity. The Raja accompanied her to the hermitage and worked as her servant for a number of days. She felt so pleased that she asked him to beg her for a boon. The Raja asked for her hand and to his great joy his request was granted.

He brought Kalindra in a palanquin to his palace at Champawatgarh. As she became the favourite wife of the Raja, his seven Ranas became very jealous of her. In course of time, Kalindra became
pregnant. The Raja had to go to a distant part of his realm and asked Kalindra to inform him by ringing through her magical powers a bell which he tied around his girdle, in case a male child was born. One of the seven Ranas rang the bell while there were still some days left for the child to be born. The Raja returned and on finding that the child was not yet born became irritated and set off on his travels again. The seven Ranas confined Kalindra in a dark room in collusion with the attendant nurse. They bandaged Kalindra's eyes on the pretext that it would be unlucky for her to see her first child at the time of delivery. While the child was still in the womb, Kalindra heard his voice asking her about the passage in her body through which he should come out. She advised him to come out through the usual passage. The child reminded her of his divine origin, and insisted on the divine prerogative of being born through her left eye, as Krishna was born through the right eye of his mother, Devaki. That female reproductive organs have no connection with eyes, ears, and noses, did not matter in ancient days, when virgins could give birth to children in spite of the discoveries of modern biology that parthenogenesis, though known among Arthropods, is an impossibility in mammals. We hear about not only virgin births, but also about girls becoming pregnant by smelling semen or even human blood. In the infancy of mankind, divine conceptions could take place not only by spirits of gods entering female bodies, but also by the sun's rays penetrating women's wombs. As soon as the baby was born, his envious stepmothers removed him and placed a pumpkin beside Kalindra. When the bandage was removed Kalindra saw only a pumpkin on her bed. The seven Ranas placed the baby in an iron box lined with salt. Soon the salt became converted into sugar and the child was sustained by it. In desperation, the Rana threw the box in the Gori Ganga, and floating down the current it got entangled in a fisherman's net. The fisherman was childless and he adopted the child and named him Gorit after the Gori Ganga. When he grew up, he rode a wooden horse and one day he went to the ghat on the river where the seven Ranas used to fill their pitchers. He asked them to make way for his wooden horse which, he said, was thirsty. The Rana laughed and asked him how it was possible for a wooden horse to drink water? His rejoinder was that if it could be possible for a woman to give birth to a pumpkin it was also possible for a wooden horse to drink water. The story reached the Raja who sent
for the boy. Goril recounted the injustice done to his mother by
the seven Ranis and the deception practised on the Raja. He was
at once recognized as the son of the Raja and the seven Ranis were
burnt alive in a cauldron of boiling oil. Even as a prince, Goril be-
came famous for his sense of justice and fairplay. After Jhalu Rai's
death, Goril ruled over Kumaon with great fairness, and was uni-
versally loved during his lifetime. After his death he became a popular
god, and there are a number of temples dedicated to him all over
Kumaon.

Even now after the passage of centuries, Goll Devata continues
to exercise a healthy influence on the social life of the Kumaoni
villagers. Poor people who cannot afford the luxury of litigation
in the law courts, who are unable to pay heavy fees to pleaders, and
petition-writers, and who give tips to court clerks and peons, seek the
aid of Goll Devata, who does not demand even court-fee stamps
on applications. Time-barred debts, and decrees which cannot be
recovered through the agency of civil courts all accumulate at the
shrine of Goll Devata. People with a bad conscience, whether de-
defaulters, or cheats, suffer from qualms of conscience when they
fall ill or meet with some misfortune. When in trouble, they realize
the wrong they have done and out of superstitious fear they come
to the shrine of Goll Devata to propitiate the angry god of justice
and to make amends to the person they have wronged. Necessity
is the mother of invention. There is so much need of Goll Devata
in the life of the Himalayan villagers that, had there been no Goril,
the villagers would have invented one.

A number of villagers were baking chaparies in an out-house of
the temple and were singing praises of Goll Devata. They had just
patched up a private quarrel and were showing the utmost cordiality
towards one another. One of the complainants who was a shilpkar,
Jit Ram by name, related that he worked for a neighbour, An Ram,
for a wage of one rupee a day for about a month. An Ram refused
to pay him his dues and continued procrastinating. This went on
for four years. It was an oral transaction and Jit Ram had little hope
of success in the law courts where documentary evidence is usually
demanded. In desperation, Jit Ram decided to seek the aid of Goll
Devata. He came to Chitai, threw a handful of rice before the god
and gave a rupee and a quarter to the priest as the process fee for
the services of his dreaded messenger Masan, the king of ghosts.
Masan is a black headless demon who haunts the funeral ghats
to administer him a mild warning when justice is too long delayed. A Brahmin, with shadowy claims to a certain property in Almora, who had given his application forty-two years ago, and still had lost neither faith nor hope, writes:

"Dear Goll Devata,

Now you should tread the straight path and do justice. I have a title over the property in Jageshwar Mohalla, Almora. I have one-half share in the temple, in the house, and in the ancestral property. I had presented a petition in your court forty-two years back, but you have paid no heed to it. Why have you suppressed my application? I am a poor man, nobody pays any attention to my grievances in the law courts, and it is on this account that this orphan has appealed to you. Now again I am filing this petition along with documentary evidence. You should do justice. Please grant my application.

Sd/- Sidh Nath Pandey

Witnesses.

1. Amar Nath
2. Badri Ballabh

It is not only the claimants of property who come to the shrine of Goril. Persons suffering from incurable maladies living in villages where medical aid is not available also seek the aid of Goril. A faithful husband, apprehensive of his loving wife’s well-being and health, left an application as follows: "Hail Shri Goll Devata, blessed be thy name! Oh incarnation of Almighty God! My wife is suffering from intense pain in the abdomen; kindly cure it within six months. If her pain is cured within six months, and she regains normal health, I will make an offering of flowers, vegetables and batashas (sugar toffees) according to my capacity before you. From today I will give her medicine also in your name."

These applications furnish valuable material for the study of the social and economic life of the Kumaonis. They shed light on their everyday life, their common disputes, their hopes and fears, their aspirations and ambitions. They reveal what a narrow-minded person a villager in the hills is, and how life, in the hill villages, which outwardly appears so placid, is really so miserable, poisoned by petty jealousies and meanness. Like all peasants, the hill-men are deeply attached to the soil. The Sarkari Bania of Panwa Noula related a
story which illustrates the deep attachment of the hill-men to their ancestral land. There were three brothers, An Singh, Pan Singh and Ram Singh. An Singh who had no children was not on good terms with his brothers. He sold his share of land to one Ratan Singh, an outsider. An Singh died issueless, but left his two brothers who started an unending quarrel with the buyer Ratan Singh. One day while Ratan Singh was ploughing the disputed field, Pan Singh and Ram Singh came to the field, wept bitterly and scattered a handful of earth in the wind and invoked the aid of Goril. A year later, Ratan Singh’s only son died and out of fear he agreed to return the land on payment of the purchase money to Pan Singh and Ram Singh. While this transaction was still under consideration, Ram Singh died leaving a widow. Pan Singh got the entire property entered in his name after bribing the village patwari, thus depriving the widow of his brother and her son of their share. One day, while Pan Singh was ploughing the field, the widow of Ram Singh came, wept bitterly and gave vent to her wrath by striking her forehead against a stone, drawing blood, and invoked the aid of Goll Devata. A week later Pan Singh fell ill. Fearing the revenge of Goll Devata, he summoned a council of village elders, confessed his guilt, and gave the woman her share. Then he sacrificed two goats, one at the temple of Goril, and the other personifying the wrath of the widow in the field in which she had uttered the curse. Such goats which are called “goats of anger” are not eaten.

Sometimes, educated persons also seek the help of Goll Devata. I saw an application in English, duly typed and accompanied with copies of official orders filed by a dismissed tracer of maps. This man had been dismissed by the Deputy Commissioner and his appeal had also been rejected by the Commissioner. He had brought a big file of papers including copies of the orders of the Deputy Commissioner and the Commissioner and deposited it with due ceremony before Goll Devata. I wonder on whom this disgruntled man invited the wrath of the god—on the Commissioner or the Deputy Commissioner, or on both.

When people desire transfers of their sons and relatives, they usually approach high officers who are empowered to pass suitable orders. When Government employees too much attached to a place and unwilling for a move, suddenly receive orders of transfer, they usually plead, the pregnancy of their wives and the illness of children. However, the novel method of seeking the intervention of
Goll Devata for the transfer of his beloved son, lies to the credit of a conscientious Kumaoni villager who sent his application to Goll Devata with the dual objective of securing his son’s transfer to a nearby place and the punishment of his enemies who were harassing him. In all humility, he writes: “Shri 108 Gour-Bhairav Ji! I prostrate myself before you in profound obeisance. Justice is always done in your court; we foolish men sometimes cannot understand your ways, and again and again we shout for mercy before you. I have perfect faith in you, and I cannot praise you too highly. In spite of our follies, you are merciful, and you are omnipresent. So far, you have fully protected my honour, but I remain an idiot and repeat my follies. I again and again pray before you to guide me and to remove my troubles. I have only one child and I have dedicated him to you. You are his protector, please transfer him to some nearby place. I will personally come and worship you when my prayer is granted. I, a born sinner, ask your pardon again and again, and have sought your protection. You fully know the atrocities my enemies are inflicting on me, as you are omniscient. There is no justice for me in any law courts; that is why I have come to you. I do not desire that anyone should be harmed. You can give whatever punishment you think proper. If I am myself guilty you can punish me. Now I have filed this appeal. I am sending this appeal through Kirpal Dutt Pant. If I am at fault, I may be punished. Otherwise, those who annoy me again and again should be punished.”
I. A view of Nandadevi snow range from Binsar

II. Nainital Lake
III. Temple of Goll Devata at Chitai

IV. Dr. A. C. Joshi drinking water from Satpahari Rani Nehru memorial fountain at Khairagarh.
V. Collecting *Sphaeradum*, a new alga, at Ganarath
VI. Temple of Baghnath at Bageshwar

VII Khassa children
4. Binsar

BY THE month of September the novelty of Almora had worn off and life was getting dull and monotonous. To escape the boredom of Almora I decided to go on a tour towards the Pindari glacier and to see the life of hillmen at first hand.

I left Almora one fine morning followed by a procession of Dotial and Danpuri coolies, laden with trunks, bedding, and baskets. Walking past the hideous Almora Jail, which looks like a mediaeval European castle perched on a crag, I slowly climbed up. On the right is a pine forest with a level bridle-path strewn with pine-needles. Passing by a few shops, we emerged in the open again with a clear view of Kalimat. For about a furlong the road is treeless. Coupled with the climb, the heat of the sun was a convincing enough argument for afforesting the bare Kumaon hills. The shade of the chestnut trees at the next bend was most welcome. I had walked fairly fast to clear past the sun-scorched part of the road, and was out of breath. This is just the moment when one feels like admiring the beauties of nature!

As I was going out on a long trip, I could not resist the temptation of seeing the Brewsters, the American artists, husband and wife, whose house on Kalimat was on the way to Binsar. When I reached their place after a stiff climb, I was greeted in the verandah by Earl Henry Brewster who was wearing a khadi cap, and was wrapped in a Kashmire shawl. Brewster, along with his wife Achesah settled down in Almora in 1936. He has painted a large number of landscapes
of the Kumaon Himalayas, characterised by simplicity of composition, and sober colouring. The dark green pines, reddish stair-like fields, and blue autumn skies of Kumaon have been portrayed by him in his numerous paintings. Brewster has painted the snow-peaks of Nandadevi as well as the pine-covered slopes and terraced fields of the outer Himalayas. He has also immortalized on canvas the quaint beauty of the hill-temples of Kumaon, the pink blossoms of wild cherry silhouetted against ebony-black branches, the white glory of bell-shaped datura flowers, and the bluish metallic sheen of chir pines bearing tassels of needle-like leaves. In his landscapes are seen the villages of Kumaon filled with purple haze and marvellous effects of light and shade when sunlight filters through cumulus clouds. By using darker paints in the foreground and lighter ones in the background he produces a stereoscopic effect in his landscapes and the valleys are seen in three dimensions. I have not seen perspective shown to better effect in any other Himalayan landscape by another artist.

Frail and anaemic, with her legs paralysed, Achsah was seated on a wooden chowki and was busy worshipping a bronze image of Krishna, burning incense and scattering flowers. On seeing me, her face lit up with an angelic expression which reminded me of the white-clad figures draped in white which she had painted in some of her paintings. She offered me some apples. I had a hearty conversation, and it was with great reluctance that I took leave of this devoted couple.

In the pine forest I heard the ‘Pea Kahan! Pea Kahan!’ of the papeeha, the so-called Brain-fever bird (Hierococcyx varius). Though the pine forest echoed with its cries, which heightened its silence, it was with great difficulty I spotted the bird. It is hawk-like in appearance with dark cross bars on its tail. Though the female shouts from morning to evening, it is much too lazy to hatch its eggs. It makes use of babblers for hatching them, and quietly lays them in their nest. For the present-day world, the behaviour of the female papeeha is by no means startling for there are reports from England of women hatching eggs in their bosoms.

From Kalimat we reached Kaparkhan where the motor road ends. At this place there are a few miserable shops, an ugly blot on an otherwise picturesque landscape (Fig. 6). The valleys are dotted with houses, and the hill-sides are intensively terraced into small fields. We passed through the Khali Estate of Mr. Ranjit Pandit, the entrance
gate of which bears a modest sign-board in Hindi with the words "Sag par". The imaginative proprietor had been trying experiments in gardening, bee-keeping and poultry farming with the object of helping the people of the neighbouring hamlets. The bungalow commands an open view of the surrounding ranges of mountains, and is furnished in exquisite taste with simple modern furniture, mostly home-made. The Pandit family had moved down to the plains, and we pushed on after resting for a while in the verandah and making a cursory examination of the blue-painted bee hives. The day was hot, and we stopped for a while under a clump of pines. Two villagers from Bageshwar were also resting after a two-day march from their home. One of them was smoking a cigarette and the other who looked more sophisticated was stretching his limbs on the slope covered with pine needles. On seeing me he quietly sat down. I asked him about the object of his journey to Almora. He replied that he was contesting a civil case about a piece of land on which he had the right of extension of cultivation, which was claimed by a neighbour for grazing his cattle. He also told me that he had settled his fees in a lump sum with the Vakil who had agreed to fight out the case for a sum of Rs. 35. As for the witnesses and their
feeding charges, he carried two-days supplies with him. While rising to depart he inquired about my name and business, and when I told him that I was posted in his district as Sub-Divisional Magistrate about four years ago, he immediately recollected a meeting at Bageshwar which I had convened with the object of collecting funds for a library and a Panchayatghar. He told me that he was keenly interested in village development work and had seen the charts which I had compiled describing the objects and benefits of Panchayatghars or village community houses with libraries, dispensaries, seed-stores and hall-rooms decorated with pictures and posters, and equipped with battery radios. As I had taken a good deal of interest in this work, the remark from the Kumaon villager touched my pride in no small measure. What a good thing it would be if these villagers— who are fairly intelligent, used their energy and intelligence for the betterment of their villages, and incidentally of their country, instead of frittering it away on petty law suits and wasting their hard earned money by pouring it into the pockets of lawyers, court clerks and peons!

From Khali onwards there is a steep climb. With the increase in altitude, the vegetation also becomes richer and varied. On both sides of the bridle-path is a thick forest of oaks and rhododendrons, which are laden with epiphytic mosses, lichens, orchids and ferns. A thick mat-like growth of Selaginella, with its green metallic leaves looking fresh and beautiful covers the red clay of the roads.

I was feeling very thirsty and there was no sign of water anywhere. On turning a corner I was agreeably surprised to see a fountain, different in design from and more artistic than the fountains one generally sees in the Kumaon hills. Ice-cold crystal clear water was trickling from the mouth of a marble cow’s head, and the inscription in Hindi indicated that it was built by the Nehru family in memory of Shrimati Sarup Rani Nehru, mother of Jawahar Lal Nehru (Plate IV). Iand Joshi had a good long drink, and after thanking the Nehrus for this piece of public service, I rested for a while under the shade of the pines a few paces away from the bridle-path. A few minutes later a couple of villagers came. Both of them had a draught of water, lighted cigarettes, and made themselves comfortable on the flat stones of the fountain. One of them said that Jawahar Lal Nehru got the fountain constructed about three years ago. A moment later he corrected himself and said that Jawahar Lal’s sister got it constructed. It is a pleasure to talk to Kumaon villagers as they do
not cringe and crawl like the tenants of Oudh and have no inferiority complexes.

At last we reached Binsar. According to the writer of the Gazetteer, “Binsar was a favourite summer retreat of Raja Kalyan Chand (1730–47 A.D.), and here he built the temple, now in ruins, and dedicated it to Shiva under the name of Bineswar, shortened into Binsar. The god is said to protect the dwellers on this hill against theft, and to compel the thief to restore the stolen property manyfold. The iron water pipes laid by Sir Henry Ramsay were however persistently removed, and the god’s reputation is now somewhat exploded.”

The summit of the main hill at Binsar attains an elevation of 7913 feet, and the temperature in summer is on the average some 10 degrees lower than that prevailing in Almora. By the kind courtesy of L. Har Kishan Lal Sah Gangola, we stayed in his house. This historic building was built by the popular Commissioner of Kumaon, Sir Henry Ramsay. It looks like an old English country house, is surrounded by magnificent old deodars, and commands a fine view of the surrounding hills and valleys. The panoramic view from the house is unexcelled, and one sees wave after wave of mountain ranges on all sides. We had tea on the turf under the shade of deodars using the stump of a recently cut tree as a table. In the evening a fine haze filled the valleys obscuring the mountains, though in the morning we were amply rewarded by a view of Nandadevi and its sister peaks. The owner has tried to maintain the ancient character of the house as far as possible, and besides portraits of English Kings and Queens and Victorian ladies, the walls are ornamented with horns and heads of stags, thars, gorals, black bucks and mountain leopards.

There are about half a dozen other houses also scattered on the spurs of the mountain, nearly all of which were uninhabited with the exception of one which was occupied by Mrs. Stetterheim, an old Dutch lady. Mrs Stetterheim was a plump woman past middle age, interested in Theosophy. Industrious, and of an artistic temperament, she had furnished her room in a simple but elegant manner with Indian fabrics and hand manufactures, and had painted the woodwork in light-blue herself. In her lonely home, her chief obsession seemed to be the ‘Bania’, who was also the postmaster, whom she suspected of not only opening her letters, but also of troubling her with hill magic. The doors of her house used to rattle
at midnight, and she was quite convinced that the evil spirits let loose by the postmaster were responsible for these nightly disturbances. We sat for tea, and conversation switched on to less spooky subjects. We talked about our common friends, the Brewsters of Kalimat, and Mrs Penrose their neighbour. It was a dark night, and the clay of the narrow path had softened into a slippery mess under the light drizzle which had been going on for the last two hours. Guided by the postmaster who had brought a hurricane lantern we slowly and cautiously retraced our footsteps to L. Harikishen Lal’s house.
5. Gananath and Dewaldhar

EARLY NEXT morning we resumed our journey. A mile below Binsar we saw a forest of pine-trees burnt by a devastating fire. We descended into a valley and reached Takula village, where there is a small Dak Bungalow and a “Sarkari” Bania’s shop. Situated in a hollow and surrounded by ugly houses, the bungalow at Takula was not very attractive. We pushed on towards Gananath. After leaving Takula we crossed a small stream, and passing through a village and trespassing into cultivated fields we discovered the bridle-path again. A bright young lad, son of a goldsmith, whom we met at the Bania’s shop at Takula, suddenly appeared ahead of us. We rested for a while near a cottage on the side of a water channel. The Takula boy’s younger brother came and offered us a brass bowl full of salted Kaphil berries which we thoroughly enjoyed. He related how his father obtained the grant of land on which the house was standing with great difficulty after protracted litigation with a Brahmin neighbour whose cottage was visible from where we sat. In the previous year their wheat crop was burnt by their enemies. The land was not fertile, and hardly yielded six months’ food supply to the family. So they supplemented their income by making ornaments and running a bania’s shop at Takula. Apricots grew fairly well in five years time, but a walnut tree still looked shrubby after nine years. They had no bullocks and the terraced fields were ploughed by a shilpkar from a neighbouring village whose wages were paid in kind. The elder boy had studied up to
the 5th standard but had been obliged to discontinue his studies to help his father in the management of the land. We also stopped for a while at the Sanskrit Pathshala where the pupils are taught to repeat parrotlike Sanskrit shlokas, whose meaning in plain Hindustani is not very clear even to their teachers. The only progressive feature of the school was the teaching of wool-spinning and simple carpentry which had just been started. It was a pleasure to escape from here, and to enter the compound of the forest Dak

![Farmers' huts on the way to Ganeshath.](image)

**Bungalow at Ganeshath.** Surrounded by a young forest of pine trees, the bungalow is most picturesquely situated. The smell of resin from the pine forest was exhilarating. Resin is collected in small earthen-ware pots which are hung beneath the incisions made in the trunks of pine trees. Oozing drop by drop, golden sticky resin accumulates in these earthen vessels and is sent in tins to the plains, to be converted into paints and varnish.

The chowkidar of the bungalow had grown a nice little garden stimulated by a reward of Rs. 10/- from Mr. F. W. Champion, and had brought bulbs of irises and lilies of various kinds even from the Bungalow gardens at Binsar and Almora. He had very aptly planted a weeping willow near the water tank which also supplies water to the bungalow. We arrived at about 4 p.m. and asked the chowkidar to bring us some milk. He said that no milk could be had before dark. The cows usually returned home from the pasture
land at about night fall, and the villagers had a superstitious horror of selling buffalo's milk in the evening-time, as any such sale was supposed to have a fatal effect upon the buffalo. It would be interesting to find out how this superstition has grown up.

While the Sanskrit Pathshala was reminiscent of Vedic times, the young 'chir' pine forest around the bungalow at Gananath unfolded a Mesozoic landscape, taking us back millions of years in the history of the earth. A young 'chir' pine forest is the nearest approach to a Mesozoic forest which one can see. The young trees with their tufts of brush-like terminal branches bearing tassels of needle-like leaves look very much like lycopods. Quite possibly they recapitulate their past history, and in their juvenile stage give us a glimpse of the childhood of their race. Excepting for the occasional chirping of crickets, the same death-like silence prevails in these forests, as it did in the Mesozoic forests. We could see only a few grey and red lizards creeping silently in the crevices of rocks; and apart from the noise of crickets, one hears only the sighing of the pines in the wind. There was no sign of any flowering plant, for the thick carpet of pine needles precludes any undergrowth.

A few furlongs from the forest bungalow is the cave-temple of Gananath. The devotees of Shiva have enclosed a waterfall by an ugly enclosure. In the front part are a few insanitary rooms where sadhus and beggars sit raking a smoky fire and smoking 'charas'. Below the waterfall is a cave in which the lingam lies embedded in a circular stone channelled on one side. Hanging over the lingam is an iron bucket with a hole in its bottom through which the water trickles drop by drop over the tip of the phallus. Surrounding the phallus are other idols smeared with vermillion.

By the time I had covered the journey up to Gananath, the soreness in my legs had disappeared, and I was feeling buoyant with energy. In fact walking in the hills is in itself an education in balance and rhythmic breathing. Hill-men are never in a hurry. You see them climbing steep ascents slowly and steadily without showing any signs of fatigue or excitement. On the other hand, the over-hasty tourist from the plains is soon left panting with a thumping heart on account of his undue hurry. While emulating the technique of the hill-men in climbing ascents, I always preferred to run while going down. It not only shortens the journey, but is also a pleasurable sensation. Another tip for hikers. Never take a short cut in the hills unless you are sure about it. Most of the paths in the hills which
appear like short-cuts are really tracks of cattle leading to pasture land, and involve so much climbing that what one gains in distance, one loses in expenditure of energy and time.

To me the interest of Gananath lies in the discovery of a new alga growing at the mouth of the cave, a few feet from the waterfall, which I named Sirocladium (Plate V).

The walk from Gananath to Dewaldhar is very pleasant and colourful. The ‘khuds’ and hill tops are covered with blue flowers of Strobilantes atropurpurea whose fragrance fills the air. Passing through a dirty village with its streets plastered with cow dung and black mud we reached the Dewaldhar Estate of R.B. Chiranji Lal. The red roof of the main building, the neatly arranged lawns, and the hedges and fountains convey an impression of orderliness, cleanliness and efficient supervision, so rare in our country at present. The Dewaldhar Estate almost looks like a bit of France. The proprietor lodged us in his guest-house which commands a full view of Nandadevi and the neighbouring snow-peaks. The setting sun had transformed the peaks into a pile of gold. From golden yellow, Nandadevi and its sister peaks became rose-red in colour, and as the sun vanished, they lost their pink hues turning steel grey, and ultimately vanished into the lap of the dark night.

The guest house contains an interesting library of old books on the Himalayas. The visitors' book contains a number of interesting entries, including those by Heim and Gannser, the Swiss authors of The Throne of Gods, an authoritative and most profusely illustrated book on the Himalayas.

After inspecting the water-mill and the masonry tank, which yielded an interesting collection of algae, we resumed our journey towards Bageshwar. On the way a couple of miles below Dewaldhar, we saw a magnificent water-fall with a drop of several hundred feet, roaring and foaming into the ‘khud’.

In the forest we saw some characteristic Himalayan birds. A shikari told me that these birds too have a hierarchy which follows the altitude. The snow cocks and eagles are found between ten and fourteen thousand feet in the snow zone. They are on the top rung, the Imperial Service, the I.C.S. (Fig. 8). At an altitude of eight to ten thousand feet are found the pheasants, chaker, moonal, tragopan, and lunga. We were now in the middle Himalayan zone, the haunt of the jungle fowl, kalij pheasant and koklass.

The Red Jungle Fowl (Gallus ferrugineus Gmelin) is found in
the jungle along the roadside. We saw a pair in a bush close to the road. The cock had beautiful plumage tinged with bright red near the throat and the tail. The dark green tail feathers were gracefully curved. The hen was brown in colour, shy and silent and disappeared with great suddenness in the bushes. At harvest time in the months of March and April, I was told, the birds come out of the jungle into the wheat and gram fields for a feed in the early morning and towards evening. In summer the birds retire deep into the jungles where they find seclusion and shelter for breeding.

In the oak forest I heard a loud whistling chuckle. It was the white crested Kalij (Euplocamus albocrisatus), Vigoss (Fig. 9). Kalij pheasants are specially abundant in Nainital, Bhim Tal and Naukuchia Tal. It was slightly larger than a chakor. Chest and abdomen were black with long conical silver grey feathers, interspersed on the chest. The neck was dark green. The lower back had light ash and
dark green feathers arranged alternately. The crown had a bunch of 2\frac{1}{2} inches long silver grey hairs. There were gold fleshy patches round the eyes.

Fig. 9. Kalij pheasants.—Male in the foreground.

Referring to the whirring sound the Kalij makes in the breeding season, Wilson says:

"We had been sitting motionless for half an hour, when I was startled by a loud drumming noise. The sound came from behind, and on looking over my shoulder, my companion with a smile pointed out the drummer. An old cock Kalij was squatting on the stump of a fallen tree, and, with its feathers all ruffled and tail spread, was causing this extraordinary sound by rapidly beating its wings against its body. The wings were kept in such rapid vibration that you could only see a haze. I think that the wings are not struck against the body, and that the sound is merely caused by the extremely rapid movement of the wings, through the tensely strung feathers of which the air hurtles."
6. Bageshwar, The Town of Shiva

AFTER A level walk of a few miles in the Sarju valley under a sizzling sun, we entered the town of Bageshwar, crossing the Gomti by a suspension bridge which was rocking pleasantly. Considered by hill-standards, Bageshwar is a prosperous little town inhabited by Banias, most of whom retreat to their country houses in the surrounding hills, when the valley becomes hot and malarial in July. In the winter months a brisk trade is conducted in the town, when Bhotias from the inner Himalayan ranges, which border on Tibet, exchange their musk-powder, salt, borax, Tibetan wool, Yaks' tails, furs, wooden bowls, goats and ponies for cotton goods and hardware.

During the Uttarsaini fair which is held in the middle of January, one may come across even genuine unwashed Tibetans covered with real Lhasa dirt, offering for sale their prayerwheels and Yaks' tails which religious people use as fly-whisks. The Tibetans are ingenious people, and they use their prayer-wheels for multiplying prayers. However, they do not realize that their simple devices have become out of date in this Machine Age, and people have made machines which execute a thousandfold revolutions per minute as compared with their primitive praying-wheels and mills. A dynamo installed at Lhasa, originally inscribed with 'Om Mani Padme Hum' will not only light their dismal houses and roads but will also offer more prayers per hour than all the praying mills of Lhasa combined together. Perhaps the dynamo will also ultimately
convince them of the absurdity of a praying life which has kept them steeped in ignorance, dirt and disease, helots of a hierarchy of priests and lamas who lead a parasitic existence. That may explain why the monks have kept the country so carefully sealed from the foreigners, and Tibet remains a forbidden country, and Lhasa a forbidden city. All forbidden things become mysterious and excite the curiosity of outsiders. To satisfy their sense of curiosity, people are ready to undertake great risks and we hear stories of restless European men and women disguised as monks and nuns trying to make incursions into Tibet with the help of bribed Bhotias and Tibetans, and coming back with lurid tales of hardships undergone, grotesque devil dances and flying lamas.

Stumbling over the cobbled streets of Bageshwar, and attracting undue attention from the shopkeepers of the bazaar, our caravan of ponies, dandies, and coolies reached the dak-bungalow on the other side of the Sarju after crossing another suspension bridge. We were welcomed by the bearded Moslem Khansama of the bungalow, and the respectable citizens of the town. I was agreeably surprised to find a library in the town which contained a number of books and daily newspapers. The custom of spinning wool is also spreading in the hills of Kumaon, and in some shops I saw coy and pretty girls sitting on stools spinning wool cheerfully. The shopkeepers also spin wool in their spare time instead of sitting idle and chasing flies (Fig. 10).

In the evening, riding a pony, accompanied by the patwari and followed by a big crowd, I made a local inspection in connection with a boundary dispute between the residents of two villages. The Kumaonis have a passion for litigation and local inspections. A wretched man applies for a bit of land for constructing a cow-shed and a score of others oppose him and file all sorts of objections. The dispute is best decided by a local inspection which usually attracts a big crowd of objectors and innocent sightseers. This dispute was of more than local importance, and the road was full of men for over half a furlong. On reaching the disputed site, I heard a vehement discussion among the lawyers of the two parties who produced ancient maps and documents dating from Beckett’s Settlement in support of the rival claims of their respective clients. The local inspection did not end with the study of maps and documents alone, but also involved jumping over hill-rivulets, and climbing a number of hill-tops. To be an efficient Sub-Divisional
Officer in the hills you must be nimble-footed as well as nimble-witted; and sound lungs and muscles are as important as brains.

After the ardours of the local inspection, which had left me sore-limbed, I had a sound sleep. Early next morning, while I was sitting in the verandah of the bungalow watching the Sarju, a lean and thin old man sent me a message that he wanted to see me, as he had certain important information to convey about the "Galeshwar". The Kumaonis regard the Pindari glacier as a cousin-brother of the towns of Someshwar and Bageshwar; hence they lovingly, though ignorantly, call it "Galeshwar". My visitor taking a seat
near me told me in a low confidential tone about the miraculous healing powers of the snow-water issuing from the snout of the glacier, and advised me to have a good sip. According to him, this water contained an essence of all the Himalayan medicinal herbs, and could cure many diseases, and was particularly effective against tuberculosis. He related the story of a consumptive, who was given up as beyond repair by the doctors of Almora, and was cured by the water. Suffering from no serious disease except occasional hill diarrhoea, I considered the gratuitous advice of the frail old man not very relevant from my personal point of view. Besides, the vegetation zone which might contain some medicinal herbs is well below the permanent snow-line from where the glacier ice begins to melt, and near the snout only a few lichens would flourish, and hence there was little likelihood of the Himalayan herbs dissolving in sufficient quantities to have any effect on the water. My scepticism had no effect on the faith of the old man, who seeing my thin physique began to expatiate upon the fattening qualities of “Galeshwar” water. Looking at his pale shrunken face, which looked like a sucked mango, and his lean and thin body, I felt that “Galeshwar” water would do him more good, and promised to bring a pitcherful of it, provided he was ready to bear the transport charges.

Fig. 11. A water-mill near Bageshwar.

Collecting donations is an art at Bageshwar, and one of the supreme artists is Poona Rawal. A fine old man with a grey moustache, he
has seen scores of tourists and explorers on their way to Nandadevi, and the jaded Almora officials who having got fed up with disputes concerning nap and benap land and water-mills and abduction cases of hill women, decide upon making a local inspection of the Pindari glacier. After a pleasant chat in which you are told that no kindlier, no more benign Sub-Divisional Officer than yourself had ever come to Bageshwar, he places a donation book in your hand. With no ambitions to scale Nandadevi, the promises of Poona Rawal to invoke the aid of the local God Baghnath, and the goddess Nandadevi left me unmoved. However, I promised to examine the entries of his “Donations Book” at leisure and to pay a visit to the temple of Baghnath. Situated at the confluence of the Gomti and the Sarju, the temple of Baghnath, (Plates VI) with no particular architectural merit, looks like a pyramidal pile of stones. It was built by Raja Lakshmi Chand about A.D. 1450. In front of the temple are a number of bells of different sizes, which the devotees of Shiva ring after going round the temple with folded hands. My orderlies had a go at the bells with a gusto which must have disturbed Shiva rather violently and reminded him of a devotee in distress. As the story goes, the Leopard Lord had received such an S.O.S. ages ago, when a hermit by the power of his austerities which he was performing in the bed of the Sarju River had stopped its flow. Shiva in conclave with his consort Parvati devised an ingenious plan. Parvati transformed herself into a cow, and began to graze by the river bank, and Shiva, metamorphosed into a ferocious leopard, pounced upon her. The hermit rose from his devotions to rescue the innocent cow, and the river was able to resume its course. Satisfied with his diplomatic victory, so tactfully achieved without giving offence to an unintelligent devotee though at considerable discomfort to himself and his dear wife, Shiva proudly adopted the title of Baghnath, after which the town takes its name.

The Aryans were imaginative people, and the rivers, forests, and mountains of India provided them with plenty of material for spinning iridescent cobwebs which have still retained their glamour. Coming from the flat plains of northern India their pioneers were intoxicated with the beauty and grandeur of the Himalayan peaks. In the legend of Shiva, his beautiful wife, Parvati, and her father, Himachal, the story of the Himalayas and its grand snow-peaks is told. All over Kumaon and Garhwal we find numerous sacred places associated with Shiva and Parvati. As the story goes, it was
near the confluence of the Gomti and the Sarju at Bageshwar that Shiva was wedded to Parvati, the "mountain-born". Shiva is a personification of the Himalayan peaks where perpetual snow lies. His matted white locks represent the snow of the Himalayan giants, from which glacial streams originate and roll down to the sun-scorched plains of northern India, fertilising them with their silt-laden water. He is also called 'Nilakantha', or blue-necked, an allusion to the dark-blue band of colour of the rocks below the snow-line. His trident or trisula represents serrated snow ranges. Parvati represents the smaller peaks which stand by the bigger giants, like a faithful Hindu wife waiting on her lord and master. On seeing these peaks in the pale-blue light of the crescent moon, the Hindu poets and artists visualize the towering giant as Shiva making love to the gentle Parvati, each holding the other in an eternal embrace. Shiva's throne is on Kailash, the majestic phallic mountain in western Tibet. When avalanches roll down the sides of the snow-peaks with a terrific roar, Shiva, the terrible ascetic with a serpent twined around his neck, is said to be in an angry mood. Drums, the most ancient of the musical instruments with deep reverberating sounds, are also associated with Shiva which he is said to have invented to give vent to his pent-up wrath. The deep thud of rolling avalanches has a strange resemblance to the noise of a drum.

It is a pleasant sight to watch the milky water of the Sarju loaded with calcium carbonate mingling with the greenish ferrous water of the Gomti. Under the shade of temple trees, dangling my feet in the cold river water, and listening to the somnolent music of the Gomti and the Sarju, I spent a pleasant hour. After collecting a rare alga from the courtyard of the temple which turned out to be a species of *Oedocladium*, I made my way to the District Board dak bungalow. The coolies had a much-needed wash in the Sarju and appeared to be happy at getting rid of the layers of dirt they had accumulated between Almora and Bageshwar. The boulders in the river-bed in front of the bungalow were covered with clothes of Danpuris and Dotiyals. It was pleasant to escape the odours of hillmen on our march from Bageshwar to Kapkot. It is a wise policy to give them soap at Bageshwar, even from a purely selfish point of view.

' My court-clerk had packed Poona Rawal's "Donations Book" along with his court registers, and at Loharkhet I received a pathetic
skywards. Occasionally, a fish leaped out of the water like a gleaming dagger. I was lost in a reverie and was hardly aware of two young visitors standing behind my chair. On turning round, I saw a young Brahmin boy, strikingly handsome and intelligent-looking, with a vermilion mark on his forehead, followed by another boy carrying a brass "thali" covered with a handkerchief. On seeing me, the boy gave me a polite 'Namaskar' and handed me a card with the words "Temple Bageshwar, Poona Mathura Rawal". The young man was the grandson of Poona, the grand old man, and I was glad to find that he was worthily carrying on the family tradition.

On return from the Pindari valley, I was delighted to meet Poona at Bageshwar. He was bewailing the changed times. The officers were not so good and kind as they used to be in the good old times, and the people too had changed for the worse. The income of the temple had considerably dwindled because of shrinking faith. He heartily agreed with a past Deputy Commissioner of Almora that it was dangerous for people to receive English education, for they not only ceased to respect their elders and Government officials, but also became materialistic, and scoffed at the faith of the ancients.

Accompanied by Poona, I paid a visit to the Baghnath temple again. The houses in the street were more or less the same. One or two new houses that had been built lacked the carved windows and doors and looked drab. The temple with its pile of statues was very much the same excepting for one innovation. In front of the temple, there was a beautiful rose shrub laden with pink flowers. I was told that the boys from the neighbouring streets, who came to pay their respects to the idols, had been pilfering roses from the bush. It was difficult to keep watch over these mischievous boys. After suffering a lot from the depredations of these urchins, Poona devised an ingenious plan. He stuck a notice-board with the following inscription in Hindi in front of the bush—"He who plucks flowers from the temple of Baghnath without the permission of Rawal will be guilty of cow-slaughter, and will be punished for the same by Shiva". Poona told me that the notice was effective for some time only. On finding that Shiva caused no serious harm to some of their comrades who had the temerity to go on plucking flowers, they began to help themselves to the bush.

On returning to the dak-bungalow, I decided to explore the left bank of the Sarju also, which I had missed during my previous
visit. Passing by a few shops, I saw a flat piece of land on which
the Uttairaini fair is held. Higher up there are a number of neat
little cottages surrounded by clumps of peaches, apricots, and
plantains. From the windows of some of these houses hung green
painted tin canisters from which scarlet pelargoniums dangled
in the air. On one corner of the ‘maidan’, is a temple-like structure,
the ‘Yagyashala’, made of stones on which grows a giant peepal
tree with thick cord-like roots interlacing the dome and also pro-
viding a frame-like structure for the entrance door. This peepal
is a magnificent tree. About 80-90 years ago, seeds were deposited
on the dome of this “Yagyashala” in the droppings of a bird. From
these a young peepal grew. It remained perched on the roof unno-
ticed by anyone. In course of time, it grew into a huge tree taking
complete possession of the building, which now appears like a part
of the peepal itself. After admiring the remarkable vitality of the
tree, I walked on. A little further down, a neat little house, washed
with red clay, was visible. It was surrounded by a clump of peach
and fig trees. On going further, I saw two yogins (women sadhus),
clean-shaven, wearing clothes matching the red clay sitting in the
courtyard. One of them was raking a fire and collecting cinders for
filling a hookah. They offered us a smoke from their hookah, which
we politely declined, being non-smokers. I asked them if they were
interested in the study of the Bhagawad-Gita or other religious
books. They frankly confessed that they were illiterate and were
quite happy as they were. A fat Englishman who looked like an
army major on leave passed by the temple of the ‘yogins’, followed
by a crowd of boys carrying fishing rods, hooks and tin-cans. Pro-
bably he had been fishing in the Sarju for a number of days, and had
earned the title of “Macchhi-mar Sahib” (fish-killer) from the
yogins who had seen him passing in front of their temple followed
by his crowd of anglers carrying a load of mahseer, the Indian
salmon. The Mahseer often attains a large size and provides good
sport to anglers from the plains and to the few local Mohammedans
and Rajputs. The Brahmins and Banias of Bageshwar are strict
vegetarians and it is they who are responsible for the mahseer attaining
unusual size. They throw little balls of kneaded wheat flour contain-
ing slips of paper with the name of Rama written in pencil into the
river and the mahseer gather in shoals for a hearty repast. According
to these pious persons some merit is acquired for everyone of these
pellets eaten by a fish, and every piscine gulp is equivalent to a
verbal repetition of the name of Rama. While it is doubtful if these devotees of Rama have acquired better credentials for entry into Heaven, there is no doubt about the fattening effect of the rich atta diet containing generous quantities of starch on the mahseer. Some of these become so fat and sluggish that they fall an easy prey to the harpoons of hillmen, who light flares over stones in the midstream at night-time to attract them. From my bed in front of the bungalow I watched these flares and the silhouettes of fishermen sitting on stones in wait for the prey.
7. Kapkot

FROM BAGESHWAR to Kapkot we went along the Sarju, with the unceasing music of its waters keeping us company all the way. The road is more or less level with a slow gradient. The morning sun greeted us at about a mile from Bageshwar, and after the cloudy weather we had met from Almora onwards, it was a welcome change to see the valley filled with its radiance. After a brisk walk of a couple of miles, I found myself overdressed, and removed my tweed coat which an obliging orderly carried behind me. After some time, it was not possible even to tolerate a pull-over. Like the proverbial wayfarer of the Hitapodesha fable, who became an unwitting object of the controversy between the Wind and the Sun, I found myself only with an open-necked shirt after a few minutes. Fleecy white clouds began to appear in the blue sky, but they gave only a fleeting relief from the heat of the sun.

Some women with long sickles were reaping paddy in a wayside field (Fig. 12). Their men-folk were sitting on the field boundary quietly smoking a hookah. Attracted by the chirpy sounds from the fields, T. N. Kaul, my friend from Fyzabad, stopped his pony with the intention of taking a snap. Photographing women in the hills, or anywhere in India, is a risky venture, for there is every likelihood of a misunderstanding on the part of the men-folk. When my romantic friend clicked his camera, the expression of playfulness and coyness had left the faces of the young women. They all appeared frightened and sullen. Disappointed by this failure, he really envied
Heim and Gannser, the authors of the *Throne of Gods*, who have so successfully captured madonna-like faces and heavenly smiles from Kumaon on their plates and films. To be a successful photographer, it is essential to win the confidence and goodwill of the people one photographs. Once the human bond of sympathy is established, the photographer can click the shutter when the people are unaware, and the result is a good photograph portraying not only human figures but also their emotions. Though it is of help, it is not necessary to know the local language, for the language of the heart is universal, and a sympathetic and sincere man radiates sympathy which cannot leave people unaffected who come into contact with him. One can also judge the character of the traveller from his photographs. If he has goodwill towards the people he photographs, one can notice their sympathetic response in their smiles and open faces. This is particularly true when one deals with the unsophisticated people of the inner Himalayas. If the traveller is not in sympathy with the people among whom he moves, they also, in their turn, show no warmth towards him, treating him as an alien, may be superior, but not of their kind. Judged from his photographs of Bhotias, Heim must have been an affable and friendly man, for one can see the reflection of his personality in the faces of Bhotias, whose photographs adorn the pages of his inimitable book.

About five miles from Bageshwar, the Sarju Valley is flanked
on both sides by precipitous rocks. At the top of the ascent is an
overhanging rock on one side, and a deep gorge on the other,
containing the roaring and angry torrent of the Sarju with white
foam floating on its deep green water. A brass bell dangles from
the ledge, and multicoloured rags are tied to the branches of the
bushes. The very appearance of the place suggests that some grue-
some tragedy must have occurred there once upon a time. I was
reminded of a passage in Oakley's *Holy Himalayas*, in which,
describing his journey from Bageshwar to Kapkot, he writes, "At
one point we came on a black swirling pool, named Baligeb, where
a strange and fearful scene was enacted about a hundred and fifty
years ago, when the redoubtable minister Karak Deb caused a large
number of Brahmins, his enemies, to be tied up in sacks and hurled
into the seething waters". These poor victims apart, the spot is an
ideal resort for suicides. Lonely travellers travelling late in the
night have also been meeting with fatal accidents at this place.

We descended again and entered an intensively cultivated valley
dotted with a number of houses surrounded by plantains and hedges
of *Euphorbias*. In a roadside field, a young girl was eating a cucum-
ber. Hill-cucumbers are dark-brown in colour, and, when mature,
weigh 2 to 4 kilos. Tempted by their juiciness and also to quench
our thirst after the 13-mile walk under a scorching sun, we also
purchased some cucumbers. A coolie fetched some rock salt and
green chillies from a nearby house which he ground into a green
paste on a stone. Eaten with this paste, the cucumbers were deli-
cious. From another village on the way, we purchased some hill-
bananas which, though clumsy in appearance, were sweet in taste.

Shaded by a magnificent *peepal* tree, the bungalow at Kapkot,
situated on a small table-land overlooking a bend of the Sarju
River, was in sight at last. The *peepal* tree is one of the grandest
specimens of its kind. The trunk, about 30 feet in circumference,
has a huge crown. There are also two *jamun* trees growing, which
give it a compound appearance. Its age has been estimated at
150-200 years, and the oldest living inhabitant states that he has
seen little change in its appearance during the last 60 years. The
*peepal* tree is not only the guardian angel of the bungalow, but
also of the village of Kapkot; and the local inhabitants mention
with great pride that its sapling was brought by their ancestors
from the plains.

While waiting for the coolies I had an interesting Bhotia visitor
from Martoli near the Milam Glacier, who gave his name as Kharag Singh. He came racing on a pony with copper rattles jingling merrily from the animal's neck (Plate IX). About sixty years of age, his slanting eyes and wrinkled forehead were unmistakable indications of his Bhotia origin. Alighting from his pony, he asked me if I would buy a small woollen carpet. I replied I would be interested to see one. He opened a bundle and showed a small red and black woollen carpet which did not appeal to me. He showed another which was bigger but uglier. After finding that I was not interested in his carpets, he wanted to let out his pony on hire. He told me that it was a quiet animal and entirely reliable, and he gave a practical demonstration of its reliability and quietness by lifting its forelegs and asking me to feel its hoofs. Then he showed me its teeth to prove that it was not old. He showed his willingness to take me to his village and guide me to the Milam Glacier, after transacting some urgent business at Almora which would detain him for 4 days. After sharing a couple of bananas with me, he became more friendly and communicative, and removing his cotton coat and a woollen home-made pull-over he untied a piece of cloth which he had wound around his waist. In this he had wrapped all sorts of papers, a summons from the court of the Civil Judge, Almora; a copy of a memorandum of appeal, a letter from his pleader, two maps of his 'Nap' land, a notebook, a pencil, a quill pen and a penholder, and a case containing spectacles. Very cheerfully he told me that he had been fighting a case about a piece of land, and that after eight years of litigation his appeal had been finally dismissed by the Allahabad High Court. He was now going to meet his pleader. No further appeal lay before any other court; otherwise he would have gladly appealed to the Privy Council. He was not sorry for spending two thousand rupees on this case, and he confessed that once a man was in the deep waters of litigation, he sank deeper and deeper. He wrapped up his papers again and tied them around his waist. He asked me to try his pony and in spite of my solemn assurance that it was a very fine pony, indeed, he was not satisfied till I actually had a ride on it in the bungalow compound with all the rattles jingling merrily.

Leaving the coolies and orderlies to collect provisions and firewood from the Banja's shop, we marched off to the river below the bungalow. The Sarju is only waist-deep here. There are no boulders in its bed, and the current is comparatively placid. After the day's
long walk, the cool water of the Sarju was like healing balm to my tired limbs. We had the time of our lives splashing water, and collecting green, red, blue, and black pebbles from the river-bed.

The Kapkot Valley is green and beautiful, and framed by pyramidal peaks, its paddyfields look like a jigsaw puzzle. We visited the Saloway Middle School which is built on a hillock. This school which serves the educational needs of the sons of ex-soldiers has made remarkable progress in recent years mainly due to the selfless labour of Prem Singh. The boys appeared keen and intelligent, and they seemed to be taking full advantage of the basic system which had been recently introduced. The walls of the classrooms were decorated with pictures of national leaders copied from monthly magazines by the boys. Pandit Gobind Ballabh Pant, the Chief Minister of the Province, who was also a Kumaoni, and of whom they were rightly proud, appeared to be their favourite.

The Khassia Rajputs of the Kapkot Valley have joined the army in large numbers. It is difficult to find a young man of military age in the villages, and we saw mostly old men, children and women who look after cultivation. Occasionally we met smart young men dressed in khaki shorts and black coats, followed by a coolie carrying a steel trunk. They were soldiers back home on leave from the war. With their intelligent faces, and smart bearing, how different they looked from the Kumaoni peasants! The war may have its evil effects, but here in the valleys it is a civilizing force. It has not only brought material prosperity to these people in the shape of gratuities and family remittances, but has also affected the human material, changing the slouchy peasants into energetic, disciplined and mentally alert men with a wide outlook.

In the afternoon while reclining under the shade of the peepal tree contemplating the river and the villagers irrigating their fields, I heard the sound of a drum which grew louder and louder. Led by an ex-military man wearing black socks, white shorts, a black waistcoat over a white shirt, and a white turban, a marriage party entered the compound of the bungalow. I recognized the leader as the chowkidar of the bungalow at Lobarkhet. He was giving a demonstration of swordplay, and a little boy was beating a drum adorned with rattles vigorously (Plates X). Behind them was the bridegroom riding a white Bhotia pony, wearing a colourful cardboard crown on his white turban. He had draped a crimson blanket around his waist. Next to him was a man holding a red flag on a
long pole. At the rear of the procession were two men carrying muzzle-loading guns which they fired in the air as the marriage party made its triumphant entry in bungalow compound. After the chowkidar had danced to his heart’s content, and the little drummer boy showed beads of perspiration on his forehead, the party rested under the hospitable shade of the peepal tree. The bridegroom, a young man of twenty-five, told me that the marriage was to cost him about four hundred rupees and that he would be back home on the following evening with his bride, whom he had already seen.
VIII. A hill village on the way to Loharkhet
X. The chowkidar dancing
XII. Snow-peaks and Spiraeas
8. Loharkhet

TO ESCAPE the heat of the sun, we started early in the morning from Kapkot. The iron bridge on the Sarju had been damaged badly during the rains of the previous year, and we crossed the river over a small temporary bridge of pine logs. From a ridge on the opposite bank, a waterfall feeding eight water-mills was visible. From there, we also had a glimpse of the Himalayan snows. A slate-blue conical peak, capped with a silver crown of snow, peeped through the pine-clad dark-blue mountains. We parted company with the Sarju from near the Bhotia village of Chir Bagar, where the River Khar Bar joins it. From here the ascent to Loharkhet begins, and the main bridle-path which goes to Milam through Tejam and Mansiari forks to the right.

Near the bridge we met a schoolmaster who was returning from the Pindari Glacier with a party of students. While waiting for Joshi who was lingering behind, collecting plants, I entered into conversation with the schoolmaster. In the meantime, Joshi came carrying his vasculum filled with plants. On learning that we were botanists, the schoolmaster showed us his botanical exhibits. He produced crumpled sweet-scented leaves of an artemisia, leaves of a member of the Rutaceae and an orange-coloured root, possibly of Berberis. Plants with strongly scented or brilliantly coloured leaves or roots appealed to his fancy and he picked them. In this he was not evincing any eccentricity. In spite of my botanical training, I myself could not resist the temptation of plucking the
leaves of herbs and crushing and smelling them. I believe the sense of smell played a very important part in the lives of our remote ancestors, who lived in the jungles subsisting on roots and leaves of plants. Even now among the illiterate peasants and coolies, the sense of smell is more developed than the sense of colour. Our coolies and local guides were quite unaffected by the beauty of the red, pink, mauve and white rhododendron flowers, the purple primulas, blue corydalis, and yellow gageas which we saw in such profusion above Diwali, while they readily plucked the fragrant leaves of artemisias. The appreciation of colour, whether in flowers or in pictures, develops only through training and education of sense of sight. Even the appreciation of snow-peaks, mountains, forests, and waterfalls is a comparatively recent attainment of civilized man. Not very long ago, the mountains were regarded with fear, and jungles were viewed as dreadful places where danger lurked at every corner, and not in India alone. Describing the attitude of men to the wild country in England, Professor Patrick Abercombie writes: 'Horror is the word that sums up their general attitude until the romantic movement of the eighteenth century', and even the Rev. Gilpin, one of the pioneers of appreciation, could write of Dummall Rise in the Lake District: "With regard to the adornment of such a scene with figures, nothing would suit it better than a group of banditti. Of all the scenes I ever saw this was the most adapted to the perpetration of some dreadful deed". Not only in Great Britain, but in India too, a large number of people are indebted to Wordsworth for kindling consciousness to the beauties of Nature. Our Aryan ancestors, who explored the Himalayas centuries ago and developed the pilgrim routes to Badri Nath, Kedar Nath and Kailash, approached the mountains and forests with a feeling of awe and reverence. They created local gods out of thundering waterfalls, fearful passes, awe-inspiring snow-peaks, and demon-haunted trees. It was only when systematic search after facts based on the principle of cause and effect, which is popularly called Science, killed the superstitious fear element that we began to appreciate snow-peaks, mountains and forests. Just as the loving God of Jesus evolved out of the terrible Jehovah of the Jews, so also did our conception of beautiful forests, rainbow-coloured waterfalls, rippling brooks, soothing snow-peaks evolve out of terrible local gods and goddesses, which our ancestors had created. Like our ancestors, we also go to the Himalayan beauty spots, but not with the
object of performing pilgrimages and propitiating angry gods and demons. We go to the Himalayas because we love the snow-peaks and appreciate the beautiful flowers.

Tehra Bagar and Chir Bagar are villages of Bhotias. They looked empty as most of the inhabitants had moved up to Johar, leaving behind a few miserable crones to look after their property. They graze sheep and goats in the alpine meadows in the summer and return to these villages in October. After crossing Khar Bagar, there is an ascent for some distance, and we met the Sarju again near the village of Dulum which looks picturesque with its rows of white-washed houses with sloping roofs of stone-slabs, surrounded by clumps of plantains and terraced fields (Plate VIII). After a walk of about two miles, we saw a limestone cave with long column-like stalactites hanging from the roof covered with the dark-brown gelatinous growth of Mxophyceae. From the roof, water saturated with calcium carbonate trickles down on a rich growth of liverworts and mosses. We crossed the Sarju again. On the opposite bank a land-slide had exposed plenty of glistening white lime, and it looked as if these mountains were composed entirely of chalk. In a waterfall, I saw mosses and branches and leaves of oaks thickly encrusted with a coating of lime, almost looking like fossils. From here started a steady ascent which led to a bungalow perched on a shelf of rock like an eagle’s eyrie.

The little village of Loharkhet is just below the bungalow, and some of the houses have finely carved doors and windows. Like most Danpuri, the inhabitants are honest and hospitable. When they heard of our arrival, some of them brought gifts of home-grown cucumbers, maize cobs, walnuts and honey. It was with great reluctance that they accepted payment for their produce; a magnificent spirit of hospitality which is not damped even by poverty, and which can only be seen in a peasant country like India or perhaps in the Balkans.

Here we made the acquaintance of Sher Singh, patwari, of Malla Danpore and Gopal Singh Bhotia, the guide with an inscrutable Mongolian expression on his weather-beaten face. The Sarkari Bania who is the namesake of the guide brought us provisions, and also sent his man ahead of us to Dhakuri and Khati which are also in his jurisdiction. Besides these three, we met other villagers also, who brought piles of testimonials from travellers and administrators, some dating from the times of Traill and Sir Henry Ramsay.
In these testimonials are chronicled all the important hikes and expeditions to the Pindari Glacier from 1835 onwards.

When I had come here last, I had a battery radio with me, and the villagers had not forgotten the novel experience of listening to a radio relaying news and music from far-off countries. The following entry from my diary dated the 12th September, 1939, is of some interest.

"In the evening we fixed the aerial and connected it with the battery radio we had brought with us in a 'dandy' to keep in touch with the recent war news. The range of our radio set was limited, and we could only receive Lucknow or Delhi. On hearing the sonorous voice of Akhtari Bai from Lucknow and the quaint music of All-India Radio Orchestra from Delhi, our Loharkhet visitors, who had never heard a radio before, were in raptures.

Some of our visitors were reservists and ex-soldiers who were waiting to be recalled to the army at any time. They made inquiries about the war in Poland which had just started. The news of the bombing of Warsaw and Cracow was sad. We were particularly sorry for the gallant Poles of the Nandadevi expedition who after losing their brave leader Karpinski in the avalanches of Nandadevi were going back home. We recollected the pleasant hours we spent together at Almora, when Dr Bujak, one of their leaders who successfully climbed the famous peak, narrated the story of his adventures in the high altitudes of the Himalayas (Plate XVIII). All of them had lost much weight and their lean and haggard faces were richly tanned. It must have been a sad home-coming for them with their houses in Cracow and Warsaw bombed and burnt, and their women-folk cast on the road, refugees with nowhere to go".

We were glad to meet old Ratan Singh, the ex-patwari, again. It was his grandfather, Malak Singh Buda, the first patwari of Malla Danpore who discovered the so-called Traills Pass. Malak Singh was a very influential man, and the patwari of Danpore related that when he used to go out on tour, the entire population of a village, including women, used to assemble to welcome him and would kowtow before him like serfs before a feudal lord. Since then, a big change has taken place, and now they regard themselves as in no way inferior to the descendants of Malak Singh.

In front of the bungalow across the bridge is a fountain with water trickling from the mouth of a ram's head carved in stone. It is an ingenious idea, indeed, and shows that the Kumaoni villagers are not lacking in artistic sense. Marble heads of gorals, thurs, kakars,
bears, sambhars and panthers fixed in fountains along the Pindari route will not only make the route picturesque, but will also enlighten the tourists about the fauna of Kumaon.

We were told that bears are also found in the forest above Loharkhet. They are vegetarians and eat roots, berries and honey, but when pressed by hunger they also eat flesh and do not hesitate to attack way-farers. They have a weakness for women and particularly attack them. This is a peculiarity which has been noted of bears in other countries too.

Fig. 13. On the way to Loharkhet.

When the sun had set, Gopal Singh, the guide, descended from the village of Choura, which is about a mile from Loharkhet. The hillsides were echoing the merry voices of the boys who were following him singing "chancharis", the love-songs of the Bhotias. The procession entered the compound of the bungalow in a hilarious mood and joined the other hillmen in a dance. Unlike the men of Loharkhet, whose performance lacked vigour, these Bhotia boys were not self-conscious and bashful, and they gave a display of Danpuri dance with great gusto. A man with a drum was standing in the middle, and the boys holding one another's hands in a circle, swayed gracefully (Plate XI). Led by Gopal Singh, they left after an hour guided by a torch made of pine-sticks dipped in resin. Laughing and singing they vanished leaving us in peace to enjoy a restful sleep.
9. Dhakuri and Khati

THE CRESCENT moon was still visible when we left the bungalow at Loharkhet. The steepest climb of the whole journey, with an ascent of 4,000 feet compressed within a distance of five miles confronted us; and an early start, though uncomfortable, was not ill-advised. The road is rough and stony in sections, and clayey at some places. I remembered how slippery those clayey sections of the road were on a rainy day in September 1939, when I had passed that way last, and there were scores of waterfalls roaring down the hillsides. Now they were all dried up and only a few springs with water feebly trickling down could be seen. The hills were covered with a luxuriant jungle of banj-oaks, rhododendrons, viburnum, and symplocos. Straggling over the oaks were wild roses, covering their ugly knotted stems and branches with white flowers. While panting for breath, I heard a queer sound from the jungle which sounded like the groan of a man in extreme pain and distress. It came repeatedly from the same direction and I had almost decided to search for the poor victim in agony when my companion explained that it was merely the bark a of kakar, the barking deer. The whistle of Daphia moonal provided a pleasant contrast and dispelled the gloom spread by the moans of the kakar. A few feet away, a pair of jungle fowl sneaked into the bushes and disappeared. The oak-trees were looking very much alive, and we saw a swarm of black-faced monkeys dangling from the branches by their cordlike tails; on seeing us, they scampered into the bushes, the females clasping their babies
close to their breasts as if we were going to rob them of their precious offspring.

Among birds found at Dhakuri are cheer (Fig. 14), chakor and koklass. Describing the habitat of cheer, Hume writes: "The best places in which to find cheer are the Dangs or precipitous places, not very bare cliffs, but a whole congeries of little cliffs.

![Fig. 14. Cheer pheasants.](image)

These animated projectiles pass you in their downward rush, some out of shot, some so close that it is impossible to fire, and very often three, four, five in such rapid succession that even with two doubles, in the old muzzle-loading times, it was impossible to fire quick enough. The force with which cheer descend is almost incredible. Other pheasants in descending keep the wings a little open; these birds pass one at such a fearful pace that it is impossible to be certain, but it always appeared to me that cheer closed their wings almost completely, and I attribute their power to do this to their enormous tails sufficing to guide them. When within a hundred feet, I speak by guess, of the level at which they intend to light, suddenly out go the wings, the tail is spread to its fullest expanse, the bird looks double the size it did a second before, and sweeps off in graceful curves, right or left, shortly dropping suddenly, almost as if shot, into some patch of low cover. If no shots have been fired, you may walk straight down, and ten to one find him exactly where you marked him. I was once nearly killed by a cheer. I was
standing in a rather awkward place, the extreme outer edge of a plateau jutting out for 20 or 30 yards near the base of a patch of precipitous ground; behind me was a sheer fall of about forty feet; a cheer flushed above; it was coming right for me. I let off the gun somehow, and almost before it seemed well off, my gun was dashed aside, and I got a blow on the face that made my nose bleed, and knocked me over the precipice, to the bottom of which my gun fell. Had the two men squatting at my feet not seized my legs, I would have fallen headlong down the precipice! Yet this bird, as the state of its body proved, must have been at least 30 yards from me when the shot struck it, and it was stone-dead when I had sufficiently recovered from the shock to be able to think of it.

The chakor is of dark-brown colour and is beautifully marked with black cross bars. The male has a dark ring round its neck. Its legs are comparatively short and of light pink colour. In pahari paintings, the chakor pheasants are commonly shown with lovely ladies in moon-lit landscapes.

![Fig. 15. Koklass pheasants.]

The koklass (*Pucrasia macrolopha* Lesson) is found at about 9,000 feet. The male has a triple crest, dark-brown in the chest and dark-green on each side. The general marking is again drab (Fig. 15). It is a straight-flier, but it flies through and not over the trees. Its flight is rapid in the extreme and after a few whirrs, it shoots down like lightning. The call of the koklass is like a chowkidar's cough with stops inserted to form AR (—.—.—.) as in the Morse Code. The males often crow at daybreak and occasionally at all
hours. The harsh “kok-kok pokrass” cry of the male heralds the dawn of the day in the Himalayan forests. According to Hume, “Of all our hill pheasants, the koklass is the best-eating, and affords the best shoot”. The koklass is generally found singly or in pairs, and is especially fond of cypress and oak forests. It is monogamous and these birds commonly pair for life. It breeds from the middle of April until the middle of June in coppices and forests of oak.

Marking the end of the tree zone are graceful smooth-leaved oak-trees, (Quercus semecarpifolia) with drooping branches laden with festoons of the lichen Usnea which dangle in the moist air like the matted locks of Hindu ascetics. The Himalayan forest trees have a personality of their own. While the semecarpifolia oaks convey an impression of age and wisdom like the rishis of ancient India, the stately firs appear like soldiers guarding the sanctuary of Shiva, the god of the Himalayan snows. The deodars with their tapering crowns are the monarchs of the Himalayan forests, and yield to none in stateliness and grandeur. The globular crowns of the chir pines (Pinus longifolia), and their reticulately split bark emitting the fragrance of resin give a characteristic appearance to the lower foothills of the Himalayas. Even the twisted banj oaks, full of knots, and their dark ugly stems draped in a coat of mosses and epiphytic ferns have a charm of their own and give a sombre appearance to the Himalayan jungles, at once throwing into contrast and toning down the sparkling red blaze of Rhododendron arboreum.

We passed through a meadow which was carpeted with red potentillas, blue gentians, and numerous Compositae in September, and now had only a few patches of ranunculus. At last, the 9,300 foot Dhakuri Pass was in sight. Multi-coloured rags waving from the branches of shrubby rhododendrons were the unmistakable signs of the pass. These ‘rags of superstition’, as Oakley calls them, were a welcome sight, indeed, after the tiresome climb.

The view from the top of the pass is most magnificent. A panorama of snow-peaks extending from Nanda Kot on the east to Nandakhat on the west unfolds itself (Fig. 16). From the 10,500-foot Supi Pass, 1½ miles to the east of Dhakuri, the two peaks of Nandadevi as well as of Nandakhat which is so prominently visible from the Phorkia bungalow are seen. From the bungalow at Dhakuri as well as from the pass which leads to it, the Nandadevi peaks are not visible as they are hidden by the 21,860-foot-high peak which is in the direct line. Similarly, Trisul is also not visible from this pass.
Our objectives were, however, the Pindari Valley and Nandakot, and the lack of visibility of Trisul and Nandadevi did not worry us. The grandeur and beauty of the peaks dominating the Sundardhunga Valley and Punlia, Chakurijhaba and Nandkna, which all appear like sentinel towers of this ‘Citadel of Nature’, (Plate XIV) is enchanting indeed. I felt fascinated and lay down on a stone above the pass, contemplating these hoary giants of the inner Himalayas. Even at 10 a.m., the sky was azure-blue, contrasting with the glistening white colour of the peaks. I felt spell-bound, and it was with great reluctance that I decided to move down.

The descent to the bungalow at Dhakuri is as sudden as the ascent on the other side of the pass. In a comparatively short time we reached the bungalow. Situated on a flat table-land with a magnificent background of snow peaks, the bungalow looks grand. Some Danpuri shepherds draped in grey blankets fastened with iron pins, were grazing sheep and buffaloes in the meadow below. Built at an altitude of 8,600 feet in a forest clearing, this bungalow is picturesquely situated, and the shepherds spoke appreciatively of the health-giving virtues of its “air”.

When I came here in September 1939, it was bitterly cold. A biting wind was blowing, and heavy rain was pattering on the tin roof of the bungalow. The wet fuel which the chowkidar had collected did not burn even when liberally sprayed with kerosene. I had carried an unfavourable impression of Dhakuri then. It was, therefore, a joy to visit it this time in May when the place was in its full glory. The pyramidal peak of Nandakot stood all by itself, as it was not condescending to mix with the minor peaks of the Sunderdhunga Valley. In the hollow between Sukaram and the unnamed 21,860-foot peak, rises the Sundar Dhunga River which joins the Pindari a little above Wachham, and provides a route to the inner sanctuary of the Nandadevi group of peaks. In 1907, Dr Longstaff explored this valley. In 1932, Rutledge made an unsuccessful attempt to reach it, as it provides access to the Sundardhunga and Sukaram glaciers. If the route from Wachham to Maktoli is developed, it would provide an interesting diversion to hikers who have already made the Pindari and Kaphini trips.

Below the bungalow is a marshy piece of land which I explored thoroughly and collected a rich variety of algae. A hasty examination under the microscope revealed a number of interesting species. While exploring the ice-cold stream, I heard the sound of
a drum, which grew louder and louder. In a few minutes, about
20 hillmen led by a drummer appeared in the meadow. Mistaking
me for a doctor, they asked me about the medicinal qualities of
the slimy thread-like green plants I was collecting. Their curiosity
was satisfied when they were told that those apparently useless
plants had something to do with "science". Apparently, they had
seen many odd persons collecting plants in those regions for some
incomprehensible purpose, and they were reconciled to our presence.
They had come from Loharkhet to fetch timber from the Dhakuri
forest for a school they were building in the village. The sound of
the drum keeps them in high spirits, and they do not feel the burden
of heavy loads so much.

We decided to move down to Khati, as still there was plenty
of time. After passing through a thick forest of oaks and stately
firs, we emerged in the open again. On the sides of the bridle-path,
bushes of the indigo-plant were laden with purple-red flowers.
From here onwards, there was a lovely display of flowers, with
white as the predominant colour. Straggling wild roses, studded
with white blossoms, covered the shrubby trees. The graceful spiraea
with curved terminal branches formed beautiful arches through
which the snow peaks peeped boldly (Plate XII). White flowers of
symplocos, viburnum, and deutzia, and the sweet-scented jasmines
vied with the snowy peaks in the purity of colour.

We soon found ourselves in a shady forest of maples and horse-
chestnuts. Near a waterfall, we met a flock of goats tended by two
Bhotia traders. They had piled in the form of a wall the panniers
of leather filled with the Tibetan salt and borax. These goats are
very steady and sure-footed; and walk with equanimity and non-
chalance over narrow mountain paths bordering on precipitous
gorges, which would chill the blood of any mule or pony.

We emerged in the open again, and saw signs of cultivation and
human habitation. Some of the fields were looking red on account
of the growth of chuna, the red-leaved Amaranthus frumentaceus,
which along with buckwheat and barley forms the staple diet of the
people of the valley. A couple of pretty girls laden with silver orna-
ments were grazing buffaloes and plucking fronds of a fern. Their
otherwise attractive faces were marred by ugly nose-rings which are
so common in these parts. If only they did not carry so much of
their wealth on their persons, they would look prettier and would
also get better opportunities of washing their arms and faces.
XIII. The village of Khali with Nandadevi in the background
XIV. The outer ramparts of the citadel of Nandadevi

XV. A woman harvesting ears of barley
XVI. Fountain with a ram's head

XVII. Women gleaning barley stalks at Khali
XVIII. Dr Bujak (with dark glasses) a member of the Polish Expedition at the author's home at Almora
At last the village of Khati and its bungalow were visible—a welcome sight for footsore travellers (Plate XIII). The bungalow stands above the left bank of the Pindari River. Khati is the last village on the Pindari route, and its few poor inhabitants eke out a miserable existence by grazing sheep and ponies and cultivating chuma, wheat, barley, and mandua. Cut off from the civilized world by the Dhakuri ridge, which is an effective barrier, this village appears like a relic of early Neolithic times. We still see the distaff in the hands of men for spinning wool. The loom used by the women for weaving woollen blankets is in no way different from that of the Egyptians in the times of the Pharaohs. The barley crop is harvested in a most primitive fashion by women, who snap off the ears with the aid of two crossed sticks (Plate XV). The straw is often left standing in the fields and is burnt later on. The threshing of grain is done by men who beat the ears of barley with a flail. Barley had ripened and women were busy gathering stalks and storing them in long wicker baskets (Plate XVII). There is not a single literate person in the village, and they depend on the postman and the wayfarers for reading their letters.

Ignoring their running noses and unwashed faces, one finds the children of the village quite pretty. As there is no school in the village, they spend most of their time plucking berries and lazing in the streets. In the evenings, they gather near the fountain with the wooden ram's head, watching the women-folk filling huge copper vessels with water (Plate XVI). Some of these boys were in rags, and I was told that even in the bitter cold of winter they were not clothed any better—a good field for 'Natural Selection' to work upon to weed out the weak and the sickly. The test of survival here seems to be one's capacity to stand the cold, and this explains the resistance built up by the men of Khati who go about barefooted and covered with only a blanket even on the glaciers.

During winter, Khati remains covered with thick snow for two to three months. Except when they are tending sheep, the men spend their time in idleness lying for the most part inside their smoke-filled houses. It would be worth while introducing knitting, carpet-making, and wood-carving in these Himalayan villages, and to develop cottage industries. A systematic cultivation of medicinal plants would also be worth while. When the inhabitants become sufficiently intelligent to shake off their religious scruples, poultry-farming may also be introduced for supplementing their scanty food supplies.
I visited some of the houses which I had seen on my last trip. I easily recognized some of the men and women I had photographed four years ago, but they had not the faintest recollection of the event. The wife of the chowkidar's son who appeared so young and pretty four years ago, now looked old with sagging cheeks and crows-feet about her eyes. Her father-in-law, Pan Singh, explained that her husband had joined the army the previous year and that she had pined away in grief. Only a few days back they had received a letter from Bareilly from the Army Office, intimating that he had died in the hospital. This letter had been read to them by a number of persons before us but they were not prepared to believe its contents. The chowkidar was not only weighed down by filial grief, but was also worrying about the expense he must incur in propitiating the gods and feeding the family priests. On our return journey, we met two men running down the slope below Dhakuri in a great hurry. On being asked the cause of their haste, they explained that they were going to Khati to perform the last rites for the benefit of a "jaism". We could guess who the "jaism" was, and why these sharp-looking persons were descending on him like a pair of vultures impatiently heading towards a carcass.

The coolies asked us for the gift of a sheep which they said would be sacrificed in honour of Nandadevi to keep her in good humour. After their hard labour, they certainly deserved a sheep, and we purchased one for seven rupees. After feasting on it, they were happy for the rest of the journey, and carried their loads cheerfully. The price of goats and sheep does not cause serious worry to most of the travellers. The solitary exception was a Scotch army officer of the rank of Captain who would warn the travellers not to spoil the market at Khati. Giving his cautious advice, especially to American missionaries, he writes in the log-book, "I would like to say that I think it is a great pity that travellers spoil the local inhabitants by paying far too much for everything. If a herdsman asks for 12 rupees for a goat, some misguided travellers pay it straightway, thereby entirely spoiling the market for other people. Naturally, the native is out to make all he can out of the sight-seers. The gist of the foregoing remarks applies especially to American missionaries, who, I think, are rather inclined to disburse their monies with a too liberal hand". Disagreeing with the Captain's remark, an American missionary lady doctor writes, "Referring
to page—of the log book we as two American women missionaries humbly ask Captain Z if he thinks Rs. 5/- too much to pay for a sheep at Khati. Far be it from us to raise the price of goats”.

Next morning we were busy eliminating extra luggage so that coolies may walk with comparative comfort on the difficult part of the route. We could not start before 9 a.m. After passing through a dense forest of maples, we descended to the level of the Pindari River. We had a superb view of Kaphini peak towering in the background, and the water of the Pindari shimmering in the light of the morning sun. The heavy rains in July and August of the previous year had played havoc with the old bridle-path, of which there was no trace for a couple of miles, and we had to jump over a number of boulders. Several dead trees lay scattered on the sides of the river. The coolies of the District Board had improvised a bridge over the river and with its help we crossed to the right side. The hills on the left were covered with a forest of Abies. At one spot, the river had spread out into anastomosing rivulets which again joined into a torrential stream. About a mile from Diwali, we saw a beautiful waterfall. The patwari stated that some years ago he saw a couple of Swiss ladies weeping in front of this waterfall. Human reactions to natural phenomena are so diverse and inexplicable that it is difficult to say whether these were the tears of joy or sorrow. However, our lachrymal glands were hardly affected by the sight of this waterfall, and we were in high spirits when we entered the bungalow at Diwali. This bungalow is built on a rising knoll above the confluence of the Pindari and the Kaphini rivers. The surrounding mountains were covered with snow, and the bungalow looked attractive. After lighting a cheerful fire in the fireplace, we soon made ourselves comfortable.
FROM DIWALI onwards there is more or less a steep ascent for some distance. Over the first mile and a half the road is shaded by birches, yews, and rhododendrons. Protruding from among the clumps of rhododendrons are dwarf ringal bamboos, which had dried up after flowering. Bamboos flower after a long period of vegetative activity, but when they do, it is in such profusion that they die from exhaustion. Scarlet red petals were still lingering on some trees of Rhododendron arboreum. The pink and mauve blossoms of Rhododendron campanulatum provide a gorgeous feast to the eye. Under the white straggling branches of R. campanulatum was a carpet of lavander-coloured primulas. In September, the rocks are covered with sprawling mats of Cotoneaster microphylla bearing crimson red berries. Gaultheria trichophylla with beautiful blue berries is also found in abundance. White anemones and delicately petalled blue poppies grow on ledges and in crannies of rocks. These alpine flowers with their rich colours are a source of joy to the weary hiker. The potentillas with all shades from the deepest red remind one of a quotation from Smythe that “A flower is one of nature’s joyous expressions of an all-pervading cosmic power. It lifts a song of the sun and brings to the face of the earth a complexion of youthfulness and vitality”.

We crossed three snow-drifts between Diwali and Phurkia. The snow was soft and crisp, and was melting into numerous waterfalls on the mountain slopes on the right. The dwarf bhujpatra birches and shrubby Salix elegans heralded the alpine grassland. The
meadows, which were covered with colourful asters, senecios, swertias, and dandelions in September, looked drab in May with the growth of rumex alone.

By the time the bungalow, where we were to stay, was in sight, we had reached an altitude of over 10,000 feet above sea-level. When we reached the bungalow, the sun had set, and a strange radiation filled the valley. It was a mellow light, so different from the harsh sunsets of the plains. The bungalow at Phurkia, nestling on a level piece of land, and protected by huge rocks and stones, is a welcome sight to the footsore traveller. Towering behind it is its lordly kitchen exhaling friendly smoke through every pore. By the time we reached the bungalow, it had become misty, and the mountains on the opposite side with their bare and jagged peaks loomed ghost-like in the thickening mantle of mist. It was a grand and awe-inspiring sight.

After the coolies had piled our luggage up in the verandah, I asked the chowkidar to light a fire. In the meantime, I went towards the valley to have a look at the roaring torrent of the Pindari, gushing towards the sun-scorched plains, and in its hurry pounding heavy stones, tons in weight, into fine sand. At its sides, numerous sheep were grazing and appeared like massive white stones from a distance.

A light drizzle started, and I made my way to the bungalow. The servants had managed to make a fire out of wet logs and sticks which the chowkidar had gathered. The walls of the bungalow were damp, and it was intensely cold in spite of the smoky fire. A visitor writes, "My watch stopped at 10 p.m., apparently on account of the cold which is very intense here indeed".

Before going to bed, I opened the window facing the kitchen and saw that the clouds had disappeared and Nandakot was visible. It was framed by dark mountains on both sides. Bathed in moonlight, Nandakot appeared like a pyramid of silver. I closed all the windows and piled up all the available quilts and blankets on the bed. But despite my heavy bedding, I continued to feel cold, particularly in the feet. Thus passed a memorable night in Nature's frigidarium. We were, however, not troubled by bugs. Perhaps they are found in June. An engineer, who had been tormented by bugs all night in June, wrote, "Much mention has been made of the fauna to be found around the bungalow, but nothing about that inside. Use your Keating's liberally".

That was in September 1939. When I came here in May 1943,
I found my paradise in ruins. The northern room of the bungalow had fallen owing to a heavy snow-storm in winter. The only remaining room which also appeared fissured and was on the verge of collapse was occupied. On return from Martoli I found that its front wall had been demolished, and enamel jugs and wash-basins were visible heaped on a mouldy table, appearing entirely odd and out of place in this Himalayan wilderness.

This is not for the first time that disaster has overtaken the bungalow at Phurkia. It was built in 1885 through the foresight and generosity of a Lieutenant Governor of the United Provinces, who made good use of the surplus money at the end of a financial year by constructing bungalows on this route from Bageshwar onwards for the comfort of tourists. Unlike the other bungalows which are situated at a much lower altitude, the one at Phurkia has passed through many vicissitudes. Oakley who came here in 1892 records that the first bungalow was swept away by an avalanche and the bungalow in which he stayed was the second one.

After commiserating over the fate of the bungalow, we began a search for a sheltered place for pitching our 'chholdari' (small tent). There are some excellent cave shelters among the rocks above the bungalow. Some of these still contained masses of unmelted snow whereas others were fairly slushy. At last we selected a shelter higher up for our kitchen and pitched the tent under the shadow of a massive rock which served as a wind-break. We spread the beds on a soft covering of dried grass which the coolies had collected. Our cook brought us tea, and after a hot meal of curried potatoes, we retired, closing the flaps of the 'chholdari'. At about 10 p.m., we heard the jingling of bells and were surprised to find a couple of shaggy sheep-dogs roaming about. We soon found that we were not alone in this place. The shepherds who graze herds of goats and sheep were also creeping back to their cave-shelters for night's rest. On the following morning, we were able to move into the only remaining room of the bungalow, as its occupants had left for Diwali.

It started drizzling early in the morning, and we had to face the problem of spending a whole day inside the Phurkia bungalow. How to relieve the boredom of spending a day inside the bungalow in such a miserable weather? Solution to this problem came unexpectedly in the form of four log-books which I discovered lying in a small wooden box.

Mr Canning, of the Indian Forest Service, who was the donor
of the first volume, conceived the idea of maintaining a log-book at the Phurkia bungalow for the record of observations of the movements of the glacier. Originally intended for the record of scientific observations concerning the glacier, the weather of Pindari Valley, its geology, and its fauna and flora, the book had developed into a miscellany of a very interesting nature.

The earliest notes in the first volume of the log-book dated back to 1893. The first few pages are typed, presumably from manuscript notes of visitors which became illegible. It was running in the fourth volume at the time of our visit, which being of a more substantial size than its predecessors was likely to last longer. Every visitor tries to be either clever, heroic, scientific, poetical or at least original. Though the fourth volume has still plenty of blank pages, a visitor has tried to be original, by making an entry on the last page, saying, "By hook or by crook, I will be the last one in this book". Besides containing valuable observations on the vegetation of the Pindari Valley by H. G. Champion, on weather by Cunningham and Alfred Noble, on the geology of the glacier by Rajinder Nath, on ice caves by Begum Hussanara, on the Himalayan birds by McKay Forbes, the log-books are an interesting chronicle of adventures and mis-adventures in the Pindari Valley.

It is not always judicious to record in the log-book one's reactions to the Pindari Glacier, especially of the unpleasant type, and even one's adventures with rocks and animals. Visitors who follow you are likely to make marginal remarks of an unprintable type if they do not find themselves in accord with your views. A vakil from Delhi had the temerity to write slightly about the snow-peaks as follows: "Whatever I am going to say does not apply to those who come here for a pilgrimage. This is a matter of individual whims and fancies. For those who want to see snow view only, I think Mussoorie or Simla, or any other hill-station at Christmas will do equally well". This seemed like disturbing a nest of hornets. The insulting remarks about the glorious snow-peaks in whose praise so many visitors had gone lyrical nettled a number of patriotic Kumaonis. One enthusiast considered the opportunity given to the vakil for seeing the glacier as having been wasted like "Throwing pearls before swine".

In the morning I saw a covey of Himalayan snow cocks (Tetragallus himalayensis Grey) on bare rocky hill-sides near the snout of the glacier effectively concealed among grey stones.
About 1½ the natural size of the ordinary blue rock pigeon, the snow cock is dark-grey in colour, with the throat, chest and abdomen snow-white, and the beak and legs pink red. They feed on grass seeds, tender blades of grass and roots. When feeding they always have a watch bird perched on some projecting stone, who gives the alarm when anyone approaches. They seldom leave the hill on which they are located, and fly backwards and forwards when disturbed.

An eagle was flying high up. According to Hume, “The ring-tailed eagle is an inveterate annoyer of snow cocks. As he sails along the hillside above them they at once arrest his attention and are driven backwards and forwards by this unrelenting tormentor all day long”. The eagles have their nests high up in inaccessible crags, and amid the glacier. They sometimes carry off young lambs, and are dreaded by shepherds.

Another interesting bird of this region is the crimson tragopan, (Cerionis satyra, Fig. 17). It is found in forests of rhododendron and dwarf ringal bamboo along the Pindari River near Diwali. Tragopan is a shy bird and only very rarely, a male may be seen summing itself or preening its feathers on some projecting rock or in the bare trunk of a fallen tree. It lives in dense jungles, and is difficult to find. It gives itself away at dawn and nightfall by making for a few seconds only a noise like a cat in pain. The cock is crimson-bronze, spotted with white. It has sky-blue horns and a pink or blue wattle. The fleshy horns of the males and their jugular lappet extend downwards several inches, especially during the breeding season when the birds are excited by passion, while in winter it is barely traceable. The female is olive-brown and spotted. What is the secret of the horns of the crimson Tragopan? There is a charming legend which explains their appearance. According to Snailloc, the male Tragopan is a reincarnation of a Gond Captain of the Guards of an ancient Hindu king. The Gond fell in love with the king's beautiful daughter who had rejected a host of suitors. When the king came to know of it, he was very much displeased, and the Gond had to flee for his life. Chased by the king’s army, the Gond Captain retired to the forest where his mother brought to him a shy little Gond girl who had been his sweetheart in the village. Taking no notice of the Gond girl, accompanied by his chosen men, he made a dash towards the fortress where the fair but fickle-minded princess was confined. The princess slipped away leaving behind a beautiful slave girl who conveyed him the message
that she would be marrying the prince of Caucasia. While in pursuit of the faithless princess, the Gond Captain was overtaken by the king's cavalry who killed him. While he lay dead on the ground with his head cloven from the crown of his buffalo-horned helmet to his chin, beside him was the plain but faithful Gond girl. Parvati,
the spouse of Shiva, was deeply touched by this tragedy. She approached Brahma and at her request Brahma changed the Gond Captain into the resplendent Crimson Tragopan, and the Gond girl into the humble live brown hen. To save the couple from further harassment from the king, Brahma transported them from Gondwanaland to the Himalayas.

Prora partridge is found near Diwali. It is a grand table-bird, but has usually to be shot on a tree. It has a peculiar whistle, which vibrates in the same way as the ‘Serran’ of the Tragopan. It often keeps up this whistle throughout the 24 hours at intervals of 11 seconds. Fortunately, the roar of the Pindari River drowns the noise.

Another characteristic bird of the alpine zone is the moonal (Lophophorus impeyanus Latham). Captain McKay Forbes has recorded an interesting description of moonal in the log-book of Phurkia bungalow. He writes: “This pheasant occurs everywhere, between 9,000 feet and the tree limit. The male is a glorious bird, and the female is characteristically drab. The male has a green crest; and plumes of every variety of bronze, and green and blue. There are, however, various faults in the original design. In the first place, the moonal is under-winged. To rectify this error, the designer gave the bird a hideous orange tail, which in the case of the male functions in much the same way as a catapult on an aircraft-carrier. The moonal, therefore, being incapable of accurate flight, hurls itself straight out from the hill until it can glide over the tallest trees. It is, therefore, a glorious bird to shoot, second only to the chakor. The designer, by the way, having exhausted his colours upon the male merely dabbed the eyes of the female with blue.”

A moonal in flight is a glorious sight. Hume whose experience of the Himalayan birds is unrivalled, thus, describes the flight of a male moonal: “I have shot many moonal in my time, and have seen a vast number more. There are few sights more striking, where birds are concerned, than that of a grand old cock shooting out horizontally from the hillside just below one, glittering and flashing in the golden sunlight, a gigantic rainbow-tinted gem, and then dropping stone-like, with closed wings, in the abyss below”. On account of great demand for its brilliant plumage, the moonal is facing extermination in some parts of the Himalayas.

The moonal utters a loud and plaintive whistle at daybreak and towards evening, numbers may be heard calling in different quarters of the forest before they retire to roost. It possesses acute senses
of sight and hearing. The nuptial dance of the male resembles that of a turkey-cock; the wings are drooped, the tail is spread in a fan-like fashion, the breast is almost touching the ground, and the bird quivers spasmodically, while moving backwards and forwards.

A poor forest ranger, with the simplicity of Hasek’s *Good soldier Schweik*, had made an entry about shooting a moonal pheasant during the close season. A day before, he had lost his pony at Loharkhet where it died after eating some poisonous grass purchased from the Sarkari Bania. This documentary evidence which he had so artlessly left in the log-book came to the notice of his superior officer who came later to Pindari. He ordered the prosecution of the poor ranger for the breach of game rules.

The log-book is also replete with a number of bright suggestions made by imaginative visitors. One from Kanpur advises the local authorities “to build a nice motor-road from Almora to Phurkia in order to relieve the travellers of too much of climbing up and down”. Some, not satisfied with even a nice motor-road, would like to have a father-in-law’s house at Phurkia to avoid the boarding charges paid to the District Board of Almora, and the discomforts of a dak-bungalow life. An optimistic trekker would like to have “stairs up these small hills”, when he turns up next time. An organizing Scout Commissioner advises the religious-minded “to build dharamshalas at convenient places, especially at the foot of the glacier”, for they would find a very healthy soil for their “spiritual uplift and emancipation”. The Scout Commissioner perhaps forgot that it was easy to secure “emancipation” at the foot of the glacier during a single night if one had forgotten to bring sufficiently warm bedding, and that so far as “spiritual uplift” went one could experience it in the bungalow itself which was a good five miles away from the glacier.

A fond mother after being deeply impressed with the “imperishable beauties” of the glacier, passes on the pen to her daughter “to give her constructive remarks generally”. The daughter tackles the problems of the “Pindari” Valley with a constructive imagination which would leave even Lenin and Stalin gasping. Expounding her “constructive” views, she says: “I suggest that our National Government (Congress Ministry) should make use of the fast-flowing waterfalls to supply the Kumaon District with electricity and have electric trains running from Almora, at least to Pindari. Then the Kumaon, the home of our worthy Premier will shine with
electricity, resound with electric trains and skiing grounds". Not being satisfied with mere electric trains, she would also like to have a landing-ground for aeroplanes on the eternal snows. Whether these landing-grounds would be on the conical Nandadevi peak or on the hatchet-shaped Bankattia is not specified!

In the bleak and cheerless atmosphere of the Phurkia bungalow, with a biting cold wind howling outside, the rain drops pattering on the tin-roof, the log-books keep one company like good companions in a time of adversity. Absorbed in their pages, full of humorous remarks about the snout, the disposition of the glacier, controversies about weather, and constructive suggestions in general, one forgets the inclement weather and the discomfort of the bungalow. Kaul who missed the sight of the snowy peaks due to bad weather, and had to hurry back on account of short leave, expressing his views about the Pindari trip said that "it was worth while coming all this distance even to read the log-books, which were more interesting than the glacier itself."
11. The Pindari Glacier

The best time for visiting the Pindari glacier is from the 15th May to the 15th June in summer, and from the 15th September to the 15th October in autumn. Those who want to see the pink and mauve blooms of rhododendrons above Diwali, and the wonderful display of wild roses, white spiraeas, jasmines, symplocos, viburnum and deutzias and the purple glory of indigofera from Loharkhet to Khati, and wonderful snow-bridges, waterfalls and fresh snow on the mountains above Diwali should leave the plains in the second week of May so that they reach the glacier in the last week of the month. Those who prefer a clear atmosphere free of haze and dust in the lower foothills from Almora to Loharkhet, or want to find edelweisses in the meadow at Martoli, or have ambitions to climb the Traill’s Pass, should reach the glacier in the last week of September after the close of monsoons, when the temporary soft snow melts away from the surface of the ice.

The following notes recorded by visitors in different months will be of interest to tourists who may like to undertake a trek to the glacier.

February:—“I experienced no great difficulty up to the Phurkia bungalow which was surrounded by snow several feet deep. From thence onward there was nothing to be seen but snow, 3 to 4 feet deep most of the way, with deeper drifts in places.”

April:—“I visited the glacier at an unusually early time. On account of deep snow-drifts the coolies could not proceed any further
than Diwali. I had not come more than half way when my ponies floundered in a snow drift, and had therefore to be sent back. The Dak bungalow at Phurkia was in a wretched condition. The lower edge of its roof peeped out of the snow by only 2 feet. Deep snow lay all round it. Heavy clouds were surging up the valley, and the outlook was most unpromising. The valley side beyond was completely covered with snow, the only land-marks being huge projecting rocks. I could not proceed further and there is no hope of access to the glacier till the end of this month. The Pindari glacier was my first and very nearly my last glacier. If you wish to see the glacier and value your skin and I do both, especially the latter, do not try the trip in April”.

May second week:—“The path from Phurkia to Martoli was blocked by numerous snow-drifts. Travellers not possessing an ice-axe had better take the lower path along the river edge. If they attempt to cross the drifts armed with no more than a steel-pointed stick they may emulate the first of the undersigned and slide with ever increasing momentum on the rocks of the river bed, 200 feet below. By the grace of God he suffered no more than several cuts, abrasions, bruises and loss of his sun-glasses. The next to try this means of descent will surely not be so fortunate.”

May third week:—“We had glorious weather and wonderful snow views from Dhakuri onwards. As we climbed the Dhakuri pass, a panorama of snow-peaks appeared before us. Its beauty was intoxicating and I lingered on for hours gazing at their unsullied white beauty. Some of the rhododendrons (R. arboreum) were still retaining their red flowers. Spiraeas, white roses, and deutzias below Dhakuri looked at their best. With the exception of indigofera all flowering trees and shrubs had white flowers. We reached Phurkia without much difficulty, and the snowdrifts were easily negotiated by means of a “phaora” (spade). We had two clear days at Martoli with no signs of any clouds up to 4 p.m. Ideal weather indeed for seeing the glacier. The temporary snow on the glacier was treacherous, concealing crevasses and dangerous pits, so Traill’s Pass was out of the question.”

May last week:—“On our way up we met two parties coming down, one at Khati, and the other at Diwali. Both had failed to reach the glacier on account of heavy snows. It was an extremely difficult going from Diwali as the road was all snowed up. I proceeded on with the help of the guides who went on ahead of me
cutting foot-steps. I arrived at the Phurkia bungalow at about 6 p.m. with great difficulty. The Dak bungalow was surrounded by snow, and its near portion was covered with snow right up to the edge of the roof. On our way back it began snowing at 11-30 a.m., ground was very loose and wet, which made travelling rather dangerous.”

June first week:—“We had a clear and glorious morning. Tempted by the splendid weather, a cloudless sky and a strong wind blowing down the valley, we started towards the glacier. The numerous snow-drifts made it impossible for my wife’s dandy to proceed further than half a mile. Several accidents happened. First the chowkidar fell and slipped down some distance, but in doing so dropped our breakfast and we had to witness degchies, plates, etc., falling down the river leaving tracks of Quaker Oats and curried Dhakuri sheep, and Bengal rice to ornament the slopes. The chowkidar had the difficult job of salvaging the utensils. Next down went my lock burn, a beautiful toboggan on the seat of my trousers which luckily ended some way down.”

June second week:—“Glorious weather. Crossing a good number of snow bridges and walking on white sheets of ice we reached the glacier. View at the left lateral moraine was indescribably beautiful. Outward journey was rather stiff going, but return journey was very easy.”

July:—“After three days of almost constant rain and mist, had a very fine morning for visiting the glacier.”

August:—“The glacier ice had cracks at most places. We then crossed the Pindari river about half a mile down by an ice-bridge which still is very strong. There was sun shine right up to 12 o’clock and we had a fine view of the glacier and the snow-clad peaks of the Himalayas.”

September first week:—“Early morning was generally fine. From about 10 a.m. to 4 p.m. there was mist, slight but steady rain. From 6 p.m. till 10 p.m. there was more or less heavy rain. I could see little owing to the rain and clouds.”

September second week:—“The glacier and the snow peaks remained clear up to 10 a.m. when a misty rain began to fall. The glacier at this time of the year has no snow on it, and melting is proceeding at such a pace that huge cracks and caverns are numerous. The moraines are easily scaled being snowless. It was not very cold.”
September third week:—"The weather was clear till about 11 a.m., when clouds rushed in from the valley covering all the peaks."

October first and second weeks:—"Perfectly clear and cloudless mornings; clouds start forming between 10 and 11 a.m. and snow or rain according to altitude start soon after 12. Rain started lower down the valley and gradually worked upwards. At the bungalow it was a very moist kind of snow. It gradually starts clearing off in the evening and by dark the clouds have gone."

October third and fourth weeks:—"It was a bright day, cold wind and no clouds till after 1 p.m. I remained near the glacier from 10 a.m. to 12 o'clock. The sun was very bright and hot. After 1-30 p.m. very cold wind began to blow and snow fell till 6 p.m. entirely covering the ground. There was also a slight thunderstorm with sleet near the Phurkia bungalow. After 7 p.m. it was clear and gorgeous by moonlight."

November:—"The only guide book which we could get hold of in Calcutta suggested that any attempt to reach the glacier after the end of October would be unsuccessful. On the contrary conditions were perfect and the going very easy. No clouds appeared till 1 p.m. On my way to the glacier I saw that the water springs on both sides of the Pindari river had frozen, and looked like fine strings or bars of silver hanging down the rocks. After 1 p.m. the glacier was covered with clouds, and snow began to fall."

The above notes merely indicate roughly the weather conditions in different months. He would be a bold man indeed who would hold out a guarantee that weather conditions noted above in a particular month will be reproduced faithfully on any particular day in the same month. However these notes amply show that it is unwise going to the glacier before the first week of May or after November. Excepting those who have ambitions of climbing snow-peaks, it is advisable to miss the rainy months of July and August, and the first half of September.

These notes also show that nobody has tried to go this side in December and January. In these months, according to Danpuris, it is not possible to go beyond Khati on account of heavy snow-fall.

An early start is advised by all the visitors who have made entries in the log-book. The morning mist is fairly thick during certain months, especially in September and October, but one need not be deterred as it usually clears before down. It is necessary to have a
good meal before starting to meet the exertion of climbing in high altitudes.

Leaving Phurkia at 5 a.m. when it was still dark, and guided by torch-light we reached Martoli at about 6 a.m. On the way we saw two snow-bridges over the river. At Martoli, huge boulders were scattered all about. Some of these were found arranged in the form of cave-like shelters, in which the shepherds and graziers seek refuge during rain and snow storms. Edelweisses are found in abundance in the month of September at Martoli. The hill-sides are covered with cushion-like herbs and mosses presenting a variegated pattern of dark green, light green, and yellowish green. On the other side of the river are plains of 'jabria' on which sturdy hill ponies are seen grazing.

Now we were near the glacier and we closely followed the advice of Col. Megaw who had paid three visits to Pindari. He writes, "I should advise those who like myself are not experts to begin by a walk along the top of the lateral moraine, and then a climb up the hill lying to the right of the medial moraine and on this side of Bankattia glacier. The snout and the lower part of the glacier can be explored afterwards. They are rather sordid in comparison with the upper ice fall and the snowy heights. Gopal Singh, guide, the District Board Road Jamadar, and the chowkidar are familiar with this route. The climb up the hill side is pretty tough. Crawling on all fours at places taking the support of weeds, we wended our way up. However, the sight of the snow peaks and the upper ice fall of the glacier is an ample reward for all this trouble."

Now let us examine the glacier. A glacier is described as a river of ice moving forward at the rate of a few inches. Snow falls on the top of high mountains and accumulates without melting. On account of pressure the snow turns to ice. A glacier fills its valley and checks erosion, hence glacial valleys are U-shaped and not V-shaped like river valleys. Tributary glaciers flow into the main glacier, just as tributary streams join a river. The glacier flows slowly downwards until it reaches the permanent snowline below which it melts and flows down as a river. Glaciers carry down masses of stones and rocks, which scratch the rocks forming the sides and bottom of the valley. A distinctive feature of the glacial valleys are parallel scratches found on stones and rocks. Broken by rain and frost, rocks on the sides continually fall on the glacier. Such lines of detritus on the sides of the glacier are called lateral moraines. When two glaciers
meet, the inner moraines join and form a medial moraine, which runs down the middle of the glacier. Finally all the material brought down in lateral and medial moraines is deposited at the snout where the glacier melts, and the mass of detritus thus formed is called a terminal moraine. The term ‘right’ and ‘left’ when used in referring to the peaks and moraines are used in the same sense as if applied to a river, the right bank being that which lies on the right hand side of a person whose back is towards the source of the river.

Considering all the above-mentioned features of a typical glacier, the Pindari glacier is a model one (Fig. 18). Mr. Ross of the Survey of India writes: “I have had experience of other parts of the higher Himalayas. I have not yet seen such a model glacier and so very easily accessible as the Pindari”. His wife, who made her acquaintance with glaciated regions of the Himalayas on the great Gangotri glacier to whose length that of the Pindari compares as a mere fraction, adds: “However I am glad I have seen this minor glacier, for I think it is perfect in its exhibition of all the characteristic features that one looks for in these regions; compacted in its two-three miles from source to snout, with its crevasses, ice-caves, and streams of different coloured moraine”.

Joining the main Pindari glacier is the smaller Bankattia glacier, and at the point of junction of the two is the so-called medial moraine formed by the inner lateral moraines of both the glaciers. According
to Professor Rajindra Nath, tourmaline, micaschist, phyllites, quartzite, felspar-tourmaline rock chiefly form the moraine materials. He also found ochre-coloured rocks in the left lateral moraine which are almost absent in medial and right-lateral moraines. In the left lateral moraine he found iron pyrites and arsenical pyrites. According to him the active colour in boulders of the left lateral moraine is due to the decomposition of iron-ores, chiefly sulphides, in them.

Three different sets of cracks were observed on the surface of the glacier by Professor Rajinder Nath and his party; one parallel to the direction of the glacier and vertical, another parallel to the direction of the glacier and parallel to its general slope, and the third vertical and at right angles to the direction of the glacier. According to Rajinder Nath, these are probably due to the differential movement of the different parts of the glacier, the middle part moving faster than the sides, and the upper part moving faster than the lower one. Besides the cracks, he saw many narrow ribs which were more or less circular as seen on the surface and the top. These cracks and ribs are the same as the gaping chasms and ice-wells referred to by various visitors. Some of these are so deep that if a stone is hurled in them, its final thud is heard after quite a few seconds.

Atkinson in his "Himalayan Districts of the North-Western Provinces of India, Vol. III" mentions the existence of many pools of water on the surface of the ice, "some of the largest of which were said by the guides, who are in the habit of visiting the glacier, to be found in the same place every year". These pools exist even now, and from a distance they look like sapphires scattered on a white sheet of snow.

The main glacier comes from the north-west and is joined by the Bankattia glacier coming from the east. Looking from the medial moraine, the main glacier appears to be divided into three sections, the topmost of which seems to be composed of loose powdery snow and ice, followed by a deeply fissured part in which long columns of ice are seen standing almost vertical. Last comes the fissured lower part which from a distance seems striated horizontally and ends in the snout. The lowermost part is covered with debris, and its ice is so dirty and muddy that from a distance it hardly appears to be ice at all. This muddy part contrasts strongly with the glistening white upper ice-fall with its pure white snow. Viewed as a whole,
the Pindari glacier is awe-inspiring. With its tanned snout, sinewy moraines, miry hummocks, and clayey ice-falls, the glacier presents a primitive beauty of rugged majesty and grandeur. To cut a long story short we came down from the right side of the glacier, jumping over chasms and crevices slithering over ice, and with great difficulty descended near the much-maligned snout. After drinking ice-cold water from below the snout, I shared curried potatoes and boiled eggs with Sher Singh Patwari, as the man who was to bring my lunch had gone in some other direction. The soles of my shoes had come off after the rough time they had had on the sharp stones of the moraines and the glacier ice. Very generously Sher Singh offered his own shoes to me, and luckily they fitted me. It was about 2 p.m. when we crossed to the left-side of the Pindari river from over a narrow improvised bridge. It started raining heavily at about 3 p.m. Drenched to the skin and shod in the patwari’s home-made shoes I reached Phurkia bungalow at about 4 p.m. tired and foot-sore but happy at the achievement of my heart’s desire and the fulfilment of a long cherished dream.

Those who have a more technical interest would be interested in the following observations of Atkinson regarding the motion of the glacier. “A comparison of the motion of the upper and lower parts of the glacier gave on the lateral moraines 4.8 inches as the mean motion of the ice in 24 hours in the lower part of the glacier, and 5.30 inches in the upper part, and in the middle of the glacier 9.4 inches as the mean motion for the lower part, and 10 inches for the upper part of the glacier. The elevation of the foot of the glacier at the source of the Pindari is 11,929 feet, and of the theodolite station, where these observations were made, was 12,946 feet above the sea”.

XIX. The travellers’ rest house at Dhakuri

XX. Bungalow at Phurka in ruins
XXI. The upper ice-fall of the Pindari glacier
XXIII. A view of the Pindari glacier in 1941
XXIV. The ice-cave at the snout of the glacier
12. The Snout and Ice Caves

There is no other part of the Pindari glacier which has drawn so much unmerited attention and provoked so many adverse comments, defamatory exclamations and libellous remarks, as the snout. On coming across the word ‘snout’ in the log-book time and again I was curious to see it. In the Oxford Dictionary, the word ‘snout’ is explained as “the nose and mouth of a beast”. Poor compliment indeed for the Pindari glacier in whose praise so many pages have been filled by the gratified visitors in the log-book of Phurkia bungalow!

The snout as it exists today is a cave-like entrance at the terminal end of the glacier from which melted ice flows out in a thin stream of greyish-green icy water (Plate XXIV). On its upper part, the glacier ice is hollowed out into a conical depression with its surface channelled by stones which keep rolling down intermittently. It is an interesting sight to see the stones and boulders of various sizes, big and small, rolling along, bouncing across the snout and falling with a deep thud into the ice-cold water, which splashes into a thousand jets rising many feet high.

The earliest observation on the snout recorded in the log-book is by Col. Mitchell dated 1894. He writes, “The snout of the glacier has altered much since May 1884, when I took a careful sketch of it; it was then of the usual cavern shape. It now seems to have receded over 100 yards within the last ten years and has assumed a new shape throwing out a tongue of ice from which the
Pindari river apparently emerges."

Col. Megaw found two snouts in existence. He observes, "since my last visit there is already a distinct change in its appearance; a second smaller snout has now appeared about 25 yards from the main snout, over which a large slab of ice has fallen down". Visitors who start late from Phurkiya bungalow often see no other part of the glacier but the snout as the snow peaks get enveloped in a thick mantle of clouds. Here is one who came in October 1923 and writes in a despondent mood: "At the expense of much perspiration and hard-breathing I reached the far-famed snout and duly stared at it. Not on account of its beauty but because I had footed about 130 miles so far and meant to get my money's worth. I got a real lemon.

"Here with a loaf of bread beneath the snout
A pot of jam, a flask of wine no doubt
Swearing full hard for all my wasted toil
For Pindari's peaks with clouds were girt about".

Curious visitors, animated with a spirit of adventure, anxious to write their observations in the log-book, and who do not share the Anglo-Saxon stolidity of an army captain who was not interested in the glacier's snout and did not grasp what it exactly was, will always go crazy over the snout. Whatever blemishes the snout may have, aesthetic or otherwise, it does attract a disproportionate amount of attention from all visitors. It will interest those who have spoken blasphemously about it to know that it creates an ecstasy of veneration in the minds of devout Hindu pilgrims. Here is one who came in July 1932 and writes, "I paid my respects to the snout and the glacier on 21st July 1932 in the morning accompanied by my wife and child Satya Prashuna Jayal of 2½ years of age". The cookies and others think it a religious duty to have a dip in the ice-cold water issuing from the snout. A Hindu visitor who came in 1931 writes, "On our return, we being of Hindu faith had a holy bath by rolling on the white snowy sheets. We believe that the bath in the manner we took was the only possible one, and we suggest that all those who believe in sacred baths must follow our example". If the advice of this visitor is followed, we are sure that the people of the "holy-bath" faith will provide a thrilling spectacle to other visitors.
Here is a visitor who cannot understand people going crazy over the snout, and reprimands the snout-enthusiasts thus: "It seems to me that most of the previous visitors have gone snout-mad. Why not expatiate on the gorgeous expanse of pure glistening ice that meets one's view, instead of spending time, toil and thought upon the dirty old snout, which is practically only a rubbish heap?"

On the other hand, there are others who believe that

"This question of the Snout
Should be cleared without a doubt
For the benefit of those
Who like a clean nose."

Apart from the ice-cave of the snout which is more or less of a permanent nature, caves of a temporary type are occasionally formed in the glacier ice. A number of these were noticed by Professor Rajindra Nath of the Presidency College, Calcutta, in June 1913. He found that the sides of these ice caves were covered over by debris which protects them from melting. An ice cave lying between the snow fields and the snout was noticed by a visitor in October 1928. He observes: "The mouth of the cave is 20 feet high and 13 feet wide, and it is a very long cave. We walked about 30 yards inside the cave, and from there onwards it begins to narrow." R.N. Dey, who came in 1929, observes: "The ice caves not far below the foot of the medial moraine seem more worth seeing than anything else on the glacier itself." An Irish soldier, who visited the glacier in June 1936, says: "The ice caves were the best part of the glacier, and the variety in their shapes and designs was as intriguing as designs of the ultra-modern bungalows in dear old blighty."

During my two visits to the glacier, in September 1939 and June 1943 I could find no caves in spite of an assiduous search. It seems that these caves appear and disappear periodically.

The best description of the ice-caves is that given by Begum Husanara, who, along with her sister Roshanara, came to see the glacier on the 26th October, 1924. The first of the aristocracy of Oudh to venture up to the Pindari, Begum Husanara writes, "We explored the ice-caves after visiting the glacier. Nothing has been said about them at all. I wonder, why? It is impossible that they could have been missed. They lie hidden away just above the "Snout" and the lower cracks on the lower surface of the glacier. There are just four or
five and I found that the guides even knew very little about them and talked a great deal about the danger of venturing near such dangerous spots. I had heard about the beauty of one of these ice-caves from a friend who visited the glacier four years ago and I was determined to find some more, even if I broke my neck. The one seen by my friend, I could not find, though he had given me a fair idea where to find it. The entrance of it has either been blocked up by the recent heavy fall of snow or perhaps it has collapsed and dwindled away. After going near spots that made the guides shriek with fear my sister and I found four. It took us an extraordinary lot of time to inspect each. I cannot describe how beautiful these caves are. They remind me of pictures Hans Anderson has sketched of the palaces of the Snow Queen. Inside they do resemble beautiful crystal palaces. The ceiling is of such solid and transparent ice that it resembles glass and from it hang frozen bits of ice like huge chandeliers; on the floor after going inwards 8 or 10 yards, there are blocks of ice and tiny streams. Through the ceiling of two caves, water had percolated and made a gap, falling from it like a shower bath. How these beautiful chandeliers of ice form, I do not know. It may be that at a certain time the water that percolates through the ice ceiling of the cave and trickles down, freezes.

I am not referring to the little ice hollows one finds just above the snouts—these that I mean are large caves—very often towards the upper end 4 yards broad and forming an underground ice tunnel 25 to 30 yards long. There is one ice cave on the left bank of the river Pindari a few yards away from the source of the river. But it is very small and very inferior compared with the caves higher up. I mention this cave specially because some one going up the river bed to the snout cannot fail to see it—though it is far from beautiful and can hardly be classed with the others. The chandeliers 'are' missing! I am sure there are many more such beautiful caves, but the recent snow has hidden them. My guide tells me that very often a cave collapses and disappears or by some means the entrance is blocked either by snow or debris so that no trace of the cave can be found.
IN THE Rumex-covered plain of Martoli there are a number of huge stones scattered all about, and some of these provide cave-like shelters to shepherds and graziers. In the month of September, Martoli is carpeted with edelweisses. The lower slopes of the surrounding mountains are covered with cushion-like herbs and mosses presenting a variegated pattern of dark green, light green and yellowish green. The autumn tints of Martoli are charming indeed!

In May, one sees primulas peeping out of the melting snow with their flower-buds folded in a scaly covering. We pitched our "chhot-dari" on a ridge about two miles above Martoli. After depositing the luggage, the Dotial porters had a hearty meal of snow. They sprinkled salt and red pepper on a lump of fresh snow and had a good feast. To provide a little variety in their simple menu I gave them some brown sugar. They selected another patch of snow, and, mixing sugar with it, completed their lunch with this Himalayan ice-cream. By the time their lunch was over they were all feeling the effect of high altitude and were lying down on the medial moraine curled up like beetles. It was an interesting sight to see the human bundles mixed with the trunks and beddings under the shadow of the snow-peaks.

After some time I felt very thirsty. There was no sign of any water nearby, and we vainly tried to melt some snow in a shallow plate by placing it in the sun. The water which we thus collected was hardly sufficient for a few sips. A Dotial was sent towards Martoli
and he brought some water which we placed on a spirit lamp. It took about an hour to boil, but at last we managed to prepare a concoction of tea-leaves, which tasted like the 'banafsha' medicine of our Vaids. By this time I too began to feel sick and lay down on a camp-bed with a splitting headache. Finding no relief with tea I made a dash towards the shepherds' hut at Martoli and reached there before dark. On my way I came across a small clump of *Equisetum arvensis* with ripe cones emerging from the melting snow. In the Carboniferous period, *Equisetum* and related plants covered large areas and some of them were tall trees, shrubs and climbers. Now there are only a few herbaceous representatives of this group of plants, and I was delighted to collect a living fossil in a fertile stage.

A fire was burning in the 'chulah' inside the hut. I made myself comfortable and soon got rid of my headache, and was cheerful again. The hut was divided into two rooms by a stone partition, and creeping through a narrow hole in the wall I laid myself on my bed which was spread over dried grass.

Inside the hut we were joined by two Kumaonis from a village near Loharkhet who had come to see the 'Glashewar'. As visitors of this type are rare in this region, I felt interested in them. I asked them the object of their visit. They said that they had heard so much about the 'Glashewar' and the snow peaks in their village they had decided at last to see them with their own eyes. Tying ten seers of wheat flour in a bundle they had started on this trek, and stopping in the houses of villagers on the way they had reached Martoli at last. At Phurka they had learnt that two 'Sahibs' were camping at Martoli and they had decided to follow us to the glacier. They were mighty glad to see the snow-covered peaks and the snout, and after saying their prayers near a water-fall followed us to the glacier.

Hearing the yodels of a shepherd who was grazing sheep and ponies I woke up early in the morning. Shouting 'Aye, Ya, Ya' the shepherd chased the sheep who were straying away. The shadow of two golden eagles on the meadow proved more effective than the cries of the shepherd, and in a moment the herd collected near the hut bleating in a frightened mood. The eagles were flirting with each other, the male bird pecking the female. Their golden grey feathers gleamed in the rays of the sun, and with their broad wings spread they skimmed gracefully in the air till they soared up and disappeared from view. After watching their flight we proceeded towards the glacier.
On all sides there are snow-covered peaks standing like giants. On the right of the glacier is the broad 21,624 foot peak known as Nandakhāl. This is the peak which is visible from the Phurkia bungalow. Next to it is the 21,858 feet Puali Duar, and the peak of Chhaka Pahar. To the left of the Pindari glacier is the 20,740 foot Bankattia with a characteristic curve (Plate XX). Next to it is the sharply conical 22,530 foot Nandakot, the highest peak in this region. Further left is the peculiar Dholia Pahar with a cairn-like top which was probably climbed by H.G. Champion.

As we stood at the foot of Bankattia, above the hanging columns of ice, we found ourselves surrounded on all sides by magnificent towering peaks with ice-falls and pure white snow-fields in every direction. The rays of the sun were bathing the peaks in a richness of colours and beauty which is unforgettable and remains for ever a valued treasure in memory's vault. From the rose tints of the dawn to the molten gold and dazzling white which the eye cannot stand, one sees an amazing transformation in the colour of the peaks. Though the glacier may be a dirty rubbish heap, one cannot deny the splendour, magnificence and beauty of its setting. In this vast amphitheatre of nature, with snow peaks standing like sentinels on all sides, one is reminded of the insignificance of man before the blind forces of nature. Complete silence prevails—broken only by the occasional deep thumping noises, which, according to the Danpuri hillmen, are the drum-beats of Nandadevi. On hearing these unearthly sounds, the guide, the chowkidars, and the other Kumaoonis, who were with us, knelt down and began to sing praises of Nandadevi and ultimately prostrated themselves in profound obeisance on the glacier-ice. There is no explanation given in the log-books of these mysterious sounds. Possibly, they are caused by the crashing of huge ice blocks under the surface of the glacier. Periodically, we also heard a low rumbling noise like thunder on account of the crashing of avalanches of snow. Sometimes these avalanches are as big as 3-4 Phurkia bungalows put together, and crash down with tremendous force sending up clouds of powdery white snow.

The ice at this place is black in colour, when viewed from above, however, when dug, the ice-blocks are transparent. It cannot be said for certain whether the black colour is due to some optical effect related to the depth of ice-layers or to some other reason. Black colour in mountain ice has been known to be produced by
blue green algae, and it would be of interest to investigate the phe-
omenon further. According to the Danpuries, this ice has been
in existence from “Satyug”, the golden age of Hinduism, and is a
panacea for all ills of the flesh, particularly pyorrhoea, tuberculosis,
and indigestion. Gopal Singh guide, the Patwari and others re-
commended us by precept and example to eat this ice and thus to tone
up our bodily health even if we had no diseases to cure. To please
them, I did eat a little of it.

The history of mountain climbing in the Pindari glacier region
begins with the conquest of the 17,700 foot Traill’s Pass by Malak
Singh Buda of Supi in 1830. With the object of encouraging trade
with Johar on the other side of Traill’s Pass, George Traill entrusted
this work to Malak Singh. So the credit for the conquest of the
Pindari Pass which has been named after Traill goes to a Danpuri.
There are two certificates in Hindi in the possession of Rattan
Singh, grandson of Malak Singh, one of which may be regarded
as a letter of appointment and reads as follows:

“To Malak Singh Buda,

The pass between Pindari and Johar remained closed for a hundred
years. It was considered that the trade between Almora and Bhot
would be greatly facilitated if this pass were opened. Orders were
therefore issued by the court to open communication through it.
Now you have been able to open that communication. So for your
maintenance you have been appointed Patwari of Mulla Danpur.
Do the work of that post faithfully. You will get a salary of Rs. 5/-
per mensem from the 1st July, dated the 7th of July 1830 A.D.”

Though the salary granted to Malak Singh is ridiculously low,
his achievement is by no means small. Unlike the plains, the post
of a Patwari is regarded in the hills as honourable and a coveted
gift from the Government. The other certificate in which Traill
has commended Malak Singh for his good work is as follows:

“Malak Singh Patwari of Mulla Danpur evinced considerable
enterprise and energy in discovering and opening the communication
between Danpore and Johar by the Pindari Pass which had not
been crossed from time immemorial.

His ancestors have possessed considerable influence in the pargana
for some generations.”

Jhunit Banj
November 1835

Geo. W. Traill,
Commissioner”
Unlike the other Himalayan passes, Traill's Pass is by no means easy to climb. It is always covered with snow. On the Pindari side there are dangerous crevasses and treacherous wells of ice, and on the Milam side vast fields of slippery ice. After Malak Singh and Traill, this pass was climbed by Capt. S.E. Smith in September 1861. He was guided by Darban Singh, son of Malak Singh. In 1893 a German traveller named Bockel climbed the pass. He spent a number of months in this region climbing and taking photographs. His sole companion was a Kumaoni who also cooked chapatties for him.

At present the only man who knows the secret of Traill's Pass is Diwan Singh Bhotia of the village of Martoli in the Milam Valley, who also runs a shop at Kapkot. Diwan Singh is a real mountaineer who loves the snow peaks. He made their acquaintance in the Milam and Pindari Valleys while grazing goats on the hill-sides. It was about thirty years ago that he crossed Traill's Pass for the first time from the Milam side in the month of July following his herd of goats. Diwan Singh also acted as a guide to Hugh Rutledge, the famous Himalayan mountaineer when he was Deputy Commissioner at Almora. In August 1936 he guided Gansser, the Swiss traveller, across Traill's Pass. Accompanied by two Sherpa porters and Diwan Singh, Gansser left the village of Martoli in Milam valley on the 25th August and reached the grassy plain of Martoli in the Pindari valley on the 28th August 1936. In June 1941, Diwan Singh conducted Dharama Vira, who was the Deputy Commissioner of Almora District, across the Traill's Pass from Milam valley. While a number of persons have crossed the Pass from Milam side, very few have done so from the Pindari side. The most remarkable climbing feat, so far as Traill's pass is concerned, is that of Sucha Singh Khera. With very light equipment—a pair of woollen blankets and a teakettle—he crossed the Pass in September 1941 from the Pindari side. Night fell when he reached the top, and wrapped in his two blankets, he slept in the open on the ice. The morning found the outer blanket glued to the ice and its owner chilled to the marrow, though none the worse for his experience. Khera observed a rainbow-like circle around the top of Nandakot from below the pass—probably a cloud phenomenon resulting from the resolution of the rays of the sun into its seven components.

The upper ice-fall of the Pindari glacier which consists of loose powdery snow provides plenty of thrills (Plate XXI). Often
one sinks waist deep in the snow. The highest part of the ridge is over 18,350 feet high, i.e. 650 feet higher than Traill’s Pass proper. In the upper part of the pass, the climb is almost vertical, and Gansser encountered a dangerous ice-crest which he climbed with great difficulty. The overhanging ice crest had a very steep fall behind. So there could be no question of going back. Carefully cutting steps in the ice in a do-or-die mood he mastered the crest. Both the peaks of Nandakot as well as the West buttress of Nandakot are visible from the top of the Pass. Ice and snow avalanches thunder down the slopes of Nandadevi and Nandakot. He passed over the moraine of Nandakot glacier and emerged in dense rhododendron thickets of Lwan Valley and ultimately reached the village of Martoli.

Nandakot was climbed by a Japanese expedition led by Sakuta Takebushi and his companions, members of the St. Paul Mountaineers Club of Tokyo, on the 5th October 1936. Mathura Datt Joshi, Qanungo, who was deputed by the Deputy Commissioner, Almora, to accompany the team, went with them up to the base camp at Lwan, at about 14,000 feet altitude. After climbing Nandakot from the east side they climbed Traill’s Pass and reached Phurka on the 10th October 1936. They left a brief entry as follows in the log-book and also a diagramatic map.

“Nandakot conquered Oct. 5th, 1936.
Y. Hotta, I. Yuasa, I. Yamayata.
M. Hamano, S. Takebushi.

Our party’s record is as follows. We left Japan on July 12th. Arrived in Calcutta August 10th. Started from Almora August 19th, arrived at foot of Nandakot 2nd September.

October 5th — Top of Mt. Nandakot.
October 9th — Traill’s Pass.”

In January 1937, the Qanungo received a letter from Japan. When he met me in May 1943 when war with Japan was going on, he was not anxious to show it to me for fear of being mistaken for a fifth columnist.

There is a good deal of confusion about the names of peaks surrounding the Pindari Valley. The entries in the log-book are of
a conflicting nature, and have made the confusion worse confounded. The peak which is visible from the Phurkia bungalow has been variously described as Nandakot and Nandakhat. This peak situated to the right side of the glacier, whose height is given as 21,624 feet, is Nandakot, so far as we could make sure. On going further other minor peaks appear to the right of Nandakot which are described as Poali Duar and Chhaka Pahar. As we proceed further a memorable peak appears to the left of the main glacier, which is called Bankattia. Unlike other peaks, which are sharply conical at the top, 'Bankattia' is sickle-shaped, and hence the name. To the left of Bankattia in a progression are: Nandakhat, a number of minor peaks, and the Dholia Pahar.
14. Some Impressions of the Pindari Valley

PEOPLE VISIT the Pindari glacier with different motives. Some who want to be in tune with the Infinite are generally inclined to hitch their compass to the Himalayas. There are some who are mentally worried and go there to forget their troubles. A victim of neurasthenia writes, "Driven by mental worries I undertook the trip towards the Pindari glacier. The snow views, beautiful flowers, delicate rhododendrons, the golden snow pearls of early morning and strong rock-castles, make me forget the cares and worries of life in the plains. Now I am returning with perfect peace of mind and filled with bliss of heart." There are others like an American missionary, who merely came because he had fractured his shoulder, and, finding that he could do nothing but walk, thought of walking to somewhere worth while and decided to visit the Pindari valley. Giving his opinion about the place he writes, "It was all a most marvellous experience, heavenly weather, stupendous scenery, a wonderful time, enjoyed every moment of it. Even a put-out shoulder has its compensations."

A unique personality came to Pindari in 1931. He wanted to speak to the people along the way about Jesus Christ. Here is what he has to say about the Pindari valley.

"Praise God for all His wonders. I do praise God for all His Wonders in nature. He has made it all, blessed be His name. It was all created by Him through Jesus Christ. I have stood by the Niagara Falls in America and it is wonderful, and I have been on the snowy
mountains in America and Norway and that was all wonderful, and I have walked in the hills in Sweden at midnight and seen the sun-shine at 12 o'clock at night and that was very wonderful, and now I have been close to this Pindari Glacier, and that is also wonderful.

Two surprises! Let me record.

That so few people came here to see these wonderful mountains.

That I have found no one in these log-books praising or thanking God for these wonderful sights. There are so many who have written about the glacier and what they have said is more than sufficient, but I wanted to say a few words to praise and thank Him, who is the Divine Architect and maker of all through Jesus Christ, my Saviour, who has died on the Cross of Calvary for me, and for all, and who saved me 15 years ago over in America and gave me the joy of salvation and opened my eyes for His wonders in His two books: The Bible and Nature, and who will do the same for anyone who asks Him for it. Praise God for it. Praise God for all His wonders." He has indeed made up for the lapses of all the atheists, agnostics and pleasure-seekers who have been to the Pindari glacier before 1931.

A visitor from Calcutta remarks, "We are all of the opinion that the scenery in the Pindari Valley is finer than anything in Sikkim with which most Bengalis are familiar. Although the glacier was much as we expected it to be, the surrounding peaks were outstandingly beautiful, and awe-inspiring, and the autumn tints in the Pindari valley would be hard to beat anywhere in the world. It certainly has been a day upon which one will always like to look back". Another much-travelled hiker with a wide experience of the Himalayas says, "From my experience of travelling in Kashmir, Assam, Tibet and Darjeeling, etc. I can say without the least exaggeration that nowhere I saw such, a wide and extensive range of snow-clad peaks in one line in such a small place. I have many a time walked over the snow-clad mountains for miles and miles together; but nowhere I ever walked in such a small place as this having snow capped peaks rising on every side. I felt as if in paradise and the snow peaks shining under the sun looked like so many silver sheets".

The personal factor in the appreciation of a place, landscape, and a natural phenomenon is of great importance. There is much truth in the saying that there nothing good or bad, but thinking makes it so. It is how one personally reacts to the glacier and its
surroundings, that is of real significance, and not what others say about it. It is interesting to note the reactions of visitors of various types to the Pindari valley. A religious-minded Parsi says, "Glacier is the place of devotion. I offered my prayers and some such sensation passed through my whole body and mind that brought tears in my eyes and I thanked God for the glorious day. Om Tat-Sat, Odar Hormazo Jatha Abu Verin". A professor from Allahabad writes, "It appears that few writers in this log-book have described the psychological and spiritual effect produced on their mind by the works of nature as a whole at this place. All that I can say is that it has made me think more of myself, this world, and the maker of it". A headmaster of a school leaves the place spiritually elevated.

As regards visitors who came merely to see the hill scenery, their reactions relate mostly to weather they encountered. Those who go beyond Martoli in bad weather can scarcely be expected to have a good word for the Pindari valley, for the snow peaks are hidden in clouds, and they have nothing but the snout to stare at. Here are two such disappointed globe-trotters. One of them writes: "After reading some of doubtless well-meant articles in this book, and after visiting the much-vaulted Pindari glacier, I am almost speechless and can ony say that one might as well visit the local mud-heaps". Let us look at the other side of the picture. A much-travelled civilian who followed the bishop's son and his companion records, "One can well imagine a visitor like the writer of the note preceding this, who visits the snout of the glacier under a pall of cloud and rain warning others from a dismal experience. But my experience was very different. My own feeling is certainly not of disappointment. Nandadevi was gracious and received me in her sunniest manner. I have seen one glacier in Switzerland, and another in the French Alps. Personally I would unhesitatingly say that the Pindari glacier beats them both in the panoramic view we get here, and in the impression it makes on one's mind".

Sir J.P. Srivastava who came to Phurka on the 14th June 1928 wrote as follows: "It had been my dream for some considerable time past to undertake this pilgrimage for it can be called by no other name considering the devotion and steadfastness of purpose which is required of one during this trip. The beautiful sights which we have seen will never be forgotten. It is here that one can truly get oneself in tune with the Infinite. These snow-covered peaks have a message and an inspiration. I think it is a great pity that young
men of India, especially college students do not visit these parts in large numbers. I would say to them "come and behold your country".

I am of the opinion that we should develop a hiking movement among our young men to interest them in the Himalayan beauty spots like the Pindari Valley. The late Professor Shiv Ram Kashyap of the Government College, Lahore, has done a pioneer's work in this direction. During the summer vacations he used to lead parties of students to the Himalayas going as far as the interior of Tibet. Unfortunately the lead given by him has not been followed by other universities, and very few people go beyond comfortable hill stations like Simla, Mussoorie and Naini Tal. We want a movement on a mass scale—like the "Wander Vogel" Movement in Germany. It will be a happy day when we see parties of young men, in shirts and shorts, with their belongings packed in ruck-sacks, marching singing to the elemental salons of Nature.

When people start going to the inner Himalayan resorts like the Pindari glacier in sufficiently large numbers, instead of wasting their holidays in the sweltering heat of the plains, the development of the Himalayas will follow. We will see tea-houses, boarding houses, and youth hostels spring up in far off hills and valleys and the lure of the mountains would become difficult to resist. Such a movement will also have a beneficial effect on the physique and character of our young men, and they will become more hardy, manly and self-reliant. Camping life will bring romance and health to them and will teach them social values which are learnt only in an adventurous out-door life.

Before closing and saying farewell to Pindari, I feel tempted to quote a British Surgeon, who giving his impressions writes: "Strenuous effort—but what memories. Shall I dare think I can climb again after following the chowkidar from rock to rock up the steep side of a moraine, and asking with quickening breath, 'Will my foot hold there? Will this shifting soil slide and precipitate me to the depths? And to stand actually on glacial ice. And to see the holy Pindari rush out from the snout of the glacier and to be able for ever after to see in the mind's eye the lofty snow peaks, and to be able to say triumphantly to all one's acquaintances'. "Yes, I did the Pindari" ". 
15. Some Pindari Problems

THERE ARE a number of problems, geological, geographical and others which continue to baffle weather-beaten scientists and amateurs who visit the Pindari Valley. Plausible explanations are given, fine webs of theories are woven, and when the visitors think that the Pindari problems are satisfactorily explained away, some iconoclastic critic turns up and brings down the edifices of laboriously built theories tumbling down. Here are some of the Pindari problems, solved and unsolved.

1. Whether Nanda Devi is visible from Phurkia. This problem has often puzzled a number of visitors who came to see the Pindari glacier. Nanda Devi peaks being so wellknown and familiar they come uppermost in the minds of tourists who, like puzzled customers at a loss for the right name, ask for the much advertised 'Pears Soap' or 'Guinness'.

Mrs. Short who made elaborate calculations and diagrams in the log-books in 1923 observes, "The 24372 feet peak of Nanda Devi can be seen from the bungalows but not Nanda Devi itself owing to peak 20024 being in the way. At sunrise the sun illumines 24372 long before it touches 21,624, and its shape is then more easily distinguished as well as the fact that it lies several miles behind the glacier. It is visible from Phurkia and up to a little beyond the 70th mile: to see it again after that it is necessary to go high up the glacier".

As regards Nanda Devi itself it is not visible from Phurkia nor
from the glacier, it is some miles back. Finally the fallacy that Nanda Devi is visible from the Pindari Valley having been duly killed and buried, an epitaph was written as follows by an army officer over its grave.

"Here Lies the Fallacy,
Notion, Opinion, Rumour, or What Not
That the Nanda Devi Peak is visible from the Pindari Glacier or Phurkia."

Even after such a decent funeral and burial by martial hands, this fallacy, notion, and opinion is resurrected again and again, and some of the subsequent visitors still continue to see Nanda Devi from Phurkia. Wanted a heavier tomb-stone!

2. The retreat of the Pindari Glacier. Glaciers are supposed to advance at the rate of a few centimetres a day, and on the contrary the Pindari Glacier is alleged to be retreating and contracting like a snail into its shell.

There is a consensus of opinion among geologists, that the glacier is retreating slowly, and its rate varies at different times. Travellers who have been to the glacier many times have been noticing this fact.

One Mr. Pringle Kennedy who came to Pindari for the last time in October 1898 observed, "I have three times visited the glacier, in June 1890, in October 1894, and October 1898. Memory is fallacious, but it seems to me that the snout has receded more than half a mile since the first occasion".

Sheo Singh, Tahsildar of Almora, wrote in November, 1915, "From a comparison of what I saw of glacier on 25th September 1910 with Lady Eileen Elliot I am able to say that the glacier has much receded. The snout in 1910 was several hundred yards below from where it is now. It has also changed its position as I now see it several yards on the west of where it was in 1910. The glacier seems also to have gone much deeper than it was in 1910. There is no doubt, therefore, that the glacier was much higher and longer several years ago".

Mr. Canning who visited the glacier in 1912 and again in October 1926 writes, "My 1912 sketch shows the snout below the point 'A' where the path reaches the crest of the moraine and I remember one could not see the snout from that point. The snout has receded
some 200 yards since 1912 as now one can see the snout quite well from this point”.

Professor Rajindar Nath and his companion mark a recession of 400 feet in 7 years in June 1913.

The actual annual retreat of the glacier should be distinguished from the seasonal retreat of the glacier, its movements up and down according to season which is best measured by an examination of the snout. Some visitors who came to Phurkia very early in May note that “The glacier has come down practically to the door of the bungalow”. Those who came in September or October when much of the ice melts find it far down below. Seasonally the glacier advances in winter and retreats in summer. However a number of observations made by visitors in the month of September and October in different years show that the glacier is annually retreating.

There are certain phlegmatic persons whom this problem of the retreat of the Pindari glacier leaves absolutely cold and unmoved. One such writes, “From previous observations in the log-book there can be no doubt that it has retreated considerably. I am quite indifferent about it however. It certainly does not draw any T.A. (Travelling Allowance)”.

Professor Cunningham made some valuable observations on this vexed problem of retreat. He writes, “The successive years” high water marks along this lateral moraine clearly prove that the glacier is at present contracting in accordance with the consensus of other evidence and opinion noted above. The very great retreat of the glacier in comparatively recent geological time is clearly shown by the line of the old right lateral moraine which stretches down along the far bank of the river to within about 2 miles of the Dak Bungalow and is now being carved into by the river. At the lower end of that line and on this (the west) side of the valley the remains of the large terminal moraine are prominent. This larger glacier was doubtless also fed by those that may be seen from the bungalow high up on the face of the mountain. Its rate of retreat during this period was probably very rapid as indicated by the small amount of moraine material left in the valley above that large terminal moraine. Below it many of the lines of stones and boulders running across the valley are very probably still older terminal moraines and may even possibly mark successive annual retreats. I am inclined to think that much of the material still lower down (to within one mile of the Bungalow) is glacial in origin. Many of the
sub-angular blocks suggest ice action and though I was able to notice only one truly "scratched block" the nature of the rocks included is in the main ill-suited to preserving such scratches".

Commenting on the learned Professor's observation, Dr Alfred Noble writes, "To begin with Professor Cunningham talks of the retreat of the glacier, and again of the great retreat of the glacier and further of the annual retreat of the glacier". Surely we are here straying from the realms of glaciology and of geology into those of theology. I myself met a friend only the other day, a clergyman, who told me he was going into a retreat. What a subject for the pantheist. The soul of the glacier, its cry for rest: and how interesting to trace the history of the development of the berg the icecream till we finally arrive at the Bishop—the glacier. But after all is not all this the merest theory? Has any one ever seen the glacier retreat? I have watched it for many hours and can find no signs either of the coquette or the recluse".

When I said, "I have done" I was merely repeating a phrase I often hear in the mouth of my clerical friends already referred to and employing the phrase in a Pickwickian sense. I really have not done, because the matter of the scratched rock is still on my mind. I spent much time in searching for that rock and at last I found it and as the result of a close inspection I came to the conclusion that Professor Cunningham was again at fault. Has the learned Professor ever encountered an angry bear? I have; and still carry about mementoes of the encounter on "a body as ill-suited for preserving such scratches" as the stone in question. With the aid of a small looking glass (when no one was about) I compared the scratches in question with those on the Professor's stone. Only one conclusion is possible. In each case an angry bear has been sharpening his claws. Who ever heard of a glacier wanting to scratch anybody however ill-suited his body might be for preserving scratches?"

**Pindari Riddles Answered**

The problems of the Pindari Valley will continue to baffle visitors for years to come. The Pindari glacier squatting in the valley with its protruding snout like the proverbial sphinx in the sands of Egypt, will continue to stare at the crowds of scientists, semi-scientists and pseudo-scientists with smug satisfaction. Professor Cunningham tried to answer the riddle of the Pindari weather and failed
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of Vol. III and has put me into the position of being able to utter a few constructive suggestions.

Concerning the rate of recession of the glacier. This question has concerned and troubled all visitors from Trail onwards—it has probably caused more insomnia and neurasthenia than any other problem of equal unimportance—it has led otherwise sane and respectable men to frantically plant flags and gauge rocks.

The solution of the problem is ridiculously simple.

Let an ardent investigator sit on the edge of the ice on the snout with his feet hanging over. When the line of receding ice passes his centre of gravity he will inevitably follow Newton's law and prove Euclid's axiom that the shortest distance between two points is a straight line to the source of the Pindari river. The exact moment of his drop could be ascertained by alarm clock and portable short-wave radio operated by observers on the left medial moraine. In the instant before his icy plunge he would be amply fortified by the knowledge that he was the first man to know the exact rate of
ignominiously. Others have tried their skill to determine the glacier’s rate of recession, and have given their comments on the fauna and flora of the valley, but to no avail.

On searching the log books from page to page and reading the dull notes of Conservators of Forests, Deputy Commissioners, Scout Commissioners, Inspectors of Schools, Executive Engineers, and Garrison Chaplains, I came across a very refreshing entry dated 1936 by a visitor from Bombay who signs himself as Silas Hiram Hammerswinger, sub-Deputy Engineer in charge of the Elephants of the Fitzbanq of Waho. Of all the people who came to Phurka from Trail onwards on official duty or in search of peace or pleasure he alone seems to have got the hang of the Pindari problems. His admirable solution of the Pindari riddles is given below.

“Having wandered over the glacier with no sight of gurruls or peacocks or even a Morhiphorbus pendiclanes reported in such abundance by previous travellers and seeing no more interesting tracks than these which when tracked down proved to be the Khan-sama absconding with the lunch (and the last egg), I have been moved to a little serious rethinking on the whole Pindari question, and a night’s intensive cogitation with my feet in the fire-place.

and the rest of me supported by what the chowkidar laughingly calls bed, heaped high with the mats and my own as well as the coolies’ blankets in an attempt to avoid Amundsen’s fate, has brought me to complete agreement with the opinions of the gentleman with the illegible signatures so admirably expressed on page 84.
and would induce a temperate climate that would make Bombay the summer capital of India.

But hear some one exclaim, "What, no 12,565 foot Pindari Glacier? No snow bridges to count between Diwali and Phurkiya? No bungalow to grumble at? No glacier to admire and measure?" Perish the thought? The distinguishing feature of the glacier, its incomparable indescribable personality; its snout shall remain. When the rest has been shipped down the river it shall be lifted by successive blasts of dynamite to the position now occupied by the first ice fall to this place. Those who yearn for altitude shall climb to admire its unsullied beauty for no longer shall it be marred by stones and mud—no longer shall slighting remarks be made about its unwiped condition and ramshackle appearance. An attendant shall be appointed to wash it down daily with hot water—conveniently piped from Jumno tri hot springs and drippings and washings shall go into a new and gentler Pindari river."

Ionic Weather

Like the Pindari glacier which stands out with its tanned snout and sinewy moraines conspicuously from among thousands of Himalayan glaciers, the weather of the Pindari valley has also its individuality. Visitors going even in May or early June encounter clouds after 10–11 a.m. and are often deluded into the belief that the monsoons have come. In fact, clouds in these months are purely a local affair and have nothing to do with monsoons.

When you reach Khati you will often see the snow-peaks covered with clouds. This is not at all a heartening prospect, and when you are in a despondent mood, coolies would often come and advise you to sacrifice a goat to Nanda Devi to persuade her to unveil her face. The coolies do deserve a goat after carrying such heavy loads over the steep heights of the Dhakuri range. As for Nanda Devi you have to take your chance. As Mr. G. B. Pant observes, "Madame Nature here though in liaison with the elements is yet a flirt. Her variety for make-up and ward-robe is unbounded. Her hourly change of costume would make even a Parisienne jealous of her. In the early hours of morning she blows kisses to Apollo, and yet would tantalize him by playing hide and seek so soon as he has approached her. A shower bath next under a drizzle and then to bedeck her brow with beads of snow is her pre-occupation."
recession (Fig. 20). (Incidentally his centre of gravity would have to be determined by experiment as it would vary with the individual.)

**Game.** The foul game (mostly wild sheep and goats) is harder to find and more difficult to shoot—one member of my party had a very successful shikar by taking pot shots at the chowkidar disguised as a goat (Fig. 21). Practically no disguise needed—this was technically Fair game but made sufficiently exciting by the chowkidar keeping constantly on the move which genuine Fair game consider dishonourable—and by my friend using only sparrow shot.

![Fig. 21. The chowkidar disguised as a goat.](image)

**Concerning the disposition of the glacier itself.** This is a modern age—we no longer go to the seashore to eat clams or wait until summer for strawberries. Pursuing this line of thought it at once becomes evident that the glacier is in the wrong place. Hemmed in by inaccessible snow falls and mountain sheep it is available only to the heroic few who are capable of sustaining hunger, cold, fatigue, and dak bungalow beds. A much more logical place for it would be the river junction below Loharkhet or even Kapkot. It would then be accessible at all times of the year to a much greater number of people. The moving process would be simplicity itself; the ice would simply be cut into sections and labelled A, B, C, etc. The pieces would be floated down the river and reassembled according to plan on the most suitable hillside. An ambitious architect might even rearrange the blocks into a fancier or more artistic design. The Almora District Board would probably object to having this historic monument moved out of their precincts but if they had a large enough vision they would not object to having it reassembled at Bombay instead where it should be accessible to the multitude as well as to incoming tourists and distinguished visitors, where it could obtain some much needed attention from the Bombay Ice Company.
recession (Fig. 20). (Incidentally his centre of gravity would have to be determined by experiment as it would vary with the individual.)

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and would induce a temperate climate that would make Bombay the summer capital of India.

But hear some one exclaim, "What, no 12,565 foot Pindari Glacier? No snow bridges to count between Diwali and Phurkia? No bungalow to grumble at? No glacier to admire and measure?" Perish the thought? The distinguishing feature of the glacier, its incomparable indescribable personality; its snout shall remain. When the rest has been shipped down the river it shall be lifted by successive blasts of dynamite to the position now occupied by the first ice fall to this place. Those who yearn for altitude shall climb to admire its unsoiled beauty for no longer shall it be marred by stones and mud—no longer shall slighting remarks be made about its unwiped condition and ramshackle appearance. An attendant shall be appointed to wash it down daily with hot water—conveniently piped from Jumnotri hot springs and drippings and washings shall go into a new and gentler Pindari river."

*Ionic Weather*

Like the Pindari glacier which stands out with its tanned snout and sinewy moraines conspicuously from among thousands of Himalayan glaciers, the weather of the Pindari valley has also its individuality. Visitors going even in May or early June encounter clouds after 10-11 a.m. and are often deluded into the belief that the monsoons have come. In fact, clouds in these months are purely a local affair and have nothing to do with monsoons.

When you reach Khati you will often see the snow-peaks covered with clouds. This is not at all a heartening prospect, and when you are in a despondent mood, coolies would often come and advise you to sacrifice a goat to Nanda Devi to persuade her to unveil her face. The coolies do deserve a goat after carrying such heavy loads over the steep heights of the Dhakuri range. As for Nanda Devi you have to take your chance. As Mr. G. B. Pant observes, "Madame Nature here though in liaison with the elements is yet a flirt. Her variety for make-up and ward-robe is unbounded. Her hourly change of costume would make even a Parisienne jealous of her. In the early hours of morning she blows kisses to Apollo, and yet would tantalize him by playing hide and seek so soon as he has approached her. A shower bath next under a drizzle and then to bedeck her brow with beads of snow is her pre-occupation."
As the day advances she must have her mantle of snow. Lucky the man who can view her in all her charms, but Oh how difficult!

The weather goddess is a generous hostess to a lucky few only, and in general we have to agree with Mr. Pant that she is a flirt.

Now let us turn from poetic flights of fancy to the hard cold facts of science. A cold clear morning, brilliant sunshine over the glacier and the snow-peaks upto 10-11 a.m., and onrush of clouds upwards from the valley, the enveloping of the snow-peaks and the glacier by the clouds followed by rain or snowfall. Is there any explanation for this drama of weather which is played almost every day in the Pindari Valley. Professor Cunningham who came in October 1905 has one. He says, "From the notes of previous observers and from my own observations the ‘local weather’ is a fairly simple phenomenon. The morning sun striking the bare sides of the mountains above the side of the valley warms the air in contact with them and draws a current of air which has proved to be rich in electric ions apparently derived from radioactive emanations from the dry soil below up the valley. This air is expanded and consequently cooled, and any moisture it contains is condensed round the ions and especially round the negative ions. The cloud thus formed and charged with electricity is carried up with the ascending current of air and so brings about the electric separation which is only neutralised again by lightning, i.e., a thunderstorm. The height of formation of the clouds will depend largely on the number of ions present and the amount of moisture in the air, which will again jointly determine the amount of rain or snow which falls. When the sun goes down cold air from the snows blows down the valley”.

Unlike Professor Cunningham, there are sceptics like Mr Ray Noble for whom the local weather is not so simple a phenomenon. Ray Noble who visited the glacier shortly after Cunningham has some very interesting observations to make about the explanation given by the learned Professor. He writes, “And then about the weather we can all doubtless go so far with Professor Cunningham when he says the sun “strikes the bare sides of the mountain and warms the air”. But when he talks of the air being “rich in ions”, is it not just possible that a waft from the Bawarchi Khana had been borne within reach of the Professor’s sensitive organ and that what he was really aware of all the time was onions. I am impelled to this conclusion by a later phrase in which he remarks upon the fact that “any moisture it contains is condensed round the ions
especially the negative ions”. How delightfully are the lofty discoveries of science blended with the lowly facts of domestic life. Who does not know of the human eye that all the moisture it contains is rapidly condensed in the presence of an onion (a sliced-one) especially if the onion be a raw one what in scientific terms is called a negative one. Truly as Professor Cunningham observes, “the phenomenon of the local weather is a fairly simple one”.

“One point more and I have done. Is not the Professor guilty of a serious lapsus when he classifies the weather as Ionic? Surely it should be Doric or even outer Doric”.

The Ghost of Pindari

After discussing the vagaries of Pindari weather and considering the scientific and unscientific explanations offered, it is of interest to make an acquaintance with the incorporeal denizens of the Pindari Valley. The Himalayan people sincerely believe in the existence of Chancharis or fairies in spite of Professor J.B.S. Haldane’s calculation that it is not possible for a female body of the average weight of 120 lbs. to be lifted in the air with the support of the wings of the size usually attributed to angels and fairies. According to common belief chancharis are the dancing attendants of the court of Indra, the god of rain. When they get bored with their divine master, these luscious aerial beauties descend from Indra’s Heaven dressed in sumptuous green, red, and blue clothes in the Himalayan alpine valleys. They have been seen gathering flowers on the tops of mountains and sporting on the snow-covered peaks, which are their haunts. They fall in love with handsome shepherd boys in the lonely Himalayan valleys and tempt them to inaccessible precipices and gorges. These love-sick youths pine away into shadows and die unless their friends and relatives come to their rescue and propitiate the chancharis by worship, songs, and dancing, and offerings of goats’ flesh, milk-pudding and halwa. Sometimes they are sent by the gods, who are jealous of their power, to tempt ascetics from their austerities so that mortals may not challenge the supremacy of gods. Occasionally they provide a little innocent fun for the ghosts of learned professors who wander about discriminately arguing the riddles of weather and glaciology in the Pindari Valley. After flirting with the chancharis, the ghosts of the professors seek refuge in the Phurkia bungalow on stormy nights. Only those who are blessed
with the eye of faith can see them. Lt. David Hare who came to Phurkia on 22nd August 1936 is one of the lucky few blessed with the eye of faith, and his encounter with the ghost of the Pindari Valley is given below in his own words.

He writes "The experiences of the last two nights have forced us to the conclusion that the Pindari glacier has its ghost as well as its grandeur. The night before last while having my bath by the light of my petrol lantern, I suddenly noticed that in spite of the pressure shown in the gauge provided for that purpose being satisfactory, the light gradually failed until I was left in utter darkness. This besides being most inconvenient, was not a little frightening, as my bath water was rapidly getting cold, and the wind was howling and moaning round the old bungalow striking fear and trembling into the bravest heart.

The lamp upon examination, proved to be in perfect working order and I was at a loss to explain why it suddenly failed.

However the following night after my bath I went along to my friend's room, and found him in a state of abject terror. Sitting huddled up on his bed he recounted to me how he, while having his bath in the bath-room with the outside door shut, but not bolted, suddenly experienced an icy draught down his bare back, chilling him to the marrow. Turning round in his bath he noticed that the outside door was open. However he continued his ablutions when again quite suddenly he noticed a draught. Turning round he saw the door slowly opening apparently by an unseen hand. Thinking someone was having a joke at his expense he leapt from the bath

![Fig. 22. The ghost of the Pindari glacier.](image)
and with an expression of annoyance suited to the occasion again slammed the door, and continued his interrupted bath. Imagine his state of terror, when for the third time he felt an icy blast down his spine and perceived the door slowly opening before his eyes. For the moment he sat in his rapidly cooling bath while beads of cold perspiration streamed from his face. Then with that superhuman effort which man can muster only in moments of extreme peril, he left his bath and again slammed the door, and this time securely bolted it with the two bolts so conveniently supplied for the purpose. Seizing his towel in one hand and his dimly-lit hurricane lantern in the other he fled into the bedroom where I found him shivering and shaking before the fire.

Only one explanation of these mysterious happenings occurs to us, and that is that the ghost of Professor Cunningham returning late at night from the Pindari Glacier, now haunts the rest-house at Phurka with the hope of catching the unfortunate Professor Noble in his bath, in order to have an examination of the bear scratches on a body so ill-suited for preserving such scratches as the stone in question” (Fig. 22).
16. Heroes All

ALL PEOPLE who visit the Pindari glacier are heroes, record-breakers, and pioneers of some sort. If one cannot claim to be the first to climb the Nandakot peak one can at least have the satisfaction of being the first in the season to visit the glacier. An army major claims the distinction of bringing the first recorded canine to the Phurkia bungalow in 1916. Canine pioneers are not always welcome. A visitor who followed the major grumbled as follows: "May I be permitted to add that dog lovers should keep their pets outside the main bungalow and to keep the place free from vermin which have tormented the writer on several occasions". A Deputy Commissioner claims the honour of taking a spaniel and a dachs aged seven months along with his wife and sister-in-law to the upper end of the medial moraine. This claim is matched by another: a suffragist who takes pleasure in varying the perpetual and irritating "My wife and I" of the log books with "My husband and I", writes "We and our fox terrier Jan, the youngest visitor to the glacier aged 7 months 21 days arrived here after a splendid trip in brilliant weather".

Talking of the youngest visitor we are reminded of the youngest primate visitors of the species Homo sapiens. A lady with two children writes with pride, "Perhaps we are the last visitors of the year 1909, and perhaps we are the only visitors who have up to date brought children so far". It is not only dachs and spaniels who have been over the medial moraine. A proud father records: "I
think this may be the first occasion for the medial moraine to be visited by so young a person as Shashibala aged only 2 years and a half". The pleasure of celebrating her birth-day in a unique fashion at the glacier, is that of a girl aged eight, who writes, "I had a lovely birth-day yesterday and went over a lot of snow. I went over more snow today and was tied with a rope and saw the top of the glacier and had a lovely time".

In this digression about dogs and children we have lost sight of the real heroes of the Pindari Valley. Warnings have been given by a number of people not to venture near the crevasses and chasms of the glacier without being equipped with ropes and alpenstocks, and also necessary arms for protection against the dangerous beasts which haunt the valley from Dhakuri onwards. Yet, "Despite numerous warnings regarding panthers, bears, man-eating pheasants, and gaping chasms, four He Men from the 3rd Indian Division Signallers left Ranikhet in September 1928 armed with nothing but a .22 bore and four khad sticks". A husband with a courageous wife makes the four 'He Men' look quixotic when he mentions, "My wife was able to climb right on to the glacier in her skirt". Intrepid explorers often perform exploits of a daring nature on the glacier ice, which give creeps to their less adventurous companions, making their hair stand on end. One of such surprised and frightened companions of a hero writes; "Mr A, one of our companions, walked straight up to the glacier on a ridge of a sufficiently steep hill at a good height. It was a hard time for us to see one of our companions taking such a risk where a hairbreadth's step would settle all accounts in this uncertain world of ours".

There are others who take a more optimistic view of things. For instance, a lady who confronts the Pindari glacier with courage and determination writes, "Looking neither to the right nor left but always determinedly pressing on to my goal I saw little of the surrounding country. At last the great moment of my life arrived and I planted my foot firmly on the glacier itself, the first of my illustrious family in the history of this great Empire to do so. Never shall I forget the joy and wonderment of that first moment when my foot slipped and I slithered down 400 feet to find myself gazing up at the most beautiful Ice Caves imaginable. I shall never be able to express my thanks and gratitude to my dear friends Mr and Mrs Z for giving me the opportunity of sleeping, or rather lying awake in our camp at Martoli; surrounded by pure white untrodden
snow, while the temperature outside sank lower and lower till it reached the point of 19 degrees Fahrenheit. My hostess always so helpful and thoughtful for my well-being supplied me with a quilt to sleep in, to which I added my own pyjamas, woollen combinations, vests, knickers, dressing-gown, stocking and scarf. Other pioneer women please note that these are essential to one's comfort when enduring the hardships of exposure. Had it not been for the ginger wine and brandy we had fortunately provided, we should never have achieved this great and perilous feat. Luckily my friend is almost a teetotaller, and with the help of a bottle of brandy we finally landed her safely at the top. Never to my dying day shall I forget the look on her face so well expressing that famous advertisement, 'She won't be happy till she gets it', as we held out the bottle and she staggered on crying loudly, 'Excelsior'!

To keep company with the heroes of Pindari, queer batches of people pay visits to the glacier. A party under the name and style of "Hunter Party of Bageshwar" consisting of a number of young men marched up to the Pindari glacier on the 31st May 1928. It proceeded to the glacier on the 31st May 1928, carrying a red flag with a bold inscription of the name of the party on it. Climbing on perpetual snow, in some places with the help of a rope, they all bathed in a snow-waterpool, worshipped the goddess Nandadevi and going a few paces up pitched the flag. A harmless exploit, planting a red flag in snow, but what an inspiration for generations to come! Such an enthusiasm for adventure-seeking is infectious and in 1933 the Indian Himalayan Expedition followed the footsteps of the Hunter Party of Bageshwar. According to its organisers, the first great achievement of the newly organised expedition was that they covered the whole distance of about 120 miles from Kathgodam to the glacier via Almora on foot in 10 days, which included days of halt at Almora. To deepen the sense of mystery and to extract admiration of visitors to come, the number of days spent at Almora are not mentioned. The second achievement of the expedition, to quote the organiser again, was that they went as far as the "bottom" of the glacier, where no one ventures to go, Traill's pass being only 1500 feet above. We have heard a little too much about the "snout" of the glacier; and it is a pity that the organiser of the expedition has left no description of the "bottom" of the beast.

A great deal is said about king-makers in history books, and Carlyle has talked himself hoarse about heroes and hero-worship.
However, in our account we have missed the “Hero-makers” of Phurki. “Who are these Hero-makers”, our readers will ask. One need not gape in surprise at this phrase. The “Hero-makers” are the chowkidars of “Phurki”, humble in social status, but past-masters in creating psychological effects. In the chronicles of Phurki bungalow we find mention of the names of Bhan Singh and Prem Singh as the ancestors of the present incumbent. To this band of “Hero-makers” we may as well add the name of Gopal Singh guide whom we meet at Loharkhet. They all assure the visitors that they have reached higher up the glacier than any sahib or memsahib has done before. Two ladies write, “We are told that we had out-distanced all other ladies”. A year later another writes, “The chowkidar and a coolie took me to the glacier, and they told me that I went further than anybody has done so far”. To those who do not aspire to mere going farther than others have done, the chowkidar has all the same something equally complimentary to say. An organiser of the Allahabad Seva Samiti Boy Scouts Association says, “The chowkidar tells us that to his knowledge such a big party of hikers as ours never attempted the glacier in such a stormy weather”. After hearing so much about the chowkidar at Phurki, you will be naturally anxious to know more about him. He is a stumpy little man with an expressionless Mongolian face and well-built calves. With a blanket wrapped around his body and held in place with strong iron pins, he meets you in front of the Phurki bungalow. He keeps his face blank like the boulders of Martoli, and seldom smiles. While taking leave of the bungalow, I asked him to pose along with my orderly for a photograph, and asked both to smile. However, the results were not encouraging. While the orderly complained that his lips were too sore and painful for a genuine smile, the chowkidar who had no such complaint put on such an eerie expression, that I changed my mind and decided to snap him without a smile. However, his stamina and hardihood are amazing. Bare-footed, he leads the way at a hot pace. A visitor writes: “While we clambered up cliffs and slithered about, the chowkidar with blanket coat leapt from rock to rock like a mountain goat while my heart kept leaping to my throat”.

It is with reluctance that we leave the heroes and hero-makers and turn our attention to intellectuals who are different from all the rest. Three intellectuals came to Pindari and wrote, “We must however note here that we came with a different angle of vision
from that of the ordinary pleasure-seekers and adventurers. When we stood in front of the majestic Pindari and Bankattia glaciers, the sun shone at the right moment, and the hoary Pindari seemed to smile at our efforts and we retired!”
17. The Kumaonis

IN THE ecology of the people of Kumaon Himalayas, altitude and mountain barriers play a considerable part. As in the case of vegetation, a zonal distribution mainly determined by altitude and the consequent temperature, rarefaction of atmosphere and other factors, is noticeable in the distribution of man also.

Four distinct population zones can be recognized in the Kumaon Himalayas. Firstly the Trans-Himalayan Tibetan Zone at an altitude of 15,000 feet and above. Secondly the Inner Himalayan Bhotian Zone from 10,000 to 15,000 feet. Thirdly the Middle Himalayan Khasia Zone from 6,000 to 10,000 feet, and fourthly the Outer Himalayan Kumaon Zone from level of Bhabar to 6,000 feet (Fig. 23). These zones insensibly merge into one another and are only distinct in their upper limits as in the case of vegetation. Apart from climate, racial factors also come into play.

1. Trans-Himalayan Tibetan Desert Zone

The plateau of Tibet is situated at an average altitude of 15,000 feet. Geographically, it is neighbouring region of the Kumaon Himalayas and exercises an important influence on the Bhotian Zone. On account of high altitude the Tibetan climate is exceedingly rigorous. Snow remains on the ground for about six months and zero temperatures prevail. The cold is accentuated by bitter winds which are blowing most of the time. There is considerable truth
from that of the ordinary pleasure-seekers and adventurers. When we stood in front of the majestic Pindari and Bankattia glaciers, the sun shone at the right moment, and the hoary Pindari seemed to smile at our efforts and we retired!”
ground into flour and mixed with sugar. Barley grows sheltered in valleys but the local production is scanty, and they mostly obtain it from Bhotias in exchange for salt and borax. All these factors have produced a race of people extremely hardy and tenacious, who are capable of withstanding low temperature, dry cold winds and rarefied atmosphere, as no other people can. Their pet animal is the yak which is even more adapted to high altitudes than the people and seldom survives when brought below 10,000 feet. Apart from yaks which are used as beasts of burden, the Tibetans also keep flocks of sheep, who are also inured to low temperature and are protected by thick coats of wool. In such desert conditions, settled cultivation is possible only in a few places where water is available, and most of the people lead a nomadic existence grazing sheep and yaks from pasture to pasture. The bulk of the population consists of these yak and sheep-rearing nomads, the Dokpas, who are honest and fairly hard-working and are the producers of wealth. Preying upon them are three classes of parasites, the lama priests who lead an indolent life in lamasseries and gompas chanting 'Om Mani Padme Hum' and revolving prayer-wheels and drums, the robbers who rob the shepherds and the pilgrims, and thirdly the officials, Urga Gongs, Urga Hogs, Jongpens and Garphans who fleece the Dokpas, lamas and the bandits impartially and maintain a semblance of order. Conditions of life in deserts, whether in Arabia or in Tibet or the Tundras are exceedingly hard and people lead dull and lonely lives. The vast silent spaces of deserts are conducive to introspection and religious fanaticism and we see the birth of Islam in the Arabian desert, of the Zoroastrian faith in the Persian desert, and of Judaism and Christianity in the desert of Palestine, and of Lamaistic Buddhism, a curious mixture of demonology and Buddhism in Tibet. There is a curious parallelism in the lives of the people of the Trans-Himalayan desert with those of the Sub-Tropical Desert of Arabia, and Tundra desert of Siberia. All these three desert zones has a nomadic population, the Eskimos in the Tundra, the Bedouins in Arabia, and the Dokpas in Tibet. Each of these desert zones had a pet animal for food and transport, the reindeer in Tundra, the camel in Arabia and the yak in Tibet. In the immense waste of Tundra snow, Arabian sand, and Tibetan rocks we find oases; of lichens in the Tundra, of date-palms in the Arabian desert and of alpine pasture-land in Tibet. While in the Siberian Tundra, thanks to the energy and scientific-mindedness
in the saying of the jackal of the Hitopdesha fable that it is not the months of December and January which bring cold weather, but it is the winter wind. Those who live in cold countries know that it is easier to bear 60° of frost when the wind is slow than 15° of frost with a raging wind. In winter months the temperature falls more steeply at high altitudes; it was observed at the Meteorological station at Agra that while there is a fall of 1° for a rise of 179 metres in August, in October there is a fall of 1° for a rise of 159 metres. On account of the rarefaction of the air there are great contrasts in temperatures in sun and shade at the same place; even in summer, while in the shade water is freezing, in the sun it may be quite hot. There is a similar contrast in night and day temperatures; while the day may be fairly warm, the nights are freezingly cold. The explanation is simple; the blankets of air which keep the temperature steady in the plains are fewer at high altitudes. The rarefaction of the air also causes difficulty in breathing, and people from the plains experience splitting headaches due to the deficiency of oxygen in the air. Rainfall is scanty and evaporation is exceedingly rapid.

Fig. 23. Population zones in the Kumaon Himalayas.

All the above mentioned climatic factors affect both man and vegetation. Vegetation consists mostly of xerophytic cushion or ball-like plants of caragana and thylocospernum, and straggling mat-like junipers. These plants along with dried dung of yaks furnish scanty fuel to the inhabitants. On account of extreme cold the inhabitants seldom wash and bathing is a virtue which is not appreciated. Most of the time they are drinking salted tea flavoured with rancid butter. As fuel is scarce and not easily available at most places, they chiefly eat tsamba (sattu), roasted barley
ground into flour and mixed with sugar. Barley grows sheltered in
valleys but the local production is scanty, and they mostly obtain it
from Bhotias in exchange for salt and borax. All these factors
have produced a race of people extremely hardy and tenacious,
who are capable of withstanding low temperature, dry cold winds
and rarefied atmosphere, as no other people can. Their pet animal
is the yak which is even more adapted to high altitudes than the
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and are protected by thick coats of wool. In such desert conditions,
settled cultivation is possible only in a few places where water is
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sheep and yaks from pasture to pasture. The bulk of the population
consists of these yak and sheep-rearing nomads, the Dokpas, who
are honest and fairly hard-working and are the producers of wealth.
Preying upon them are three classes of parasites, the lama priests
who lead an indolent life in lamasseries and gompas chanting
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robbers who rob the shepherds and the pilgrims, and thirdly the
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rocks we find oases; of lichens in the Tundra, of date-palms in
the Arabian desert and of alpine pasture-land in Tibet. While in the
Siberian Tundra, thanks to the energy and scientific-mindedness
of the Soviet Government, the radio and the aeroplane have broken the isolation of the people, the Tibetans still lead sordid lives cut off from the rest of the world by high mountain barriers.

II. **Inner-Himalayan Bhotian Alpine Zone**

Both from the point of view of human and plant ecology, the Bhotian zone which extends from 10,000 feet to 15,000 feet, is the most interesting. The tree limit in the Kumaon Himalayas is reached at an altitude of about 11,000 feet. At that altitude we find only shrubs of rhododendrons and salix and alpine meadows with flowering herbaceous annuals of numerous varieties. This region of snow peaks, glaciers and high passes is inhabited by a most interesting people, the Bhotias, a semi-Mongolian people belonging to the Tibetan branch of the Himalayan group of the Tibeto-Burman family. Numbering about 15,000 the Bhotias fill the alpine valleys of the Central Himalayas, and on account of their physical, and racial characteristics form an interesting link between the Trans-Himalayan Tibetan Desert and the Middle Himalayan Khassia Zone. They are accustomed to high altitudes, and furnish excellent human material for mountaineering in the high ranges of the inner Himalayas. They have little caste nonsense about them and freely intermarry with the Tibetans. This factor alone places them at a point of vantage against any possible Hindu competitor. They are shrewd businessmen and ardent mountaineers. Some of them have done very well in the Survey of India. Nain Singh C.I.E. the Pundit A of Tibetan Exploration 1856-76, and Rai Bahadur Kishan Singh, the Pundit A.K. of Tibetan Exploration 1869-93, both residents of Milam, distinguished themselves as secret explorers in Tibet. Manee Bhotia who was later appointed Patwari of Darma did commendable work under the Great Trigonometrical Survey and with the German mountaineer and traveller Schlagintweit. Diwan Singh Martolia is the only living person who knows the secret of Traills Pass and has guided a number of persons including D. Vira, S.S. Khera and Gansser, the Swiss explorer.

The Bhotias are the only Kumaonis who drink alcoholic liquor which they brew in their homes from barley. Perhaps they are more in need of alcoholic heat and stimulation in the cold of high altitudes as compared with the Kumaonis of the foot-hills. Jhaboos, the yak and cow hybrids, are the main beasts of burden of the Bhotias in
the higher regions along with goats and sheep which they bring to the lower foot-hills laden with salt and borax. All along the Tibetan routes they establish depots for the storage of their merchandise and for sheltering their womenfolk who weave blankets and brightly coloured carpets and look after children and cattle, while the men-folk are busy travelling from Tibet to Bageshwar and Almora. Sherring, who was Deputy Commissioner of Almora in 1906 has left an interesting description of these fascinating people. His account of Bhotias still holds good with a few modifications. Describing the land of Bhotias in his book ‘Western Tibet and British Borderland’ he writes, “Bhot, or more correctly Bod, is really the same word as Tibet. The Bhotias of our hills are found in that very tract of country which has been described above as being so very sacred to the Hindus, viz., all along our Tibetan border, from Nepal on the east to Tehri State on the west, for a distance, roughly speaking, of thirty miles south of the border line. They are to be found at the mouths of all the passes into Tibet. Those by the Mana Pass, near the holy temple of Badrinath, and those by the Niti Pass are known as Tolchas and Marchas, whereas those by the Untadhura Pass, in Johar, are Shokas (otherwise called Rawats), and amongst them there are also some Tolchas and Marchas. All these compose the western division of the Bhotias, who are in their own estimation superior to all other Bhotias, with whom they will not eat or marry, and whose ordinary language they cannot talk, as they have forgotten it. South of the Johar Bhotias are the Jethora Bhotias, who do not trade but are cultivators. These have a Tibeto-Burman dialect of their own (called Rankas or Shokiya Khun), and consider themselves the first settlers (Jeth means elder brother), and as such, far superior to all other Bhotias, though, as a matter of fact, they are severely left alone by the others of their race for no apparent reason as they seem particularly harmless. Lastly, there are the eastern Bhotias, living in the pargana of Darma, which is sub-divided into three pattis, or sub-divisions, viz., Darma patti, the inhabitants of which use the Neo, or Darma Pass, and Chaudans and Byana pattis, whose residents use the Lankpya Lekh, Mangshan and Lipu Lekh Passes, and frequently also the Tinkar Pass of Nepal. These are much more backward than the others, and their customs are, therefore all the more interesting; they have a Tibeto-Burman dialect of their own, and are much nearer akin to the Tibetans. They are looked down upon by the other Bhotias, because of their primitive
ways, and, although all Bhotias call themselves Hindus, the knowledge of the eastern Bhotias about Hinduism extends to little more than the name, whereas the western Bhotias, and Jethoras, have made some progress in Brahmanical rites and customs. All Bhotias everywhere are divided into two castes, viz., Rajputs, or upper class, and Dumras, or low caste. This accounts for primitive customs even amongst the western Bhotias, for, although the upper class clings more and more to Hinduism, the Dumras are still partial to the old ways.

In the matter of dress there is a great difference between the western and eastern Bhotias. The men, it is true, generally dress in woollen-stuffs of home manufacture, their garments being the coat, trousers, and cap familiar among hillmen, with the very general addition of a long frock-coat, while their shoes are the same as are worn everywhere in the hills, though sometimes they take the form of woollen boots of chequered colours, which come from Tibet and are soled with rope very ingeniously and finely plaited. These boots are called Baukch, or Babch, and are found everywhere, except among the Jethoras, who do not visit Tibet. They cost three to four rupees a pair. The women, on the other hand are different from the ordinary hill women. The western women wear a skirt, coat, shirt, and waistcoat, and finally a headgear, which goes one to one and half yards down the back and with which the face can be covered (Plate XXVII).

The Eastern Bhotias of Byans and Darma are a romantic people. They have the delightful marriage institution of “Rambang” and are in fact the only people in the Kumaon Himalayas who resemble the Europeans in practising free love and their women have the option of selecting their life-companions. Women do not observe purdah, and do not run away like wild cattle on seeing strangers. Describing a visit to Chaudans patti, on the border of Tibet Shering writes, “This is Chaudans, the country of the Bhotias, and one immediately realises that it is a different country, inhabited by a totally different people, whose faces, religion, dress, and surroundings are entirely at a variance with all that is to be found further south. We are amongst Mongolians, amongst women who, like the little Japanese, laugh at everything and everybody, and prayerpoles, where stone pillars send off spirits and ghosts from the homestead, where men whistle to the sheep and goats which carry precious burdens on their backs and sneeze at the ponies or mules which
they ride, and where yaks and jibboos replace the homely acttle
of the lower hills. It is a strange country which charms at first sight,
and for which one forms a singular attachment, that never grows
cold.

Further, throughout all the domestic details of life the eastern
Bhotias invariably put women in a high place, in this way differing
radically from Hindus.

Some of the Bhotias of the more distant valleys still retain their
pristine religion and customs; they worship the great god Gabla
for prosperity in business, and Kebang-Rang-chim, who is both
male and female, and sacrifice a goat covered with red earth to the
deity Chan for mountain sickness, invoke Sain to show them where
a lost sheep or goat may be, and worship the goat-herd brothers
Siddhua and Biddhua to restore health to their ailing flocks. Women
too, have the greatest liberty; they can, amongst the eastern Bhotias,
pick and choose their own husbands, and matrimony is compulsory
for none. The Bhotia maid has to be wooed and won, and if her heart
is not in the arrangement, no marriage takes place.

The Bhotias are a hardworking, practical race, but withal most
superstitious. They are always at work, both men and women,
and in their idliest moments are still spinning thread for weaving,
and in all their business are most capable and clearheaded. Still,
this is the race that is in the clutches of a superstition that permeates
all their life. They attribute all sickness to evil spirits; a returning
traveller before entering his village confines thorns and nettles under
stones, thinking that in this way he has laid the evil spirit, and this
practice is common at the heads of passes, near dangerous bridges,
or in difficult places."

III. Middle-Himalayan Khassian Zone

Roughly this zone extends north of a line running from Baijnath
in the west through Bageshwar, Berinag. As lot up to the border
of Nepal. Most of the places in the region are from 3000 to 10,000
feet in altitude. This region differs from the outer Himalayan
Kumaoni zone in two ways. Firstly the population is predominantly
Khassia Rajput and secondly the inhabitants do not migrate to
Terai and Bhabar in the plains during winter like the people of the
outer Himalayan zone. They are mostly cultivators and shepherds.
In the summer months a section of the population is busy grazing
goats, cows and ponies in the meadows and forests at an altitude of 8000 to 10,000 feet, and in winter they are nearly all back in their villages situated at an altitude below 8000 feet. As a typical example we may take the people of Danpore pargana above Bageshwar who live in Kapkot valley and at Loharkhet. Atkinson is of opinion that Khassias are identifiable with Khasas, a war-like Aryan or Scythian tribe who settled down in hilly country extending from Kashmir in the north-west to Nepal. They have typical Aryan features. As the land available for cultivation is very limited, the surplus population seeks relief by joining the Army and the Khassia region provides an excellent recruiting ground for the Army. The Khassias are much less orthodox than the people of the outer Himalayan zone and the pernicious influence of Brahmanical caste system has not affected them to the same extent. They are also less punctilious in the observance of Brahmanical ritual. They resemble the Jats of the Punjab in many ways. Both the Khassias and Jats

are of Aryan origin, are warrior races, are good cultivators, are unorthodox, and the custom of levirate prevails in both the communities. When an elder brother dies, his widow can live with the younger brother as his wife. The Khassias are a cheerful good-

Fig. 24. Khassia women at a loom.
natured set of people, and considering that they are comparatively free from Brahmanical prejudices, they will be soon in the vanguard of progress. People of other castes such as Brahmins, Bania, and Doms are also found in the Khassia zone, but they are comparatively of secondary importance as Khassias are the principal land owners and cultivators.

IV. Outer-Himalayan Kumaoni Zone

The outer Himalayan Kumaoni Zone is restricted to the lower foothills below Ranikhet, Almora, Pithoragarh and Champawat. This is the most populous zone and extends from 8000 feet to the level of the plains. Most of the inhabitants migrate to the Terai and Bhabar in the plains during winter. There is a numerical preponderance of Brahmins, Bania, and Doms in this region. The Doms whose economic and social position was not far removed from a state of slavery not many years ago, are the aborigines of Kumaon. They claim to be the drummers of Shiva, who followed him when he came to the Himalayas to take up his abode among the snows. They were certainly present in Kumaon before the advent of Scythian Khassias. They are mostly masons, carpenters, and metal-workers by profession. Some consider them as related to the Gypsy nomads, who are found all over Europe and Asia. The Doms are hardworking people and their lot is far better now due to the decline of orthodox Brahmanism and the spread of education.

The most influential people of this zone are the Brahmins, the Joshis, Patts, Pandey, Bhattts and others. Most of them live at Almora and have fully availed themselves of the educational facilities of the town. They are mostly immigrants from the plains who came to Kumaon as priests, advisers and officials of the Chand Rajas. The average level of intelligence is very high among the Brahmins and they have produced very capable lawyers, administrators and professors. Among the educated classes orthodoxy is waning and progressive ideas are prevailing. Along with the Sahs and Bishts, the Brahmins of Kumaon are one of the most progressive people in India, and have attained a high cultural level.

Next to Brahmins in importance are the Sahs, the Bania. Physically they do not appear different from the Brahmins and Rajputs. As compared with the Bania of the plains, they appear different people for they are seldom fat and dark. The strenuous life in the hills which involves considerable climbing up and down, leaves
no opportunity of developing a paunch. The Sahs, Brahmans and Rajputs are all pale of complexion with thin and sharp countenances, and lean and wiry bodies. Most of the bungalows scattered all over Kumaon are owned by Sahs, who have purchased them from English tea-planters and owners of apple orchards. In the latter part of the nineteenth century some retired Englishmen settled down in Kumaon, planted apple-orchards, tea-gardens and built magnificent bungalows after the style of English country houses. However, this colonisation effort proved abortive, and most of the property of these colonists has passed into the hands of the Sahs.

The town of Almora is a microcosm within a macrocosm. It illustrates the effects of the impact of western culture and mode of life on the native life of Kumaon. The motor lorry has broken their isolation from the plains and the people of Almora and the neighbouring villages no longer lead an insular existence in their mountain homes and the valleys are no longer sealed from the influence of the plains. On account of their insular position hill people are prone to develop a parochial outlook, narrowness of vision, pettiness and jealousies. The lorries and the radio will undoubtedly widen their mental horizon. At the same time certain evils are also bound to creep in. It is an admitted fact that the Khassias of the Middle Himalayan zone who have never seen a railway train or a motor car are more honest and truthful as compared with the people of Almora. However, this cannot be helped, for such evils are found to arise in the transitional stage and with greater education and social stabilization the people will certainly improve after they have assimilated western culture and science and developed a culture of their own. In education the town of Almora is in no way behind any other town of an equal population in the rest of India. As Pt. R.D. Bhatt says, reading in schools is the profession of the people of Almora, as cultivation and soldiering are the professions of Khassias. The citizens of Almora are rightly proud of their high percentage of literacy. The effects of a system of education whose goal is the mass manufacture of office clerks, are fully evident in Almora. While a small percentage of educated Kumaonis is employed in lucrative Government jobs, both in the hills and in the plains, others drift about swelling the ranks of briefless lawyers, and unemployed clerks. The more virile among them, disappointed with life, which holds no hope nor promise for them, join the ranks of political parties. It may be said without exaggeration that there is no town
in India whose inhabitants are as politically conscious as those of Almora. When you go for a walk in the evenings on the Mall, the solitary road of Almora, you will come across groups of students gesticulating and discussing political subjects in a loud tone. There is a shop on the Mall, where you can always meet a group of Almora citizens discussing current events and politics with so much zeal, that a new-comer may easily conclude that a minor brawl is going on.

The legal profession is very much overcrowded at Almora, and the town is full of young lawyers. Populated by middle class Kumaonis, who gravitate to Almora from their village homes, Almora bears the stamp of the middle class with its pruderies, petty bourgeois morality and jealousies. On account of its exuberant democratic tendencies, the town is torn by factions and party strife. Strange as it may seem, when their interest comes in conflict with those of plains' people, whom they call 'Deshis', the people of Almora develop a sense of solidarity which is surprising. This in itself is a relic of their former isolation and will disappear in course of time when there is greater understanding between the hillmen and the people from the plains.

In the matter of dress the educated people are in no way different from those of the plains. They all wear western clothes, which are more suitable for their climate than dhotis. However, most of them combine a cloth cap with western coats and trousers. The cloth cap is economical as compared with a felt hat and is also a symbol of nationalism. So it is likely to stay for some time. The women of the middle classes wear saris as in the rest of India, which is undoubtedly the most graceful female attire in the whole world. If our men have borrowed items of dress from the West, our women can pay back the debt by encouraging the use of saris among the women of Europe.

Among the poor people also we see a dress revolution in progress. The shorts and shirts are displacing dhotis and pyjamas in the villages. The process is more marked in Khassa villages which have furnished recruits for the army. When these men come back to their villages from the army they no longer remain slouchy villagers shuffling about in clumsy dhotis and pyjamas but appear disciplined well-built men, smart and well-tailored. Their more backward brethren still wear breeches-like pyjamas inside which they tuck in their shirts in an unbecoming fashion.

The dress of the women, especially that which they wear on festive
occasions is picturesque. They wear a black 'lahnga' (petticoat) and embroidered velvet blouses closed at the neck, with long sleeves. Like their sisters in other parts of the world they are fond of ornaments, and apart from large nose-rings which are supported by a thread tied to the right ear, they wear silver haslis, bangles and cheap necklaces of scarlet beads.

Women work very hard in the villages, and the burden of cultivation in Kumaon rests on their shoulders. Besides being domestic drudges, they cut grass, hoe the fields and harvest the crops. Because they are so valuable as agricultural labourers, it is not uncommon to see Kumaoni villagers with two or more wives. The lot of the women is really pitiable, and their faces become hard and expressionless like stones in a few years. Recently the spinning wheel has come to their rescue, and in some villages women have taken to it with great zeal.
THE DISTRICT Courts at Almora are housed in an ancient castle-like building, which was built by Raja Rudar Chand. The Gurkhas who ruled Kumaon before the British occupation converted it into a strongly fortified place. To make it doubly secure they denuded the mountains around Almora of all trees, and the town has not yet fully recovered from this act of Gurkha vandalism. In spite of its battlements, towers and grim exterior, the building has now become a harmless seat of quill driving, where a number of office clerks and magistrates assemble every day at 10 a.m., scribble piles of papers till they disperse again at 5 p.m. It is accessible from the Mall, the solitary tarred road of Almora, by a long flight of stairs. By the time one has climbed all the stairs, one is left panting, short of breath and bereft of dignity. It required quite an effort on my part to regain composure and to wear that solemn expression, which people expect from a magistrate, when I had finished my daily ordeal, and was accosted by the court peons and orderlies bending low in a servile fashion and salaaming. The verandahs of the court rooms as well as the platforms below the shady trees in the compound were full of the crouching figures of litigants from various parts of Kumaon, some of whom had walked scores of miles from the remote recesses of pargana Baramandal to seek redress for their grievances. For the first few days my appearance in the court verandah caused little excitement, but after a week or so when the pleaders, their clerks, and the petition writers had
become familiar with my physiognomy, my arrival used to cause a considerable commotion among the crowd in the verandah. The pleaders and their agents arose hastily to greet me and their village clients taking the hint from them retracted their sprawling limbs in all haste and conveyed their namaskar with folded hands.

My court room with its wooden roof and its frame-work of heavy beams and rafters had a strangely mediaeval appearance. On a platform was spread a table covered with an ink-stained blue flannel table cloth. On one side was a musty book-case with a row of ancient-looking law books, most of which seemed to have been lying untouched for ages with their pages uncut. On the other side sat the court reader, a bespectacled middle-aged Brahman of Almora with a pair of heavy moustaches. Opening the files, he began to initiate me into the mysteries of the land laws of Kumaon. While the Kumaon land laws are simpler than anything known in the plains, and ceased to be mysterious in about a week, the spidery Hindi writing of the reader remained an unsolved mystery to me right up to the time I left Almora.

If the Sub-Divisional Magistrate of Almora was not encumbered with dull money suits, which are decided in the plains by civil judges, his work can be called interesting and pleasantly varied. He usually deals with a number of petitions for cultivation of Government land, which means the scratching of a hill-side covered with young pine trees. Pressure of population is great, and land available for cultivation is limited. Consequently most of the applications are rejected. The water resources of Kumaon are meagre, especially around Almora, and applications for running a water-mill on a stream which is already being taxed to its full capacity by the existing water mills, are tried like regular suits, and a finding is given whether a new mill can be run on the existing water supply. Thus law courts are given a task, which could be more efficiently executed by engineers, and magistrates with poor knowledge of hydraulics, muddle through assisted by equally unqualified lawyers. The Sub-Divisional Officer has also to deal with a number of applications for grant of land for building houses and cow-sheds. Such applications are usually given by the poor shilpkars, and are strenuously opposed by the land-owners, Brahmans and Rajputs. Prejudice against the lower castes is so strong in the hills, that in some villages, the higher caste Brahmans and Rajputs will not allow their bridegrooms to ride on ponies or palkis. It is regarded as an insignia of respect-
ability to be carried like a corpse in a palki, and the efforts which
the villagers make to ride on ponies and palkis are pathetic indeed!
That they attach so much importance to it is evident from the fact
that a regular agitation developed in the neighbouring district of Garhwal about this ‘Dola Palki’ question. It is surprising that
such conditions exist even now in India and that so much impor-
tance is attached to such trivialities. Our social and economic system
is strangely petrified and all over the country we see fossils of ancient
prejudices, superstitions and obsolete customs which have passed
into the limbo of oblivion elsewhere but still continue to linger
on here.

Crime in the hills is rare and criminal cases occupy only a fraction
of the court-time of the Sub-Divisional Magistrate of Almora.
Violent crime is very rare in Kumaon and during my six months
stay at Almora, I had occasion of inquiring into only two murder
cases. In one case a woman of about 50 was murdered under very
mysterious circumstances. She was a merry widow who in spite of
her years was leading a gay life in the village. There was evidence
that she even had boys of sixteen as her lovers, who spent many
nights at her house, when her only son, a young man of 25 had gone
to Tarai Bhagar to earn his living. The motive of the crime appeared
to be jealousy among her crowd of lovers. The criminals had done
their work so thoroughly that only a few bones denuded of all
flesh by vultures, pieces of scalp to which dark matted locks of hair
were attached, some rags covered with blood, and broken necklaces
of crimson beads hanging from the branches of bushes were the only
ghastly relics left of the woman. These were duly exhibited in the
court. Evidence produced was extremely unsatisfactory and it
appeared that the case was prosecuted more on moral than on
legal grounds. Ultimately the entire crowd of lovers who were
hauled up by the patwari, were let off, some during the magisterial
inquiry and the remainder by the Sessions Judge, who finally tried
the case months after the termination of the inquiry.

The other murder case was from Ranikhet Sub-division, which
was sent to me as the local magistrate, L.F. Niblett, had made
certain investigations and was produced as a witness. It was of a
particularly gruesome nature, and it haunted me for months after-
wards. A very pretty married girl ‘Bachuli by name’ whose husband
had gone to Bhagar to earn his livelihood was the object of un-
welcome attentions from two village lads. One day while she was
coming from the jungle with a bundle of grass on her head, both the boys met her on the way. They started making love to her and she abused them roundly. Her father-in-law on his way to Ranikhet passed by, but out of modesty she did not say anything to him about the conduct of the boys. When the old man vanished out of sight, they threw her on the ground, one of the accomplices gagged her, while the other raped her. When all was over, the girl threatened that she would tell her people everything. On this the chief culprit throttled her to death. Taken aback at what had happened, the criminals began to remove the traces of their crime in a gruesome manner. With a sickle they severed the head of the corpse, removed all the ornaments, and buried the head in one corner, and the body in another corner of the field. In their hurry they could not dig a very deep pit, and the body was dug out by the village dogs. Both the murderers were arrested by the village patwari on suspicion, and one of them turned an approver, and made a confession revealing all the facts. On his pointing it out the head was discovered, as well as ornaments and clothes of the woman. Blood-smereared ear-rings, necklaces, silver bangles along with the clothes of the girl were exhibited in the court. The blood-curdling facts of the case in which a pretty young girl was done to death in such a cold-blooded manner made me almost sick with horror. One does not feel so sorry for old people, for they have seen life, and experienced all its sensations, but the death of a young woman on the threshold of life appears very tragic. The trial dragged on for months in the Court of Sessions and I had left for Allahabad in the meanwhile. One morning at Allahabad on opening the ‘Leader’ newspaper I learnt with great satisfaction that both the murderers were duly hanged.

Applications for grant of maintenance from deserted wives are often filed. I remember a case in which a woman, almost maimed by leprosy, applied for maintenance on the ground of cruelty from her husband. The husband, who had two more wives, would not leave the leper-woman whom he was keeping as a cowherd and could ill spare, for he could not get a cheaper substitute. The woman who was treated no better than a pariah dog would not go back. I allowed them two hours together, and happily they came to some understanding, and the woman withdrew her application. I wonder if that blue-beard kept his promise of treating the woman fairly.

Abduction cases of grown-up married women, popularly known
as 498 cases, after the section of the Indian Penal Code, were also common. These cases lifted a corner of the veil which covers so much human misery not only in Kumaon, but in the whole of India, where marriages are arranged on social and financial grounds only, while the consent of the marrying couple, who seldom have a chance of seeing each other before marriage, is of no consequence. Invariably in such cases I found that the husband-complainant was an old man, victim of senile decay married to a young girl, or a feebleminded, impotent-looking imbecile. There can be no doubt that women run away from such persons on account of physical incompatibility. I remember in a couple of cases, the run-away wives who were produced as witnesses openly alleged impotency on the part of the husband. In such cases applications are invariably given praying for the issue of a warrant against the woman. The service of warrant is usually a difficult matter and, if successful, it enhances the interest of the case. When the woman stands in the witness-box, her face is anxiously watched by her lover, whose fate depends upon her statement, and by the husband who puts on a benign expression to melt her heart. Some times the aggrieved husband collects a large crowd of his friends armed with lathis, and when the woman steps out of the court compound, she is forcibly carried away, especially when her lover commands no following in his village. In most cases, this means the end of the case, unless the husband proves to be vindictive which he seldom is.
19. Gods and Ghosts

OURS IS an age of iconoclasm; the old gods are being thrown from their pedestals, and discarded into the limbo of oblivion. Before the onslaught of scientific rationalism, the gods and ghosts are retreating, and not in the West alone. Modern means of communication have abolished the isolation of the Himalayan valleys, and the Kumaonis are also bearing the impact of modern ideas.

About a century ago the gods and ghosts in Kumaon were so numerous that Traill, the first British administrator, found the population almost equally divided into two classes, human beings and gods and ghosts. Since then Kumaon has been exposed to the influence of westernisation and before the march of knowledge the gods and ghosts are in retreat. From the towns they retreated to the villages, and from the villages they escaped to the jungles and mountains. They are finding no peace even in the mountains and from the cultivated valleys they have fled to the snows and glaciers of the Bhotian Alpine zone. Even in the snows they are being relentlessly pursued, and the Abominable Snowman, the Mirka Kang Admi of the Himalayan mountains, when tracked down was found to be merely the Himalayan bear, *Ursus Arctos Isabellinus*. We all love illusions and enjoy cobwebs of fancy and are sorry to discover that our favourite gods and pet ghosts are nothing but avalanches of snow, angry bears or restless insects producing strange sounds in the rickety beams of old houses.

There is a common belief among Indians that persons who have
XXV. Roses and Spiræas
XXVI. Deodars and temples—Jageshwar
XXVII. Temples at Jageshwar
XXVIII Five Bhotia belles
died a violent death by murder or drowning and whose funeral rites have not been performed become ghosts and haunt rivers, gorges and forests. Brahmans who are the main beneficiaries of funeral rites have sedulously encouraged the belief that these ghosts require to be appeased by offerings. Bachelors who remain unmarried till middle age become Tolas’ (will-of-the-wisps) and dwell in solitary places. They are particularly apprehensive of Chancharis or fairies, the ghosts of young unmarried girls who flit about disconsolately on mountain tops plucking flowers, pathetic victims of sex suppression. The ghosts of persons killed in hunting are called “Airies” and are said to be seen wandering in the forests where they died, hallooing to their spectral dogs.

Even the faithful admit that the gods and ghosts frighten only those who are afraid of them, and themselves are afraid of people who have the courage to defy them. One such brave Kumaoni who had the courage of catching Masan, the king of demons, by the beard was Anariya, whose descendants live in the village of Anariyakot near Almora and still exercise considerable authority among bhoots. Oakley in his Holy Himalaya describing the adventure of Anariya with the King of Demons writes:

“The people of a village called Anariyakot, not far from Almora, are credited with the power of exorcising evil spirits. They obtained this reputation in the following way, according to the local legend. Down by the river Sual, to the east of Almora, there is a burning ghat, where the corpses from the town are usually cremated. At this ill-omened spot demons would rise up on dark moonless nights and beat their drums with horrid din, and dance, waylaying the hapless villager going late to his home in one of the hamlets across the river. Some of these goblins were headless, some without legs or arms, some with bleeding eyes jutting out of their heads, some with eyes sunken like two holes, some with bleeding hair, some with huge faces and projecting teeth, some walking on the ground and bearing their king, who was in a still more appalling form, in a litter, others flying and dancing around him, but all (and this point is much insisted on) with their feet turned backwards. There was once a man of this village, named Anariya, who was a person of extraordinary courage. When the grisly procession met him repairing to his village by night, he rushed forward in his desperation and seized the leader of the demons, and in spite of all their threats and fearful gibbering kept hold of him until at last
the king of the ghosts was forced to submit and ask what he wanted. Then there came into the valiant rustic's head the idea of demanding from the demon king the greatest boon that he could imagine, namely that all the rich manure-heaps in the village of Khatiyari on the other side of Almora, should be transferred to the fields of his own village, and that all the millet crops near his village should be weeded without any exertion on the part of the owners. The ghost king had to consent, and was then liberated. Next morning when the hero awoke, he looked out of his cottage-door and found to his wonder and delight that the village was full of heaps of fine manure; but when he went to examine the millet fields, he saw that the plants had all been pulled up along with the weeds. Great was his wrath; and having lost all fear for ghosts since his last night's encounter, he set out with a big cudgel that same midnight to waylay the king of demons. Again the weird procession met him by the river, and he again seized the king riding in his "dandi" and holding him tightly by the neck flourished his shillalagh, and in a loud and fierce voice reproached him for the damage done to the crops. The ghost, quite humbled, pleaded that they did not know how to weed fields, and that their mistake had been quite unintentional. Thereupon the villager with many hard words for their stupidity, explained the proper mode of weeding, and before he released their king made them promise to impart to him and his descendants the power of exorcising any of them from the body of any person of whom they had taken possession, and that all of them would be at his service in future. He then went home, and in the morning found all the fields properly weeded. Ever since that time the members of his family have been famous exorcisers in all the country round, and their services are in requisition whenever any poor peasant has to be delivered from possession by a demon. The ghosts now-a-days never appear to any one in that village, so terrified were they by the brave Anariya."

When medical aid was not within reach of the average Kumaoni he placed considerable reliance on the curative powers of his gods. When he got an attack of malaria, he ascribed the shivering and headache to possession by an angry god who must be propitiated through the agency of the village oracle or gantua. The ritual observed by the victims of disease as described by Oakley in 1906 is as follows:

"In Kumaon when a person is suffering from any calamity he seeks out the deity or ghost to be propitiated, by going to a gantua.
The relations of a man attacked by serious disease go early, fasting, taking a handful of rice (called pearls!), with a pice or farthing, to the sorcerer, and present them to him. He keeps the pice as his fee, and, taking the grains of rice in the palms of his hands, moves them up and down, uttering incantations and names of the local gods and ghosts, professing to calculate by the movement of the grains of rice. He then declares who is the cause of the trouble, and gives advice as to the worship of the deity whom he names, and to whom the disorder or misfortune is ascribed.

When the name of the god under whose baneful influence the afflicted person has fallen has been thus ascertained, resort is had to the “dungaris”, a devotee or “dancer” of the particular deity. The name is derived from “dungari”, which means a hilltop, as these rustic rites are often performed on mountain-tops, where the dungaries usually reside. In case of sickness very frequently he is invited to the house; and on his coming and taking his seat there, incense is offered to him, and he is begged to make himself at home and overlook any faults inadvertently committed by the afflicted person or by any other member of the family. Then a little tobacco is given him to smoke in a “katori”, or earthen vessel used for the purpose. After smoking it the man appears to show signs of intoxication or narcotic influence, and then suddenly jumps up with a wild yell. This is supposed to be the moment when he is “possessed” by the deity. Incense is again offered to him as the incarnation of the god, and he is humbly entreated to cure the sick person. At this stage the man sometimes remains mute, and deaf to all entreaties. Again and again he is besought with clasped hands and many prostrations. After a while the god deigns to attend, and the inspired man utters some stammering and mystic words. Then he unfolds the cause of the disease or calamity, and enjoins certain gifts, offerings, or services for the satisfaction of the offended deity.

Besides such occasional worship, there are concerted dancings held in honour of the gods to obtain deliverance from their wrath. Any person who is suffering from a special misfortune, believed to be due to the displeasure of a spirit or demon, collects his family and friends and gets them to dance, either in his own house or at the temple of the god, which is often merely an erection of a few stones. This dancing goes on from one to twenty-two days, or even in some cases, is repeated daily for six months. Large fires, called ahumi are kindled round the place at night. After dancing the deity
is worshipped. In most villages there is a temple to the local god or spirit. No idol is placed in it, but on all ordinary Hindu festival days offerings are made there, though the real and original purpose of erection seems to be this curious dancing with the object of being inspired by the demon. The dancing ceremonies and other rites usually take place during the moonlit halves of the months of October, December and March. The villagers contribute for the purpose of these rites, which are believed to secure the welfare of the community.

The occasional ceremonies referred to above, on behalf of individuals who desire to gain the favour of the god, are usually performed on Tuesdays or Saturdays. The offerings consist of he-buffaloes, goats, cocks, pigs, and pumpkins for sacrifice. The last named article has sinister interest, as being probably a substitute for the ancient human sacrifices. Other offerings are sweet cakes fried in ghee or oil, sweetmeats of ghee, treacle, and flour, rice-pudding, milk, curds, fruits and flowers. A portion of the offerings is taken as a perquisite by the house-priest or temple priest, and the rest is eaten up by the persons making the offering, and their relatives and friends. The god is believed to make certain people, subject to his influence, dance at the request of the priest and people, and to inspire them to give oracles, and predictions regarding the granting or refusing of their prayers by the deity. These rites are held in high estimation, and are fervently believed in by women of all castes, by the rustics generally, and especially the Doms. These are the people who believe in and practise the ceremonies above described. As a general rule, the Brahmans, traders, and town-people take no part in such cults, and would disclaim all knowledge of them. It is highly probable that the system of worship referred to represents the ancestral religion of the aborigines, the Doms."

With dispensaries dotted all over the district, the medical gods have met serious rivals in the doctors and have lost their former importance, and gantuas and dungaries are not much in demand. In fact the foregoing account by Oakley is more of historical value than a description of reality when applied to present day Kumaon. These rites may only be seen in some out of the way Bhotian villages rather than among sophisticated villagers of the Kumaoni zone. The sacrifices of goats and cocks as still continue, merely exist as devices and pretexts, for eating meat, for butchers' shops are not found in hill villages. The shrewd Kumaoni villager does not want
to give up the pretence of propitiating the angry gods if at the same
time he can also enjoy the delicious meat of hill goats.

Whereas medical science has benefited the Kumaoni considerably,
veterinary science has just made a start. Even now hundreds of cows
and buffaloes die of rinderpest and haemorrhagic septicaemia,
and no wonder that 'Chaumu' the cattle-god is still popular among
the Kumaonis. Oakley's description given below though 65 years
old, still holds good about the cult of 'Chaumu'.

"There is a touch of pastoral simplicity about the cult of Chaumu.
He presides over cattle, and has a stone put up to him in a rustic
shrine, or mere niche of a wall, or under a rock. Lamps are lighted
and sweetmeats offered to him on all Hindu festivals in nearly every
village. The milk of every cow and buffalo which calves is offered
to him before it is used. The custom is that when a cow or buffalo
calves, it is milked to ease the animal, but the milk is not taken or
used by any one for eleven days, during which time the animal is
thought to be unholy. The milk of the twelfth day is first offered
to the deity and then used. This god is the protector of cattle from
wild beasts and accidents."

The popularity of Kshetrapal (or Bhumia) "the god of the
fields" still continues undiminished. Even now miniature temples
dedicated to "Bhumia", the lord of the land, are venerated by the
villagers. When the sowing season starts, the farmers sprinkle a
little grain before Bhumia temple. When the harvest begins, the
first sheaves of 'mandua' and barley are brought to Bhumia with
the request that he may protect the garnered grain from rats and
weevils. As Kshetrapal is the protector of growing crops from hail,
smut, rust and wild animals, he receives high praise when the crops
are good and reach the villagers' home in safety. When crops suffer
from hail, the villagers heap well-merited abuse on the god for
negligent discharge of his duties.

Standing quite apart from Kshetrapal, Chaumu, Gori, and other
pastoral and medical gods, Ghantakaran or Bell-god of Pandu-
keshwar is a class by himself. Sherring thus describes this god in his
Western Tibet and the British Borderland:

"One of the most remarkable deities worshipped in Garhwal is
the god of Ghantakaran, or the Bell-god. It is common to find a
large bell, sometimes one and a half feet long, suspended to a cross-
bar supported by two uprights on the top of some lofty mountain.
The lonely goat-herd, or the zealous devotee, rings the bell when
passing the spot. The Bell-god is very specially worshipped for nine days in the month of Magh, and in this special and remarkable service there are associated with him three other gods, viz., Kailas, the Tibetan deity Kumer and the deity Nanda Devi. The last named is the loftiest mountain in the British Empire, and is situated in Bhot, and the first is the sacred mountain near Mansrowar Lake. The annual adoration takes place at Pandukeshwar in Garhwal Bhot, and the ceremonies are specially interesting as they afford an instance of the religious fervour or ecstasy, which seizes the devotee and makes him act as though goaded by a mania. An iron tripod is made red hot in a furious fire, which is zealously fed by the crowd. The men who are particularly favoured by the manifestation of the gods are Duryals of one family, living in Pandukeshwar. At this present time Gobind Singh is the favourite of Nanda Devi, Dhurma of Kailas, Meharban Singh of Kumer and Debu of Ghantakaran. Only the gods Kailas and the Bell-god manifest themselves. When the religious excitement is at its highest the two favourites of these gods suddenly rush down to the river and bathe, and dripping with water they rush towards the scorching fire. The crowd with cries of “Behold the god” rub butter on the hands of the one who is devoted to the Bell-god, and he immediately raises the red-hot tripod and inverts it over his head and puts it back, while the other leaps into the flames and leaps out again. This is the ceremony as described to me by an eye-witness."

We need not refer to the major gods like Shiva and Vishnu, who are also worshipped in Kumaon. Shankaracharya, who routed the equalitarian religion of the Buddha and re-established the supremacy of the Brahmans was responsible for popularizing the cult of Shiva. The Aryan people are incorrigibly caste-minded and by establishing a rigid class stratification on account of their colour prejudice against the natives, they fashioned a hereditary caste-system, which led to the decay of the Hindu polity till it collapsed utterly when confronted by the democratic armies of Islam. It is pathetic to see the various castes of Hindus still vying with each other in their professions of alleged superiority.

We are straying from gods to sociology. However it cannot be helped, for gods, ghosts and demons are so inextricably woven in the web of Hindu society, Shiva continues to be popular as a phallic symbol. His son Ganesha, the corpulent elephant god is the god of prosperity. Women in villages place his cow-dung replicas in the
niches of their houses, sprinkled with barley grains and with a pair of swabs of cotton wool stuck in the upper part to represent eyes. In a few days the grains of barley germinate and we see the interesting sight of barley seedlings sprouting from the body of the 'Gobar-Ganesha' or Cow-dung Ganesha as he is called.
20. Folk Songs

AN OUTSTANDING feature of the Himalayan folk songs is the influence of the environment. The beauty and majesty of the snow-peaks, the profound silence of the mountains which fills the heart of the singer with awe, and the endless succession of mountain ranges have all left their impression on the hill people and their songs. The Kumaonis, God fearing and superstitious in daily life, have dedicated many rocks and rivulets to some saint or deity. The omnipresence of the supernatural is the key-note of many a legend and song. Again and again, one comes across the expression of dependence on Divine mercy. "Nature here," says Atkinson, "in her most rugged and wildest forms and eerie sounds seem to speak of an ever present spirit-world, which compels men to see the supernatural in every bush, rock and avalanche."

The Bhotias, when they cross the Darma Pass, fasten a long pole across their bodies, for it saves them from falling into gorges. They also propitiate the goddess who protects them from mountain sickness by sacrificing goats. As the Bhotias sing:

Snows are great,
But our goats are also great,
Great is the pole,
That saves us this year and next year.

Strips of red and white cloth may be seen tied to a bush or a tree
promoted the development of clubs locally known as Rangbang. The young-folk are admitted to the Rangbang, if they happen to be present in the village. Unmarried girls and the married women, who have not become mothers, have the privilege of managing the club. Even strangers may be admitted if the female members accept them. Every village has its separate Rangbang, and a large village may have more than one. The meeting is held in a house or on a level spot of land. Young men accompanied by the young girls and women sit in a circle, and pass the night in singing, dancing, eating, drinking and smoking around a bon-fire. The girls invite the boys of the neighbouring villages. A signal is given as a mark of invitation. Holding the ends of a white cloth, two girls wave it in the air. Due to the elevated situation of the villages, the waving cloth can be seen for miles. The boys from distant villages whistling and waving pieces of cloth arrive at sunset to join the Rangbang.

The Rangbang, the place for courting and match-making, is responsible for scores of marriages. It also provides premarital sex experience in some cases.

The songs of the Rangbang are love-songs one and all.

So melodious you are,
Like the tune of the flute, my love,
So pure you are,
Like the snow of the Himalayas, my love.

The flute salutes the drum,
The Rangbang night is a night of song and dance.
The sun shines while it is day,
But the full-moon at night too is no less, my love.

The gods are witnesses,
Do not avoid me in youth.
The grass is slim,
You are born in the valley,
I belong to the upper country.

Do not play the flute,
Like an unripe fruit am I,
Do not touch me with your hands.
The night is so cold and long,
Wrap me within your arms.

A lump of butter shall I give you at sunrise.
Accept my salute, oh morning star,
My eyebrows you like,
Your waist I like,
Open the eastern gate,
So long as I am with you,
You should have no fear.

Open the western gate,
You may test me in silence,
I shall never be untrue.
Open the northern gate,
Even the stones know me,
I am a good boy.
Open the southern gate,
Even the trees know me,
I am a good girl.

Who gave you your name?
Fill your song with meaning,
Then I shall take it for all my life.

Legends are true,
Today and tomorrow are brothers,
Today we meet, tomorrow we will part.

The rocks are high,
Have my cup and drink it,
I shall drink yours.

No more wind and snow,
My heart is like a waterfall,
Ever it sings the old, old song of black eyes.

The wheels of the cart move onward,
Your voice should not be so rough,
When you sing a love-song.
The newly composed song looks fresh,
Love is born in the heart,
As the paddy is born in the field.

The wanderer ever wanders,
With my heart like a beehive,
Flying and singing, I have come to the Rangbang.

Flowers blossom unattended,
Until yesterday I never saw you,
Today I feel that you ever lived in my heart.

The smoke rises in the sky,
Lift up your chin,
Look into my eyes.
The dove sits inside her nest,
The world gave me no peace of mind,
Until I met you tonight.

Day and night follow a circle,
Open the door of your heart,
I shall love you for a hundred years.
Leave all gold and silver,
Doesn't my song pursue you?

My song of the full moon,
The balls make the same ringing sound,
Your song shouldn't tell a lie,
Your heart shouldn't deceive me.

The earth looks green,
My heart is like an embroidered cloth,
Your image on it will never change.

Long live the ring dance,
The Rangbang is my heart,
The Rangbang is my soul,
Long live the Rangbang.

Once at night we talked to each other,
Tonight our souls have met and talked.
Long live the forest maid,
Faith shines in her eyes,
Hope shines on her forehead.

Long live the festival of joy,
Drink love, drink beauty,
Until it is sunrise.

Song emerges from the Ranghang,
My first embrace will live in it,
My first love will breathe in it.

In between the big and small rocks is the central rock,
Love is born like fresh, fragrant milk inside the cow's udder,
Like honey inside the beehive.

Scores of small bits of love-songs are strung together; each bit is a living proof of the cultural forces of the Himalayan folk art. Every girl knows the time-honoured love-songs, though she never fails to add a few new ones of her own. Similarly, boys too contribute. These are songs of freedom and friendship. The mountain landscape provides the background, and the similies are drawn from the hill environment.

The dances of the Ranghang are all mixed dances. Boys and girls mix in the ring, though at times each sex may decide to form a separate sector in the ring. It is essential to move to the rhythm of the song, which is generally a chorus—first sung by the boys and then repeated by the girls. While the boys sing the girls keep silence. Similarly when the girls sing the boys must keep quiet. The leader of the dance standing inside the circle directs the dancers with the changing beat of the drum which he plays. Rhythm is in their blood. The voices of the boys and girls display a happy contrast which is enchanting. The drum never fails to carry the dance towards a climax.

The ring dance, which is probably the most ancient Himalayan folk-dance, is the pride of the Rangbang tradition. It has a number of techniques viz., dandyala, chanfuli, dhuska, and dhurang. The dandyala is like the garba dance of Gujarat and dancers carry small sticks and time the rhythm of the dance and song by striking them
against each other. The chamfuti is more or less like the giddha
dance of the Punjab, and the rhythm is marked by clapping of hands.
The dhuska has a number of variants. Now the ring is formed by
alternate male and female dancers. Now the practice of segregating
the sexes in sectors is preferred. Now each boy or girl holds the
waist of the next boy or girl and now a loose circle is formed by
joining hands. The climax of the dhuska is the jaunla dhuska, or
twin circle, when the boys form the inner ring and bear on their
shoulders the outer ring of the girls. First the girls in one ring sing
and then the boys in the other ring repeat the song. The dhurang
comes from the pargana Darma, and is danced in honour of a man
or a woman who died in the service of the village.

Some of the Bhotia folk-songs refer to mountaineering exploits.
One may come across an inspiring description of a landscape, or
the song may be in praise of a god. The songs are generally trans-
mitted from generation to generation. The Bhotia youths, as they
come in contact with the people in the lowlands, carry a few lowland
songs with them while returning to their homes. These songs, like
all interesting imports, lend additional colour to the Rangheng
song festivals. Rich in song and dance traditions, the Rangheng is
an institution which has a profound influence over the creative
impulses of the Bhotias.

Among the lowland songs the most significant is the hurkiya
bol, the musical entertainment given by a drummer. Hurka is a drum
resembling the damaru, and hurkiya is a sub-caste of the Doms.
The hurkiya, or drummer, sings to the rhythm of hurka while the
hard and monotonous task of transplanting paddy goes on. After
the first seedlings have been planted ceremoniously, women divide
themselves into groups and taking bundles of seedlings begin to
transplant them. They work with their feet in cold water and a burning
sun on their heads. Every peasant woman knows the art of planting
the rice-plants; the soft mud has to be pressed around the roots
of each plant. As the transplanting work starts in the morning,
the hurkiya first recites the morning prayer. With his face towards
the women-folk he sings and moves forward as the line of women
recedes. He sings one line of the song, and the women at once pick
it up and sing in chorus:

The pearly rice of this field is for you,
It will be cooked and offered to you,
O harvest god of this village, be kind throughout,
Give shade for the transplanter and the leveller
in equal measure,
Let the ploughmen and the bullocks be endowed with speed,
Give quickness to hands,
Let the seedlings suffice for all the fields,
O five-named god!

Fig. 25. Women at a wayside spring

Every girl in the lowlands remembers many baira and bhagnola songs. They are full of humour and wantonness. The baira and bhagnola songs are a long series of questions and answers in verses and are often composed extempore. The spring month of Chaun (March-April) brings its own spirit of merry-making, and members of the hurklya and badi castes go from village to village singing and dancing, and receiving presents. The lowland people sing and dance whenever they come to attend a fair.

Like most hill people the Kumamis are a cheerful and happy people. They brighten their drab existence by singing love-songs, called 'chancharib'. One often hears plaintive notes of hill-songs echoing from the mountains; it is the women grass-cutters trying to lighten their drudgery. In some of their 'chanchari' they recite the praises of the flower of 'mali'. The Danpuries sing together in a chorus and also dance.

The ballad of Malu Sahi and Rajula is sung to the accompaniment of a drum. On winter nights villagers gather round a bonfire of
logs of oak, and on the beat of the drum the singer recalls the deeds of Malu Sahi and Rajula. Malu Sahi was a son of a Raja of Dwarahat, and Rajula was daughter of Sampat Bhotia of Johar. Similies used are simple and effective. Rajula's face is described as beautiful as the full moon, her complexion yellow as freshly crushed turmeric. She is slender like the blades of asparagus, delicious as the spinach of early January, and soft as a ball of butter. Malu Sahi was a born hero, as the ballad-singer would emphasize. He further stresses the point that Malu Sahi and Rajula were destined to be married. But as luck would have it, Malu Sahi's father had married him to two beautiful princesses, Hansia and Kausia. In the meantime Rajula grew up and was of marriageable age. Her father decided to marry her to prince Guna Pal. But Rajula saw Malu Sahi in a dream and fell in love with him. Malu Sahi too saw Rajula in a dream beckoning him to come and carry her away. Ultimately, Malu Sahi succeeded in contacting the princess Rajula and eloped with her. Guna Pal followed them and watched them crossing the rope-bridge over a river. Malu Sahi succeeded in cutting the ropes of the bridge and caused Guna Pal's men to be drowned in the river. Malu Sahi reached his palace safely and lived happily with his new queen Rajula.

The Himalayan folk-songs from Kumaon are indeed the real heartbeats of the hill people. They reflect their collective genius and traditions which have ever been blessed by the snows of the Himalayas.
21. The Vegetation

THE VEGETATION on the route to the Pindari glacier from Bareilly in the plains to the glacier valley is of great interest. The pink, white, and red splendour of Rhododendron blossoms provides a feast to the eyes. The graceful arches of white spiraeas and the mauve and red carpets of primulas and potentillas leave an everlasting impression on the mind. The richness and variety of species, and their zonal distribution also provide a clue to their past history.

The zones of vegetation in the Himalayas correspond with the climatic zones of the earth according to latitude. Up to an altitude of 3-4,000 feet we find more or less the same trees as in the deciduous Monsoon forest of the Bhabar in the plains. From 4-10,000 feet we meet coniferous trees like pines and firs and broad-leaved deciduous trees like oaks, rhododendrons, elms, horse-chestnuts and walnuts as in the temperate countries of Europe and Asia. At about 10,500 feet we pass the tree limit and after passing through a shrubby zone of Salix elegans and Rhododendron campanulatum is the alpine zone where only certain xerophytic annuals and perennials can grow along with lichens and mosses. The alpine zone corresponds with the Tundras of the Arctic zone. Higher up there is only snowy waste, the alpine desert which corresponds with the Arctic snow desert (Fig. 26). This parallelism between latitudinal distribution of vegetation from the equator to the Arctic circle on the surface of the earth with altitudinal distribution of vegetation from the level of the plains to the alpine grass-land zone in the Himalayas is very interesting.
and illustrates in a striking manner the influence of altitude on climate and ultimately on vegetation.

Fig. 26. Parallelism in latitudinal and altitudinal distribution of vegetation.

The occurrence of alpine annuals in the western Himalayas at an altitude of 10,000 feet and above, which resemble the flowering plants found in the Alps as well as those growing in the Arctic Tundra belt of Siberia, has stimulated interesting speculation about their origin. It is a matter of common knowledge among the geologists that the climate of the earth during the course of its long history has been changing from time to time. Fossil date-palms have been discovered in the present icy wastes of Greenland. Date-palms are heat-loving trees which grow in hot countries. If they could grow in Greenland, it indicates that Greenland must have been a warmer country at that time. A number of ice ages have prevailed in the long history of our planet, and ice and glaciers covered the surface of the land which is now free from snow and ice. In the last glacial age about a million years ago, considerable land surface in what was then the continent of Eurasia was covered with cold-loving plants like conifers, birches and Arctic annuals. From the Arctic zone to the Himalayas, and from the base of the mountains to about 10-11,000 feet in the western Himalayas it is surmised that the Arctic plants prevailed. When the ice age ended and the climate gradually became warmer, the ice sheets began to melt, and the glaciers retreated. With the retreat of the glaciers the character of the vegetation also changed. The cold-loving plants died in the lower regions of the mountains and only a few were left stranded in the alpine zone of the Himalayas, and other high mountains where the climatic conditions are still the same as in the Arctic zone.
The effect of altitude on temperature is known to all persons who escape from the scorching heat of the plains in the month of June to the cool heights of the hill stations. It has been estimated that there is a fall of 1° F temperature for each 300 feet rise in the western Himalayas. While the maximum temperature at Lucknow soars up to 116° F in the shade in the month of June, in Mussoorie at 6,705 feet above sea level it seldom exceeds 76° F. The higher we ascend, the cooler it becomes, and the mean annual temperature at 12,000 feet is only about 42° F.

As regards rainfall, the outer heights of the Himalayas attract most of the rain and the inner ranges have comparatively less rainfall. The line of the greatest rainfall in the Himalayas is about 5,000 feet above sea level. Here the rainfall is about 2-4 times as much as in the plains below. This is illustrated by the rainfall figures for Kashipore in the Terai, Nainital in the outer Himalayan range, and Almora in the interior. The mean annual rainfall at Kashipore is 45", at Nainital 100" and at Almora only 30". In the higher altitude above 15,000 feet the precipitation is mainly in the form of snow which falls throughout winter, while there is only 5-6" of rainfall during the monsoons.

The direction of the slope also affects the amount of rainfall. The south-facing slopes receive more rain than the north-facing slopes. However, the south-facing slopes receive more heat and light from the sun while the north-facing slopes are less insulated. On account of this factor of insolation the cool north-facing slopes in the higher zones are covered with luxuriant forests of oaks, firs and birches, while the south-facing slopes are bare. The depth and direction of valleys also exercises a considerable influence on humidity. Monsoon clouds travel easily up the north and south valleys of rivers, while the east and west valleys attract few clouds. According to the late Dr. Winfield Dudgeon the combination of a south exposure in a deep east and west valley produces the most arid conditions seen anywhere in the Himalayan mountains.

Thus we find that altitude plays a great role in the determination of climate. Climate is a combination of temperature and precipitation, which term includes both rainfall and snowfall. While temperature has a direct relation with height, in the case of rainfall other factors are also involved. Apart from the chief factor of rainfall, humidity and temperature, wind also plays an important role in the growth of trees and shrubs.
The vegetation on the Pindari glacier route can be classified into the following zones according to altitude:

I. **Monsoon Forest**
   1. Monsoon Forest of the Terai and Bhabar;
   2. Monsoon Forest of the outer hills, from the level of the plains to 3,000 feet altitude;

II. **Broad-leaved Sclerophyllous and Coniferous Forest**
   3. *Pinus longifolia* and *Quercus incana* forest, from 3,000 to 6,000 feet;
   4. *Quercus semecarpifolia* and *Abies webbiana* forest, from 6,000 to 9,000 feet;
   5. *Betula utilis* and *Rhododendron campanulatum* forest, from 8,500 to 10,500 feet;

III. **Alpine Vegetation**
   6. Alpine Shrub-land, above the tree limit, from 10,000 to 12,000 feet; *Rhododendron campanulatum*, *R. lepidotum* and *Salix elegans* formations;
   7. Alpine grass-land from 11-13,000 feet at Martoli.

The above-mentioned seven zones of vegetation are described below in detail.

I. **Monsoon Forest**

1. **Monsoon Forest of the Terai and Bhabar**

   Monsoon forests occur in areas which have a pronounced hot and dry season followed by a wet monsoon season. The trees of the monsoon forest shed their leaves in summer and are more or less leafless for some weeks and they produce new leaves before the rains begin. Typical monsoon forests are seen in the Terai and Bhabar where the average rainfall is 40". The most characteristic trees of this forest are, *sal* (*Shorea robusta*), *saim* (*Terminalia tomentosa*), *kaldu* (*Adina cordifolia*), *dhanri* (*Lagerstroemia parviflora*), *khair* (*Acacia catechu*), *amaltas* (*Cassia fistula*) and *semai* (*Bombax malabaricum*). Out of these the first four species ascend to an altitude of 3,000 feet. The rich forest of the Terai degenerates into Savanna-like thorny scrub in the submontane area of the Bhabar and Lantana bushes mixed with
aroosa (Adhatoda vesica) shrubs are most characteristic.

2. Monsoon Forest of the Outer Hills
From Kathgodam to Ranibagh is a characteristic Monsoon Forest. Most of the trees are the same as found in the forests of the Terai and Bhabar with an admixture of some new ones. Mixed with sal trees are tün (Cedrela tina), sandan (Ougeinia dalbergioides), harar (Terminalia chebula), Erythrina suberosa, E. indica, Bauhinia variegata and B. retusa. Climbers like Bauhinia vahliai and Dioscorea sp. are also common.

11. Broad-leaved Sclerophyllous and Coniferous Forest

3. Pinus longifolia and Quercus incana Forest
From 3,000 feet upwards are forests of the well known Himalayan Chir pine (Pinus longifolia) which is characteristic of the outer Himalayas. There are excellent Chir pine forests at Ranikhet, Almora, Binsar and Gananath. They extend up to 6,500 feet and in their upper limit gradually get mixed with Quercus incana. Such a transition can be seen near Binsar and above Takula where there are extensive Banj oak forests mixed with Rhododendron arboreum, which is covered with red blossoms in the month of April. On account of their xerophytic climate chir pine forests flourish on dry south-facing slopes. The thick mat-like covering of pine needles prevents undergrowth of herbs and shrubs in chir pine forests. Near about Gananath and Dewaldhar, however, Strobalanthes atropurpurea with its beautiful purple flower fills the open hill sides in September and gives charm and colour to the landscape.

4. Quercus semecarpifolia and Abies webbiana Forest
There is a very characteristic karshu (Quercus semecarpifolia) and silver fir (Abies webbiana) forest on the Dhakuri range, from 8,000 feet upwards. From Loharkhet onwards is a characteristic Quercus incana forest in which associated with banj oak are Rhododendron arboreum, Pieris ovalifolia and Viburnum sp. along with straggling wild rose (Rosa moschata) which appears very pretty in May with its white star-like flowers. Above this zone is a flat piece of land which gives one an impression that we have passed the tree-limit. This is, however, not correct, for this meadow is the result of human interference on account of burning, grazing and
lopping. As we ascend, we meet a grand forest of karshu oak. Some of the trees have a peculiarly gnarled appearance on account of extensive lopping by the villagers. Festoons of the lichen Usnea barbata hanging from the leaves and the branches of karshu oaks are very characteristic. Under the shade of Rhododendron arboreum trees near the pass which is above 9,800 feet, is a rich growth of Lycopodium along with anemones. There is a graceful forest of Abies webbiana, the silver fir, below Dhakuri pass. The tall and stately firs rise like spires, very often reaching a height of 150-200 feet and their pointed and elongated crowns stand out from among other trees, giving a very characteristic appearance to these forests.

About two miles below this Abies webbiana—Quercus semecarpifolia forest is an open shelf-like piece of land covered with a thick growth of shrubs like Indigofera gerardiana laden with purple flowers in May, Spiraea bella, and solitary gnarled and stunted trees of Pieris ovalifolia and Deutzia sp. We also come across numerous shrubs including Leycesteria formosa, Piptanthus nepalensis, Pyrus ursina, Rosa sericea, R. macrophylla, Viburnum foetens, Berberis sp. Ribes glaucum, Lonicera parviflora, and Prunus padus. Lower down is a wet temperate forest of maples, horse-chestnuts and walnuts which continue on the north-facing wet slope for some miles even below Khati. The translucent broad leaves of Aesculus indica, A. caudatum, A. caesium, Ulmus erosa, Corylus jacquemontii and Juglans regia reflecting a mellow light are typical of this forest and there is a rich undergrowth of liverworts, mosses and some Caryophyllaceae.

5. Betula utilis and Rhododendron campanulatum Forest

From Diwali onwards is a rich display of Rhododendrons. Rhododendron arboreum which had completed its flowering at Binsar when we passed, here still retained some red bunches of flowers even in the last week of May. R. campanulatum with its glorious pink and mauve flowers is at its best in May. Interspersed with Rhododendrons are yews (Taxus baccata) and birches (Betula utilis) which mark the end of the tree zone. Clumps of the dwarf bamboo Arundinaria falcata had flowered and died in large numbers.

There is a typical Betula utilis forest covering the north-facing slope, known as the Kotla range along the banks of the Kapihini river. The silver-grey stems and branches of birch are very attractive from a distance. Birches ascend to a height of about 12-13,000 feet. The birch forests are sustained by snow in winter and by rainfall in
summer, and the trees emerge from their winter dormancy in early June when they produce flowers in profusion. Near Diwali firs are found mixed with birch (*Betula utilis*), and as we ascend firs disappear and there is an almost pure forest of birch (Fig. 27). The bark of these trees called *Bhajpatra* is like paper, and was used for writing in ancient India.

III. Alpine Vegetation Forest.

6. Alpine Shrub-land

About a mile or so below the Phurkia bungalow we pass the tree line and enter the zone which may be designated as "alpine shrub-land", where *Betula utilis* is the last tree along with some twisted specimens of yew (*Taxus baccata*). Now we come across shrubs and herbs only. Association of *Rhododendron campanulatum* and *Salix elegans* with their branches blown in a westerly direction are found along the bridle-path and furnish fuel to shepherds and travellers. The curvature of their stems indicates the direction of the prevailing winds. On the medial moraine and in the area around the snout are small bushes of *Juniperus recurva* and *Ephedra gerardiana*. On the sides of the hills are the small shrubby rhododendrons, *Rhododendron anthropogon*, with pale yellow flowers and *R. lepidotum* with bright red flowers.
7. Alpine Grass-land

There is a typical meadow at Martoli at an altitude of about 12-13,000 feet. From early December to the first week of May it remains covered with snow. The snow begins to melt in early May and Primulas produce flowers as soon as they are free of the layers of snow. Their flower-buds and leaves are carefully wrapped in a scaly covering which protects them when they are buried under snow. By the end of May a colourful carpet of purple Primulas, blue Corydalis, and yellow Gagea covers the slopes and the meadows. A solitary plant of *Equisetum diffusum* bearing a cone was also collected from under the melting snow in May 1943. In June and July flowering annuals are plentiful. Interspersed with pale mauve Primulas are patches of yellow aconite (*Aconitum heterophyllum*). In July and August the Himalayan blue poppy (*Meconopsis aculeata*), which can justly be called the queen of the Himalayan alpine meadows, can also be seen growing in the crevices of rocks, as well as *Nomicharis sp.* with its purple-spotted yellow flowers. In 1935, an expedition was sent by the Forest Department of the Government of India to collect seeds of these plants, which have been successfully acclimatised in England and now grow in the gardens of Buckingham Palace in London.

This alpine region resembles the Trans-Himalayan Tibetan desert in certain features. On account of the rarefaction of the air, the rays of the sun, particularly those in the ultra violet band are very active. Evaporation is also rapid and is assisted by the cold and dry wind which blows in the afternoon. To guard against the desiccating atmosphere, the plants which grow on the rocks where the soil is very scanty, have developed xerophytic characteristics such as a cushion or mat-like habit, long tap roots and a hairy covering. We see cushion-like growth in *Arenaria festucoides* and some other members of the *Caryophyllaceae* and *Crassulaceae*. A mat-like habit is seen in *Cotoneaster microphylla* which produces a profusion of flowers in May and crimson red berries in September. The Edelweiss (*Leontopodium*), the pride of the Swiss Valleys is also plentiful in this meadow in September and its woolly flowers are used by the hillmen for lighting fires with the aid of tinder.

Gentians are represented by two species and anemones by two, *Anemone polyanthes* and *A. rupicola*. About eight species of Potentilla, with all shades from the deepest red to bright yellow and three species of Primula, light purple to deep purple flowers, have also
been recorded. *Cynoglossum uncinatum* is found both in the alpine zone and lower down. While in lower altitudes its colour is light blue, in the alpine zone it is deep blue. Intensity of colours in alpine flowers has been widely noticed and may be due to chemical action of the ultra violet rays on the pigments of plants.

Apart from the above-mentioned plants, *Androsace lanuginosa* with tiny pink-coloured flowers and forget-me-nots (*Myosotis palleus*) have also been recorded from Martoli. This does not complete the list, and an ardent flower enthusiast may discover many more in the months of June and July in the Pindari and Kaphini valleys.

Dense growth of *Rumex sp.* has been noted in nearly all Himalayan meadows by travellers. This holds true for the Pindari and Kaphini valleys as well. There are large areas covered with *Rumex sp.* at Phurkia and Martoli on which the hill sheep feed. A symbiotic relationship exists between *Rumex sp.* and the hill sheep and as a result both flourish in these meadows. The sheep eat the leaves of this plant and in return manure it. This mutually beneficial arrangement has resulted in extensive growth of *Rumex sp.* to the exclusion of other plants in the Himalayan meadows, where shepherds and graziers bring flocks of goats and sheep for grazing in the summer months.

In the above account we have more or less exclusively dealt with Angiosperms and some Gymnosperms. This is likely to give one an impression that lower plants like algae, fungi, lichens, liverworts, mosses and ferns are not well represented in this region. These plants have not attracted much attention so far. The present author found a veritable mine of new terrestrial algae in this region. Following is a brief account of algae collected from the Pindari glacier route.

**ALGAE**

The Pindari route is particularly rich in terrestrial green algae, which are found abundantly on road-side rocks and bridle-paths in the month of September after the close of the monsoons. By the first week of October, these algae form ripe 'spores' and disappear. The spores perennate throughout winter and summer, and germinate during the monsoon rains. *Zygnema terestris* Randh. is very common near Binsar, and shows a distinct preference for sandy and pebbly
soil. Zygogonium kumaonis Randh. grows on red clay near Jariakhali. Patches of Fritschiella tuberosa Iyengar mixed with pin-like red patches of a species of Oedocladium, in an akinete condition were found on the road near Jariakhali. Lower down, a terrestrial species of Cylindrocystis was found on the bridle path. On clayey soil of the bridle-paths near Ganananth, Hormidium flaccidum is seen in the form of a green covering. An attached species of Spirogyra and Cladophora glomerata attached to stones were collected from a fresh-water stream below Takula. A new and interesting member of the Zygnemales, Sirocladium kumaonis Randh. was seen growing on moist clay at the mouth of the cave temple of Ganananth. Later on it was found growing in abundance at Nainital on clayey bridle roads. In the tank in Dewaldhar estate Vaucheria sessilis forma orthocarpa and Cladophora glomerata are found. A couple of miles beyond Dewaldhar Oedocladium kumaonis Randh. mixed with Oedogonium terrestrial Randh. was found growing near a private garden. In the compounds of the temples at Bageshwar and in the Dak Bungalow at Kapkot Oedocladium operculatum Tiffany is found in great abundance growing in the form of a velvety green covering.

A species of Symploca was found growing on a dripping rock covering a large area beyond Kapkot. A laterally conjugating form of Zygema terrestrial Randh. was found in abundance on the clayey bridle-path between Loharkhet and Khati. At Dhakuri there is a marshy place below the bungalow which contains a number of interesting algae, both green and blue-green. A number of conjugating desmids, sterile filaments of Mougeotia, Zygema, Spirogyra and Binuclearia tatranca were found in the ice-cold water of this marsh.

Near the 63rd mile between Khati and Diwali, Prasiola fluviatilis was found growing on stones in a torrential stream joining the Pindari River. Near about Phurkia no green algae could be found and only Myxophyceae, Chrysophyceae and diatoms could be collected. On the Jabria meadow near the snout of the glacier two species of Oscillatoria, one of Lyngbya, numerous diatoms, members of Chrysophyceae and a species of Pedostrum were found in ice-cold water. On boulders in a torrential stream red patches, known as water-biscuits formed by the abstraction of calcium carbonate from water by a species of Calothrix were also found.
Mycetozoa, Fungi, Liverworts, Mosses and Ferns etc.

In the forest near Dhakuri many Polyporaceae including 'luminous' fungi and Mycetozoa are found and need investigation. Species of liverworts, mosses and ferns are common and will repay investigation. _Woodia lanosa_, _Asplenium viride_ and many other species of ferns are found near Binsar, Dhakuri and Diwali. _Osmunda regalis_ was collected in fertile condition on the way to the Kaphini glacier. A species of _Lycopodium_ was found near the Dhakuri Pass and near the bungalow at Diwali, and _Equisetum diffusum_ at Martoli.
22. Fauna

WILD ANIMALS in the Kumaon Himalayas also show a zonal distribution like vegetation according to altitude. Roughly they are distributed in three zones as detailed below:

I. Wild Animals of the Lower Himalayas—Wild boar (*Sus cristatus*), panther (*Felis pardus*), and tiger (*Felis tigris*) are characteristic animals of this zone, which extends from Terai and Bhabar in the plains to an altitude of 6,000 feet at Lohaghat and Ganapath.

II. Wild Animals of the Middle Himalayas—This zone extends from 6,000 to 10,000 feet. The musk deer (*Moschus moschiferus*), barking deer (*Cervus unujiae*), and the Himalayan black bear (*Ursus torquatus*) are the characteristic animals of this zone.

III. Wild Animals of the Inner Himalayas—This is the alpine zone which extends from 10,000 to 16,000 feet. Animals which are specially adapted to an environment of rocks and snow are found in this snowy zone, and the goat and sheep families are characteristic. The goat family is represented by the thar (*Hemitragus jemlaicus*), and the goral (*Nemorhauedus goral*), and the sheep family by the bharal (*Ovis nula*) (Fig. 28).

Pythons are also found in the Terai. Apart from tigers and leopards, it is the pythons which make the forests of Terai so awesome and dangerous. In the past they were more common. Bishop Heber records, "The Boa Constrictor is frequently found, particularly in the wood between Bamoury and Dikkalee, under the immediate feet of the hills. These snakes are of enormous size, but not much
Fig. 28. Altitudinal distribution of wild animals in the Kumaon Himalayas
feared by the natives, size though they have, in their opinion, sufficient strength to master a buffalo, they are proportionately unwieldy. Many stories are told here, as in Surinam, of persons stepping on them by mistake for fallen trees, and being terrified on finding them alive.”

Leopards are common in the forests of Terai and of outer Himalayan ranges up to an elevation of 6,000 feet. Those living in jungles near the vicinity of villages often become man-eaters. During my stay at Almora, I heard many stories of brave Kumaoni villagers who tackled man-eating leopards with axes and lathis. One day ten villagers came to my residence carrying a dead leopard tied by its legs to a bamboo pole. They told me that it had become a menace to their cattle and tore up three cows. They cornered the beast in a cave which they filled with sulphur smoke. When he was nearly blinded by smoke, they attacked him with lathis and axes. They had come to me carrying a heavy load in the hope of getting a reward after covering a distance of forty miles on foot. By the time they reached Almora the carcase of the leopard had become swollen. Government rules for such rewards were by no means generous. Maximum reward which could be given was Rs. 20/-, a paltry remuneration for carrying such a load and facing such risks. But they were glad to receive it, more so as a recognition of their act of bravery.

Tigers are found mostly in Terai, and a few also ascend the outer ranges of the Himalayas. Jim Corbett who lived at Kaladhungi in District Nainital, narrates a number of incidents about man-eating tigers in his Man-eaters of Kumaon. He was a man of great courage with an excellent sense of observation who understood the signs of the jungle. In fact it is his encounters with the tigers that has made Kumaon famous among Western people, who delight in jungle tales and wild life. Tigers become man-eaters when they become old and feeble or are incapacitated due to some injury.

Wild dogs now extinct were found in Kumaon in early nineteenth century. Bishop Heber records having seen a wild dog in captivity. “One of the most curious animals I saw or heard of was a wild dog belonging to Mr Adam”, records Heber. He continues, “these animals are considerably larger and stronger than a fox, which, in the circumstances of form and fur, they much resemble. They hunt, however, in packs, give tongue like dogs, and possess a very fine scent. They make, of course, tremendous havoc among the game in
these hills; but that mischief they are said amply to repay by destroying wild-beasts, and even tigers."

The musk deer (*Moschus moschiferus*) is found throughout the Himalayas, and extends as far as Siberia through Central Asia. It is a small rabbit-like creature, brownish grey in colour, about three feet long and about twenty two inches high. It is an agile and sure-footed animal and jumps with amazing agility over precipitous rocks. A precocious animal, it begins to reproduce within a year. The female gives birth to one or two youngs who are driven off in about six weeks time to shift for themselves. The hillmen call it by the name of *kastura* on account of *kasturi* or musk, secreted by an abdominal gland which the male carries in a musk bag. The musk bag contains about an ounce of musk in the rutting season. The musk deer is found at an elevation above 8,000 feet. On account of high price of musk, this animal has become rare in Kumaon, and unless some chemist comes to the aid of these unfortunate creatures and synthesizes musk, there is every likelihood of their extinction. Its meat is considered excellent and its flavour is not affected by the odour of musk.

Kakar, the barking deer of the Himalayas (*Cervulus munyae*), is a pretty little creature about two feet high, of a bright chestnut colour, with short forehead horns. Its strange moaning cry, creates a melancholy atmosphere.

The Himalayan black bear (*Ursus torquatus* vel. *Tibetanus*) is found above Diwali and in the Kaphini Valley. It is a good swimmer. Captain Baldwin who noticed one crossing the river Pindari in the flood, remarks, "No human being, however, strong a swimmer, would have stemmed such a roaring rapid". Black bears are regarded as pests by the farmers and cause a great deal of damage to gardens. They often venture near villages, and being fond of honey, steal hives attached to the cottages of the hill people. The black bear is also a flesh eater, and kills not only sheep and goats, but also feasts on dead cattle. Its sense of smell is very powerful and if approached from windward side, it takes alarm easily. If frightened or wounded, it sometimes coils itself in the form of a ball, and rolls down steep hills and precipices.

The brown bear (*Ursus isabellinus*) is yellowish brown in colour with a long and shaggy fur. The females are lighter in colour than the males. It is found in the Himalayas close to the snow in summer. In autumn they descend into the forests lower down to feed on various
fruits, seeds, and acorns, often coming close to villages to plunder apples, walnuts, apricots and buckwheat. Their usual food in spring and summer is grass and roots. They also feed on insects, and turn over stones to look for scorpions and insects. In winter they hibernate in caves. Occasionally, they kill sheep or goats, often wantonly as they do not feed upon them. They come out of their caves in March, and litter in April and May. The female generally has two cubs.

It is the goat and sheep families which are typical of the Bhotian Snowy Zone. The goat family is represented by the thar, and the goral. The thar is found throughout the entire range of the Himalayas at high elevations between the forest and the snow line. On the Pindari glacier route, it is found above Diwali, in the rocks on the right side of Pindari river between 10,000 and 12,000 feet in summer. It is handsome goat-like creature, with black horns curving backwards and outwards. Colonel Kinloch speaks thus of this animal: “The thar is a fine-looking beast, although his horns are small, and he cannot compare with his majestic relatives, the ibex and the markhor. The male thar is about the same size as the ibex, but rather more heavily made. The general colour is a reddish-brown, deepening into a much darker tint on the hind-quarters, but individuals vary a good deal, and I have shot one which was on a yellowish-white. The face is covered with smooth short hair, and is nearly black; the hair of the body is long and coarse, attaining its greatest length on the neck, chest and shoulders, where it forms a fine flowing mane reaching below the animals’ knees. The horns are curious, being triangular, with the sharp edge to the front; they are very thick at the base, and taper rapidly to a fine point, curving right back on to the neck. The largest horns attain a length of about 14 inches, and are 10 or 11 inches in circumference at the base.

Early in the spring, when grass and leaves are scarce, and again in the rutting season, are the best times for thar shooting, as the old males then come out on open slopes.

The thar is very tenacious of life, and, even when mortally wounded, he will frequently make his escape into utterly impracticable ground. In autumn, the thar becomes immensely fat and heavy, and his flesh is then in high favour with the natives, the rank flavour suiting their not very delicate palates. An Englishman would rather not be within one hundred yards to leeward of him, the perfume being equal to treble-distilled ‘bouquet de bouc’. Ibex is bad enough,
but there is a ‘a caution’. The flesh of the female is, however, excellent.”

Shikar in the hills is not such an easy matter as in the plains, and a keen shikari must be prepared to climb steep slopes and to stumble against stones. A tourist who signs himself as ‘Alpha of the Plough’ writes—“As a naturalist, the birds have kept me hanging about the road from Dhakuri to Phurkia since April 15th, with no mean success. ‘Local Intelligence’ has it that there is a pig at Dhakuri which old Sham Singh, Chowkidar of Dhakuri says was fired at in 1905 and missed. He has not crossed my path yet. I mean the pig. I have seen that on the hill opposite clean out of range and I should like to inform visitors that one does not empty a magazine at 1,000 yards at that in the hope of hitting one in the eye—it spoils sport for others, whose enthusiasm takes them up the neck-breaking slopes.”

The goral (Nemorhoedus goral), which is also known as the Himalayan chamois is found at an elevation of about 10,000 to 11,000 feet. It is a goat-antelope, goat-like in build, with small cylindrical horns and short tail, and antelope-like in the absence of beard and markings of goat. Like true goats, gorals are not gregarious, and commonly they feed alone or in pairs. Occasionally they are found in groups of three or four. Their favourite resorts are steep rocky hills, thickly sprinkled with forest. Gorals avoid the heat of the sun, and feed only at night or early in the morning, though in cloudy weather they feed nearly all day. Kinloch gives following hints about Goral shooting in his Large Game of Shooting in Tibet:—

“From living so near human habitations, and constantly seeing shepherds and wood-cutters, gorals are not alarmed by seeing men at a distance, and where the ground is much broken they are not difficult to stalk. Every slope should be carefully examined, and on reaching the edge of each ravine it should be thoroughly reconnoitered. Being good climbers, the gorals may be found in all sorts of places—on narrow ledges, on the face of steep precipices, on gentle slopes, and among scattered bushes or forest trees. As little noise as possible be made, talking should never be allowed, for nothing frightens game so much. Frequently after firing a shot or two on a hill-side, other animals may be found quietly feeding a little further on, whereas if there has been any shouting or talking the beasts will have been driven away. Shooting over a hill does not
appear to have the effect of frightening goral away; when disturbed
they seldom go far, and may be found again on their old ground
in the course of a day or two. On detecting the presence of danger,
the goral generally stands still, and utters several sharp hisses before
moving away."

"The bharal (Ovis nahrula vel. 'Burhel), the wild blue sheep
is widely distributed in the Himalayas from Sikkim to Ladakh.
Bharal is dull slate-blue in colour, and its belly, buttocks and tail
are white. Horns have few wrinkles, and are directed upwards,
backwards, and outwards. A good ram carries horns 20-25 inches
long. The female is smaller, with small, straight and slightly recurved
horns. Bharals are found on grassy slopes in the immediate vicinity
of steep precipices, below the snow line between 10,000 and 16,000
feet. Old males always remain close to rocky strong-holds to which
they escape in case of alarm. It feeds in the morning and evening,
while during the day time it seeks refuge among the stones, where
the protective blue covering of its wet makes it almost invisible.
In winter when the bharals get snowed in, in their mountain shelters,
they become miserably thin, and actually browse the hair off each
other. The bharal fattens in September and October, when its
mutton is particularly good."

Though bharals, gorals, thars, kasturans and kakars are reported
to have been shot in near historic times at Dhakuri, Diwali and
Phurkia, the Pindari valley is hardly to be considered as a shikar
ground. In fact it is high time that protection is given to thars and
bharals so that these beautiful animals do not become extinct due
to the sporting zeal of hunters. The Swiss even organize rescue
squads to help young chamois during winter and have also established
feeding places for them in the Alps. If we cannot follow the example
of the Swiss, the least we can do is to stop the slaughter of these
harmless animals in the Himalayas.
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