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Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

"When you are old and grey
And full of sleep
And nodding by the fire
Take down this book. . . ."

I.—LAHORE TO SRINAGAR.

WE had been four years in India and had been married for nearly nine years and never had a whole month's holiday. In 1923 we had ten days leave from Simla, and went five marches up the Hindustan-Tibet road as far as Bagi. That only whetted our appetites for the long leave which was always ahead of us but never seemed to materialize. In 1925 when we were in Simla it had been promised by the General, and R. started buying rifles, maps, and a telescope, and he talked of little else. We were not too happy, however, when the official application for leave had been sent up, for week after week passed and no answer came. We had burned our boats in the way of selling off kit and giving up our house in Lahore, as well as boarding out the ponies.

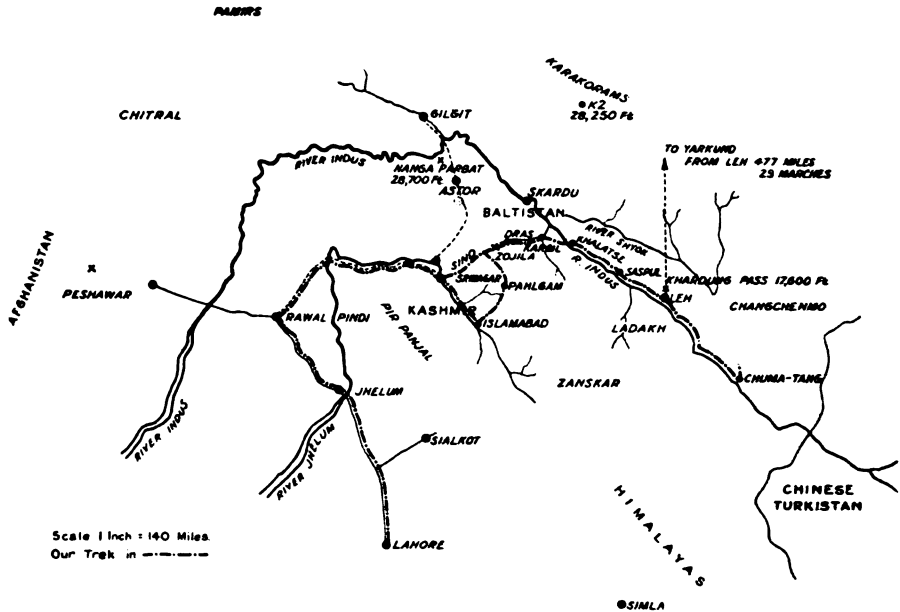
It was well on in March before we decided we could wait no longer, and R. telephoned to Simla to hear that 4½ months leave had been granted from April 7. I was very loth to give up our little bungalow where we had made a very attractive garden. I felt our house-keeping days in India were over for this tour at least, and we could never have our friends about us in such an intimate easy way for some time to come. Then there was the parting with a very good faithful lot of servants. On returning from leave we had only a few months to put in before sailing for home, and so hotel life seemed inevitable.

When leave was actually sanctioned and we were making real plans as we bent over maps, I was too busy to have any time for regrets about house, servants, or even a garden at its best.

It is a rule of the Game Preservation Department in Kashmir that for first leave (April to July) a block or nullah can only be booked by the applicant in person in Kashmir territory. As booking commences on January 1, it is a policy of "first come first served," and the man on the

spot can choose the best block for the particular heads he wants. Shooting in Astor, Baltistan, Ladakh, and other parts of Kashmir, all comes under the same department, and a big game licence costs Rs.125—about £9. The whole country is divided into a limited number of blocks which can be reserved, but the best heads of different animals have a fairly definite geographical distribution. The distribution is roughly as follows: Astor district for markhor, Baltistan for ibex, and Ladakh for burrhel, sharpu, and *Ovis ammon*.

R. had always had a great ambition to get a good markhor head, and it was therefore the Astor maps we studied most. I had seen markhor heads



in the museum in Lahore, and I could understand his keenness when I admired the long graceful corkscrew horns.

We left Lahore on April 6 in our new Overland car, heavily laden with baggage, gun, and rifles, our little old Gurkha bearer, and our two Airedale dogs, Garry and Kelpie. The first day was an easy run to Jhelum Dak Bungalow, where we spent the night, although we were unfortunate in having some punctures. We had eggs with our early tea next morning, and were on the road by seven o'clock. We could see the line of hills on the horizon as we covered the miles on the Grand Trunk Road.

The country people of that part of the Punjab seem to be the finest of any I have ever seen. They smiled as we passed, and the children called out on seeing our two big dogs in the back of the car, Kelpie sitting quietly, like the well-behaved dog he is, and Garry, not having reached years of discretion so far as a car is concerned, having to be held by the collar to

prevent him leaping out to give chase to a goat or send a pariah dog flying from our path.

We had lunch in the shade of a sheeshun wood by the roadside—rather a light one, as we found the cold chicken we had brought from Lahore was nearing decomposition. The petrol tank was filled at the Overland Agency in Rawalpindi, and then we started for Murree. The road was new to me, and R. had only gone by tonga fourteen years ago, when there were no cars on hill roads in India. The ascent is very steep at times, the road twisting and turning amongst the mountains until it rises to 7,000 feet above sea-level at Murree. We had to stop several times to fill up with water as the day was very hot. Many empty lorries came swerving and bumping round corners, and we had several narrow escapes. I suppose familiarity breeds contempt even on such a road.

Garry has a passion for chasing any animal. When we were having tea outside the Dak Bungalow at Tret, halfway up the hill, we had much ado to keep him from seizing a pet monkey which was doing tricks on a tent rope nearby. Garry hunts monkeys on every possible occasion in Kasauli, but there are no wild monkeys in the Murree hills or in Kashmir.

We had paid toll further down the road which should have been refunded at another toll gate, as we were going on to Kashmir, but no notice is displayed to this effect. The collectors are so slow in giving receipts, I can imagine that the majority of motorists pay their toll and hurry on—the money going to the upkeep of the collectors' families, instead of to the road.

We missed the turning at the entrance to Murree, and went up the hill instead of round it. We were able to turn where two roads meet, but we were annoyed at the loss of time, as we were not inclined to put up for the night at a Murree hotel—a roadside bungalow seemed so much more like leave, although it meant another twenty-six miles, and a descent of several thousand feet.

We had gone seven or eight miles down the road when we felt very hungry, so I suggested tea and a tin of sardines—most enjoyable—but boiling the kettle took much longer than we expected, and dusk had descended before we had been on the road for half an hour. We knew nothing of the rules of the road, or that the ox waggons, which almost line the road during the day, yoke up and start off at sunset. If the road had been clear we could have gone down comfortably at eighteen miles an hour, but these carts have no lights, and go on either side of the road, so our progress was rather slow.

We were now out of the pinewoods, but darkness was upon us, and we crept along, hearing the Jhelum roaring in the gorge on our right. R. suddenly said he could see no road ahead, and stopped the car to investigate. We walked ahead with an electric torch, to find there had been a landslide, and the outer half of the road had been carried away for a distance of thirty yards. There appeared to be just enough room for the car to pass with

about four inches to spare on the outside. It was now pitch dark. I agreed to take the dogs across and wait, if R. promised he would not sit in the car, but lean across and guide it from the inside step, ready to jump off if the car toppled over the precipice. I breathed again, and the dogs stopped barking and straining at their leads, when the car was safely on the other side of the gap. We went very slowly in case of another landslide, and missed the entrance to the Dak Bungalow at Kohalla.

Kohalla is a little village on a cliff overlooking the ravine of the Jhelum river—it is the end of British territory, and the bridge across the river just beyond is the entrance to Kashmir State.

There was room to turn the car before the bridge, but we had to reverse up the steep stony entrance to the Dak Bungalow. With the aid of a candle lantern and a smoky paraffin lamp we got up that hill. There was no fence on the outer side, and a wrong turn would have meant a drop of forty or fifty feet to the road below.

As we sat down to a late meal about 9.30 we felt we had had plenty of adventures for one day. We slept well and were off next morning at day-break, and had breakfast at Domel, a charming little bungalow by the river. Rain came down in torrents before we reached Baramulla, and we decided to spend the night there instead of arriving in Srinagar in darkness.

The Kaj Nag mountains were smothered in mist when we started off next morning. Baramulla looked like a Dutch village with the river, once more navigable, and its green fields and rows of poplars. It was a straight easy run into Srinagar, a good wide road with no more twists and sudden turns, and it was a relief to get into open country again.

We slowed down going through the bazaar, and the car was at once weighed down by several men standing on the step at each side, anxious to earn some bucksheesh by showing us the way to our destination, the Army Agency. We tried to push them off, but two, more persistent than the others, were still clinging to the doors when we reached the Bund, where the Army Agency has its office.

II.—AT SRINAGAR.

We arrived in Srinagar on a Saturday morning, and on Major Broome's advice, went straight to the office of the Game Preservation Department. We were lucky to find Major Radcliff, who is in charge—himself a famous big game hunter, and who was unfortunate enough to lose an arm when lion hunting in Africa.

To our immense disappointment we found that all markhor blocks worth reserving had been booked four days before our arrival. The young officers of the Punjab and Waziristan had wisely taken advantage of the Easter week-end to get a flying start, and had booked all the best nullahs. At first we felt only crushed, the disappointment was so unexpected. There was one markhor nullah left in Astor, but from its geographical position

Major Radcliff agreed that it was a most unlikely place to find a good head. We gave up that idea, and R. asked what else they had to offer. There were two sharpu blocks in Ladakh, where burrhel also might be found, and possibly *Ovis ammon*. R. turned to me saying, "Sharpu, those animals that feed on grassy slopes; I thought when I was sixty I might take a sharpu block!" Later we were to find that these sharpu were to give him more work and harder rock climbing than ibex had ever done.

So that is how it came about that we went to Ladakh. My disappointment about the markhor nullah was tempered with a longing to see the country of the Lamas. We had read no books about Ladakh, and had hardly glanced at the maps of the country—all our attention had been focused on Baltistan and the Gilgit road. The kit I had brought with me was intended for either of these places, and Ladakh is much higher above sea-level, and very much colder in spring. I had not even a tweed coat, only a drill riding coat. We had four blankets each, a rezais each (i.e., a wadded quilt used as a mattress when travelling in India), and we bought two numdahs or felts to put beneath the rezais in cold weather. We took no sheets, and our pillow slips were made of holland. These last were soft, being linen, and they at least never looked so soiled as white ones would have done. I was only allowed to take one jersey frock besides my marching kit, as R. said I would have no occasion to wear anything else—which only goes to show how little men know about women's clothes!

We spent the next four days in repacking yakdans (leather-covered boxes specially made for mule or yak transport), and in buying stores which we packed in the same way. Fresh vegetables and potatoes were put into skin-covered baskets, as these could be discarded later as the stores were used up. The tents were pitched in the compound of the Army Agency for our inspection, and I felt quite elated at sight of them, as I had only slept in a tent for a month once in an orchard in Somerset. We had two eighty-pound double fly tents for our own use, one for sleeping and the other a dining-room in which the yakdans were kept. The Kashmiri servants had a single fly tent the same size as our own, and there was a small one for a kitchen, where the cook and bearer slept. Two camp beds, a folding canvas-topped table, and two very hard and uncomfortable folding wooden chairs completed our equipment. Why we did not take two Roorkee chairs instead of the wooden-seated ones, I cannot imagine. We certainly regretted our choice every day when we arrived in camp.

Owing to a sequence of Mohammedan and Hindu holidays, the banks in Srinagar were closed for several days, and it was only by the kindness of a friend who knew the agents that we were able to get the money we required to take with us, including a large supply of small change in six leather money bags. Those four days in Srinagar seemed endless until we really got on the road. I was haunted by a half fear that I would prove unfit for such a long trek and be a hindrance. I soon forgot any such ideas when the start was made, but I found the days of preparation very trying.

Srinagar was cold and wet in April—as cold as Edinburgh in March—and Kashmir was not rising to my expectations at all.

The usual way to start up the Sind valley is to take a boat with all the baggage by river to Gunderbal, but R. thought we should start on foot from Srinagar, so as to get our legs and feet somewhat harder before we reached the stiffer marches further on. The Agency had engaged a good shikari, who in turn had got two tiffin coolies from his village, and a sweeper who would look after the dogs. We protested that two tiffin coolies were unnecessary, but he insisted that one was not enough when a memsahib was there—or lady sahib, as he always called me. Later on we found that one would have been ample when a large saddle bag is used on the riding pony. This not only makes the wooden saddle of Ladakh much more comfortable, but carries all the extra kit, and the pony man is always proud to carry a camera or a pair of field glasses.

III.—FIRST MARCHES FROM SRINAGAR.

On Thursday, April 15, we set out from Srinagar. We had ten pack ponies which had been laden early that morning and left half an hour before we did. We carried with us bread and some cooked food in the tiffin basket, to give our cook as little work as possible until he got accustomed to marching. He is a Punjabi Mussulman who has been with us for four years, and so was not used to trekking as were the Kashmiris.

The idea of starting on foot from Srinagar with a view to getting muscles harder straight away is sound in principle, but I would not recommend it. Those first few miles through Srinagar and the villages surrounding it were sheer misery. The streets were narrow, uneven and unspeakably dirty, but the pariah dogs disturbed us most. Kelpie and Garry are not aggressive, but when these village dogs came out in numbers they went for the first dog they saw, and had to be rescued with the help of our khud sticks. The noise of the yelping of the pariahs as they disappeared into the rabbit warren of side alleys drew out another batch further along the street, and so it went on for two hours. Our heads ached with all the noise, and the sun beat down on these narrow streets. We were glad to leave villages behind, and sit down under a big walnut tree between some fields to make our coffee for lunch.

I had used the riding pony very little, as it had an uncomfortable way of walking slowly for ten steps and jogging for five. This was repeated in a sort of rhythm, and it was not a soothing one.

There is one pretty little bit where the road lies near the Anchar lake—it brought back to my mind the banks of the Holy Loch in Argyllshire.

Our legs were weary and our feet sore and blistered by the time we reached the Dak Bungalow at Gunderbal. The bungalow is very little used, and is small and dirty. It would have been preferable to pitch camp,

but that would have taken time, as the servants were tired, and the ponies were already unloaded, and the rooms prepared for us.

We marched in chapplies, and although they are undoubtedly the most comfortable footwear for the road, it was natural that our feet were blistered in spite of thick socks, as this was our first march. For the first time I had my feet and legs massaged by the shikari and tiffin coolie, which eased the stiffness and relieved the pain. After that it was a regular custom, fifteen minutes a day on our arrival in camp. Waking up next morning, we laughed as we remarked on our thin faces—a result of the blistered feet I feel sure.

Although people go to Gunderbal to escape the heat of Srinagar in July and August, we found it more sheltered and not so cold in April. At that time the snow had not begun to melt on the higher hills, so the Sind river was small, and made little difference to the temperature.

That evening at dinner a tall youth appeared and helped our bearer. We remarked that he must be the dak coolie, but about a week later our cook told us he was the shikari's son, who had been brought to learn his trade at our expense.

We slept fitfully, and probably a good sprinkling of Keating's powder would have been worth while! When half awake, that delightful semi-conscious feeling came over me that something nice was happening to-day. In a second I was wide awake—yes, we were really on the road. Long before I was dressed I heard the yakduns being carried from the verandah to the waiting ponies. By half-past eight we were following a level winding road through pretty villages with chalet-like houses. The people live on the ground-floor and use the top for storing the winter's supply of grass.

Our path lay between fields of sweet-smelling mustard—the soft yellow colour showed up against the dark snow-capped hills and the deep blue sky above. Garry in his joy started chasing sheep, but came back when he was called.

After crossing the Wazil bridge, we came at once to a moorland road. No motor or tonga is allowed to cross this bridge, and indeed the road beyond is unsuitable for wheeled traffic, even if the bridge were strong enough. There were large cobble stones everywhere, as if we were walking in an old river bed.

I never saw so much mistletoe as on the chinar trees in the Sind valley.

The Sind river is a fast-flowing stream, and both it and its surroundings made us think of the Spey. It was a deep clear sea-green colour, not at all like the tumbling, tossing, muddy river that we rejoined three months later at Baltal.

The sun was very warm, and I was glad I was wearing shorts under my riding coat, instead of the tweed knickerbockers which were for colder days. We went some distance beyond a tiny village before stopping for lunch, as Kashmir villages are not too clean. The tiffin coolie made a fire, and I warmed some stew which had a tempting smell for two hungry

people and two hungry dogs. We finished our lunch with some walnuts, of which I had brought a few hundreds. We found them a very useful addition to our stores in a country where there was no fresh fruit or vegetables.

I was riding a bit ahead when we came to the Wangat nullah, and there was a good deal of water crossing the path, so I sent the pony back for R. A sahib with a little fox terrier had passed us while we were having lunch, but we found him in the bungalow when we arrived at Kangan. The bungalow is a new one, and is clean and roomy. After tea we sat on the verandah and talked to the sahib. He was on his way to the Zanskar range. He had been to Wardwan the previous year, and it was very interesting to hear his experiences there, and the country was all so new to me.

The shikari came for orders for the next day, and suggested that we should go beyond Gund, the usual stopping place, to a village called Kulan, and pitch our camp there, as there is no bungalow. The snow was lying half a mile beyond Kulan, and if we camped there we could make an early start and get beyond the most precipitous places on the road before the sun had begun to melt the snow. At these places there was real danger of avalanches and rocks falling from above.

With a long march before us next day, we had dinner early and went straight to bed. We were wakened at six and started off as soon as we had finished breakfast. The road was again very rough, with large cobble stones to be avoided at every step. I was very weary and went to sleep for a few minutes, lying on the ground after lunch at the roadside, but we did not have much time to spare, and the baggage and servants had passed us. As we reached Gund, we were surprised to see the shikari and baggage at the bungalow. The sky was overcast, and he decided that unless the weather was settled, it was useless going on to Kulan. If the tents got wet, they would have to be dried before we could go any further, as beyond Gund all baggage had to be carried by coolies.

The Dak Bungalow was the worst we had seen, and I suspected that the rooms had been used by coolies when no sahibs were there. The mud walls in one room were not even whitewashed. I was tired, and found the leg massage very soothing. We had to drink our tea without milk, as there was none to be had. In these high lands where the snow lies well on into spring there are no kids or calves until May and June.

That afternoon we had to make a complete rearrangement of baggage for coolie transport. The heavier tins of food were removed from yakdans and put into sacks or kiltas. Each coolie was allotted his own load, and there was great noise and competition for the lighter loads. Sixty pounds is the maximum weight, and the shikari tried the weight of each load before they were stowed away for the night. There were no stores of any kind to be had at Gund, but we had brought a plentiful supply of eggs from Kangan at sixpence a dozen, and three small fowls.

Sitting by the river we watched a storm coming up on both sides, and it was not promising for an early start next morning. Conversation was impossible, as the water came tumbling down with a steady deafening roar. The pine-clad hills on the opposite bank rose straight up in front of us, so the valley was in shadow, and the air grew chilly quite early in the afternoon.

As we came up from Kangan there was less and less blossom on the fruit trees. The willows were just beginning to drop their furry catkins, and were showing a little green. No other trees were in leaf. The road is like many a hill road in Scotland, bordered by the finest turf, close-cropped by sheep. I haven't played golf for a very long time, but I could not help thinking what grand lies there were for a brassie. I thought bracken grew in this kind of country, but there was none.

There was benefit, I found, from sleeping in blankets—when a parasite makes an attack at night, it can be chased with a lighted match with no danger of fire, then the charred body is removed and again there is peace.

On our first Sunday morning, tea was brought at 5 o'clock. We had hoped to make an early start, but rain was coming steadily down, sometimes sleet, so we returned to bed.

There was fresh snow on the hills all round us, and the road to Sonamarg was impossible in rain, with the danger of avalanches. We heard the rain pouring down all the next night, so there was no chance of moving. The temperature had dropped, and we were glad of our Gilgit boots and big coats. The pines quite near us looked like Christmas trees.

I busied myself in giving out stores and in getting the first mail ready. Coolies coming from a village further on told us that four men were held up in the Dak Bungalow at Baltal.

The sahib who was bound for the Zanskâr range lent us a weekly edition of the *Times*; it was at least a month old, but was new to us.

After a good night's sleep we at last wakened to a clear starry sky, and we were on the road shortly after six. I might have said "in" the road, as it was six to eight inches deep in mud. I was very glad to ride a little cream-coloured pony for the first three miles and keep my feet dry. R. had a very bad time in the deep sticky mud, his grass shoes being nearly sucked off at every step, but fortunately the surface of the road improved after the first few miles.

IV. —INTO THE SNOW.

It was a pretty winding road, the valley narrowing to a gorge in places. We came to one great avalanche, with snow fifteen feet high on the path. The pony was led round it, and I was able to ride another mile. It was lucky I did this, as I was to need all my energy later that day.

There was deep snow after the seventh milestone from Gund, and the pony could go no further and had to be sent back, after paying the pony boy. Just then part of a snow bridge fell into the river, and with a long roar, a

great mass of snow on the far bank, having lost its support, fell into the tumbling water and was washed away. Luckily our bank of the river was not so steep at that place, but in a few minutes we were crossing a much bigger mass of avalanche snow, sloping sheer down to the river 100 feet below. R. went first, I followed, and the coolies brought up the rear. They would not let me stop for a minute to get my breath, and I could see they did not like the dogs jumping along on the slope above us. Burra Subana kept repeating in Hindustani: "Very bad place this, very bad place."

Shortly afterwards snow began to fall, and we still had five miles to go, with two feet of snow already on the ground. Progress was slow, as each foot had to be carefully placed in the deep footprints of coolies who had made the track the day before.

At last we came to a tiny village and found a ledge to sit on, under the projecting roof of a little grain shed. It was now snowing heavily, and we sat tailor-wise to keep our feet from the dripping icicles. R.'s feet must have been very wet from the mud in the early morning, as even mine were wet through, the snow was so soft. We shared hot cocoa, sardines, and bread and butter with the dogs. It was very hard going for them too, as their feet sank deep in the snow, but Garry especially was his own cheery self.

We started off again just after midday, following the winter path which goes through the small village, and then climbs over the shoulder of a steep hill. R. had told me about the last mile before Sonamarg being through a beautiful meadow. We climbed over the shoulder of this hill, and on reaching the top, saw the meadow stretched before us under four or five feet of snow! Only a tiny track showed in the new snow, as if only one man had gone before us. Many inches of snow had fallen since he had passed, and it still kept falling. The tops of the telegraph poles would have been our guide had there been no track. Our feet were two feet below the snow level, and again each foot had to go in the footprint already made, or sink in and overbalance. Looking up for a second meant a certain fall into the deep snow on either side, and we had several falls before learning to stop dead when looking round.

The bungalow was just visible ahead, but we appeared at times to make no progress. Of course we were unaccustomed to going on snow, and it took us an hour and a quarter to do that last mile; it seemed very much longer.

The bungalow at Sonamarg is built round a little courtyard, and a path had been dug in the snow to the entrance. The roofs were fringed with icicles, and it looked very picturesque.

I put the kettle on the little spirit stove, meanwhile watching for the arrival of our coolies, through the tiny window. They soon appeared, looking like a black thread at first, coming nearer in the blinding snow. A cheery lot they were, and soon had fires burning, and we had a good dinner by half past six. The servants were very tired, so we unstrapped our

bedding and made our own beds. We were late that night ; in fact it was nearly eight o'clock before we were in bed. We slept until three, when parasites were again very troublesome ; one limb after another in a fever. I am afraid I charred the blankets in several places with lighted matches. The coolies were awake and chattering by 4 a.m. and our tea came not long after.

We dressed ; had breakfast, and made all our own preparations by candle-light, and long before sunrise we were on the road. It was a wonderful morning, so still and clear and cold, and the scenery was magnificent. Within an hour the sun was colouring the jagged peaks above us. The pity was that we could never glance up or turn round without halting. The moment we came into the sunshine we had a five minutes' rest, sitting on a waterproof at the top of a rise, and put on our snow goggles.

The continual mental effort to keep our balance, and concentrate on each footprint, used up a lot of energy, and we had gone but a mile and a half. Still we kept at it. R. took a snapshot of Garry and me standing in the snow almost level with the roof of a dak hut.

By half past nine I felt I must stop and have half an hour's rest at least, as I was overbalancing at every step. I tried to call to R., who was only twenty yards ahead, but we were near a stream and sound didn't carry, so on we went until we passed some of our coolies resting under pine trees, when he waited for me. I suggested a rest and a cup of cocoa, but when we actually sat down, we found we were both very ready for a good meal ; hot cocoa and a cigarette first however, until we were somewhat rested ; then some country meal girdle scones and a tin of herrings—a very good lunch !

A slippery, slushy path for some way, then again walking in the narrow ditch between walls of snow : it was only ten or twelve inches wide. I counted my steps up to a thousand to keep myself going, and found R. had done the same. I didn't want the tiffin coolie behind me to see that I was tired, but I am afraid I kept stumbling. I hummed all the Scotch tunes I could remember—the cheeriest ones first : one hasn't breath for singing at these heights.

A five minutes' rest, then on again. We passed twenty of our coolies resting their bundles on their T shaped sticks : the load rests on the top of the T and relieves them of the weight. After a drink of water R. went ahead, waiting for me at short intervals, as my pace was too slow for his stride, and the dogs followed him, still going well. We were tired after the snowstorm the day before, and if the road had been interesting, it would have been much easier. I thought of many times in illness and in tennis tournaments, when I had almost thought I was down and out, but had managed to keep my teeth together and win, and I said to myself, " Even if you are not brave, it's not courage that's wanted here, just endurance, and you can manage that."

The steep ascent to the bungalow was trying for tired legs. As I looked

back I saw our khansamah slipping in the soft snow and tobogganing to the bottom of the hill : he joined the others in hearty laughter. Wonderful people I thought they were, and I wondered if I would have laughed had I fallen.

It was snowing softly and we were more than glad to have reached Baltal, our destination. It was only one o'clock, but it seemed like late evening to me. It had taken us nine hours to do that nine-mile march. The men kneaded our legs and feet, and we got tea within the hour. Yakdans and kiltas were brought in from the verandah, and stores given out—sugar, lentils, rice, macaroni and potatoes, and R. searched until he found the Keating's powder.

Khazir Butt came in and suggested starting on this march, 2,000 feet up the pass, at 3 or 4 a.m. We planned dinner at 6—then to bed with most of our clothes on. I was glad my hair was not shingled ; it was so nice and warm behind my ears. R.'s was a bit long, but we left it alone until we were out of the snow. Both dogs fell asleep at once, Garry not even taking any notice of coolies collecting their kit on the verandah.

Baltal must be a lovely place in summer, but it was mid-winter when we passed through it, although April 21. The shikari said he did not remember such a late season. There were icicles eighteen inches long all round the verandahs, and great drifts of snow up against the windows on our side of the house.

Our faces were very red, but had not begun to peel. I hoped we had become acclimatized and so escaped peeling, little knowing what the glare off the snow can do.

When I looked at our pillow slips after we had been out for a week, I felt glad they were made of holland ; at least they were brown when we started, and were now only a darker colour.

We looked out our fur caps for next morning. I had an old black Cossack cap, and R. had a sheepskin-lined helmet. Our lunch coolie had been carrying our long Gilgit boots, so that we could change our wet quilted boots and socks the moment we got in. The Gilgit boots are also lined with sheepskin, and come well above the knees. They are a great comfort ; in fact a necessity in these bungalows.

I stopped on a bridge before coming up the hill to the bungalow to look at the view, and the tiffin coolie showed me the entrance to the pass, and where the summer path wound round the hillside far above us.

In the Dak Bungalow book we saw that a sahib had left that morning. He had been held up at Baltal for three or four days by the same storm which kept us prisoners at Gund. The chowkidar (caretaker) told us he had made one or two attempts to get up the pass, but had to return. I was not reassured on hearing this, and again felt afraid that my being there would hinder R. However tired we were, we had to start off next morning without waiting for a day's rest between, in case the weather broke.

V.—THE ZOJI LA.

“Macchoi.”

Thursday, April 22.

We are actually through the pass, and it was a real “Hill Difficulty.”

I began my diary directly after tea at Macchoi: there was so much to relate. We arrived just before two o'clock, having left Baltal at four in the morning. Our tea was brought before 3 a.m., and we got up at once, and got ready for breakfast. I have not said “dressed ourselves,” as we



FIG. 1.—The top of the Zoji La, 11,300 feet. R., the dogs and tiffin coolies.

slept in our clothes. The dogs at first refused to move, wondering what we were doing in the middle of the night. I was too excited to want much breakfast—tea without milk is not very appetizing; but I ate my egg and bacon, with a fried scone.

We started off with our two tiffin coolies and the dogs. It was a lovely night, stars overhead, but dark, and we needed all the candle lanterns. We had had no fire in our room before starting, and in such cold we were glad to be moving.

It was weird in the true sense of the word, and rather exciting, starting for this well-known pass in pitch darkness. Our coolie went in front carrying a lantern. We began to climb at once, and the path was difficult. Each foot again had to be in the track, which was even deeper than before. We wound up the hillside, then crossed a very high bed of avalanche snow, piled hundreds of feet high in great balls, which had formed as it rolled down from the mountain above.

We then turned to the right, and started up the real pass, with high cliffs on each side. Daylight came quicker than we expected, and the candles were put out. The track got steeper and steeper, always deep down in soft snow, and it was still very difficult to balance, even with the help of our long iron-shod khud sticks.

When I think of it, I can still feel the pain in the sides of my feet where the balancing muscles must be. We stopped often for two minutes to get breath and look round. The sun was just catching the ridge behind us, where a sharp peak towered above the others. We crossed avalanche snow again and again, hundreds of feet of it, as we climbed higher and higher. The gorge between the cliffs was extraordinarily narrow, the cliffs overhanging at times. Although in reality the march must have been far harder than that of the previous day, I did not find it nearly so tiring. This march was long and wearing, but full of interest; while from Sonamarg to Baltal was really monotonous.

There was little wind for the first three hours, for which we were thankful; then it began to blow and the snow cut our faces, but we pulled our caps well down and plodded on. I don't know if it can be called "plodding" when we were climbing so steadily; it doesn't seem a suitable word.

Our snow goggles were not put on until we came actually into the sunshine about 8 o'clock, as there was no glare at first.

I thought time after time that we had reached the top of the pass, only to find that round another corner there was a still steeper ascent. We looked for a sheltered spot where we could stop for breakfast, but there was none. The sun was shining, but a freezing wind was blowing, and our hands were so cold that to shell the hard-boiled eggs was almost an impossibility. The butter I ate with a spoon, as it was too hard to spread on the bread. We thoroughly enjoyed our hot sweet cocoa made without milk—a drink that we would not have appreciated in our own house at home.

We sat as short a time as possible, as we were actually sitting in soft snow; there was not a rock or a tree in sight. A good hour before we had seen the last of the birches. Birches are very "homey" trees, and made me think of the Highlands in early October, when the rowan trees are red, and the birches a soft yellow, but these were far up the hillside. We had seen many trunks of fine birches among the debris which had been hurled down from a thousand feet above us by avalanches.

We got up, and shaking the snow from our coats and breeches, followed the long trail again in deeper snow than ever. A steady wind was blowing, and the track was almost obliterated. On one exposed slope we sank deep in driven snow every three or four steps; it was weary going.

We saw figures coming towards us down the pass, and as they came nearer we were very interested and surprised to see that one was a sahib. R. asked him if he was quite fit as he was going back so early in the season. It transpired that he had gone up on March 26 to Tsurri nullah in Baltistan, had finished his shoot, and got two markhor and two ibex. He asked where R. was going, and said he had shot in 16 block in Ladakh last year, and that it had good burrhel as well as sharpu, and he had also seen *Ovis ammon* there, probably crossing to other parts. It was all very interesting to hear about where we were going, as our shikari had not been there, and they knew very little about this block in the game office in Srinagar. He asked if I had found the climb very hard, and said, "I think you have done the finest thing of any woman in Asia." This was very pleasing from a man who knew the country so well.

He then told us that a hut was an hour's march from where we were, and that it would take us two more hours to reach Macchoi. We were very glad to get this information.

While R. was talking to him I was stroking his dog, a fine Great Dane, and I saw the owner's name (Stephens) on the collar, and his regiment, Oxford and Bucks Light Infantry. His hair was long and he had a short beard and wore goggles, so it would be difficult to recognize him again. He was very modest, and did not tell us what he had shot, or how long he had been in the nullah. It was not until half an hour later when we met his shikari and a long line of coolies that we knew. He had been only two days in the nullah, and had shot two ibex and two markhor, all fine heads. His shikari said there was so much snow, and so late this year, that the animals had to come very far down to get the young grass which grows where the snow has just melted.

About eleven o'clock we saw the hut in the distance, a black blot on the white background. It was a dirty little place, obviously used by coolies and the telegraph workers. Coils of wire lay there unprotected; no need to keep them under lock and key in such a place at this time of year.

We made tea, and used a lot of our precious methylated spirit, as we had to melt snow in the kettle. It was so cold we made two brews of tea and fried our sardines, and were on the road again within the hour.

We crossed several snow bridges. They seemed wonderful to me; great banks of snow twenty feet above a stream, with the water passing underneath. We also passed over some deep crevasses where a great crack had formed thirty or forty feet deep. Kelpie looked as if he was going to fall into one as we peered down when R. was showing it to me.

We tried singing for a time but we had no breath and the cramped pace at which we were forced to go made it worse. At last we saw the

bungalow on a rising in the middle of the valley. We cheered up, and R. went first to the telegraph office to send a wire to the Game Preservation Office, to ask if he could have the markhor nullah in Baltistan that had just been vacated.

Macchoi Bungalow was quite the dirtiest I have ever been in. I even disliked my feet touching the floor, it was so dirty. However, we were glad of a roof over our heads, and with a big wood fire we were fairly comfortable. I found I had some drawing pins, and pinned up some pieces of dog's blanket where panes of glass were missing in the windows.

We had our legs well massaged and then made tea on our own fire, filling the kettle from the six-foot-high snowdrift in front of the door. The poor dogs were too stiff to move; Garry was as cross as a tired child. Their feet had been troubling them a lot, I'm afraid. Little lumps of ice got between their toes, and sometimes I noticed little blood marks on the snow.

We did not trouble to tidy up that night as it was a short march next day, but even seven miles in that soft snow are very trying; quite double the exertion.

We gave the coolies money to buy firewood, and Jit Ram, our bearer, told us that the caretaker had no more wood in his shed. I wondered what we should do if one of us went sick and we had to stay for a day or two. There were plenty of rough wooden bookshelves round the room, so I did not worry.

As we sat round the fire with the smell of wet boots and socks in our nostrils, we thought we had much to be thankful for that day—beautiful views, a cloudless sky all the way, and no wind up the first part of the pass; a thing we had dreaded. Our faces were very dark that night; the reflected glare is the strongest for tanning the skin. I kept my back to the fire.

There was no wondering how we would sleep: all the fresh air and exertion, and the mental relief of the pass being now behind us, made us very sleepy. We piled on the beds everything possible for warmth, but the wind howled through the room, and the cold wakened us frequently.

(To be continued).



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Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 392.)

VI.—MACCHOI TO KARGIL.

We made a late start for Matayan, just before eight, and the baggage coolies were off before us. It was a perfect morning, a very blue sky. Unfortunately the snow was just not hard enough for us to walk on the surface, but the dogs scampered about, and their footprints could hardly be seen on the crust of snow.



FIG. 2.—Our servants leaving Macchoi Bungalow.

The bungalow made such a funny picture almost hidden in snow with icicles hanging from the roof, that I called to R. for the camera to take a photograph.

After a mile of the same kind of track as before, we came to a long uninhabited valley. There were great snow-covered mountains on every

side, and the whole undulating valley was smoothly covered with untouched snow. Here the snow was very deep; khud sticks were useless in attempting to discover its depth. The valley was extraordinarily still, not a breath stirring. I took a photograph of R. and the dogs and the tiffin coolies, sitting in the snow at a five minutes' rest.

Two miles further on there appeared to be less snow on the surrounding hills, crags showing black against the white background more frequently, and we rested on bare rocks on a hillside for ten minutes. Garry galloped miles away, burrowing beside the rocks, where there must have been marmot holes. He looked like a black dot in the distance.

In a few inches of snow near the rocks we found small yellow crocuses. There was no grass or anything green, only these brave little yellow heads amongst the snow.

We stopped for lunch beside a stream which up to now had been completely bridged with snow. The water was a beautiful clear green, and overhung with high snow walls, parts of which fell away as they melted in the sunshine. We sat for an hour, quite warm for the first time.

The remainder of the march was very trying indeed; the snow was soft and wet; the old footprints were very little use as they gave way under us, and we staggered from side to side, sinking deep at nearly every step.

We could see the flat roofs of the tiny village of Matayan a mile away, and when we looked up at each short rest, leaning heavily on our khud sticks, the village seemed no nearer. The only thing to do was to count the telegraph poles.

The bungalow is on the far side of the village, and we finally arrived very tired about two o'clock to find a sick sahib had been there since the day before: this was the man who had been held up at Baltal before we got there.

We had our legs massaged and got off our soaking boots and puttees while tea was being prepared. After tea R. went to see the sick man, an officer who had malaria. He was recovering, but R. told him he must on no account attempt to go on for another two days.

I heard Garry barking loudly to greet the arrival of another officer who came in about six o'clock, almost exhausted, having come all the way from Baltal. He had been fifteen hours on the road, and had to battle with a stinging wind and driving powdered snow in the pass.

All windows in Dak Bungalows in the district have outside boards to protect them when snow drifts up against the house, but there were panes wanting here too.

Our faces were swollen and badly burnt. Even our smooth linen pillow-slips felt like horse hair to our tender skin, and we had a restless night and little sleep. We were up before five o'clock, however, very anxious for an early start before the snow became soft in the sun.

The officer with malaria had a good night. R. gave him some medicine

from our box, and we had left the bungalow by six o'clock. To our great joy the snow was hard on the top, and it was easy walking. We walked hard at four miles an hour, even running at intervals, in our delight at being able to stretch our legs once more. The cold was intense, and we met a coolie about seven o'clock with his hair and moustache frozen white. The dogs were in great form, chasing each other and racing along.

The first three miles were very pleasant. We were in the shadow of the hills, so goggles were not necessary. After that I had to attach a cloth to my goggles to protect my blistered face from the glare, and R. had a silk handkerchief arranged to protect his burnt neck.



FIG. 3.—Pandras. Last march in the snow.

A ten minutes' rest in a willow plantation, and then we came to Pandras. In the plantation I picked a few pussy willow catkins just burst.

Pandras is four miles from Matayan—a few flat-roofed huts built among the rocks, like an Old Testament picture. All the children, goats, sheep and poultry were on the roofs of these huts, the only place where there was no snow. We had arranged for a pony to meet me at Pandras, as a track had been opened from there to Dras, although the snow was still three feet deep, and a shaggy little animal was led down from the village as we appeared. It had a wooden saddle inlaid with ivory and mounted with brass. We took a photograph of the valley, then the pony was led to the track, and two miles further on I was able to ride.

We came to a high bank above the river. The pony had to follow the winding path up this bank, while R. and the coolies walked across the

hard snow by the river side. I rode three or four miles where the snow had melted sufficiently to make riding possible. It was a friendly little beast, but preferred to walk on the very edge of the path. The man pulled it downhill by a long hair rope. Coming down a steep incline where the snow was deep again, the man pulled, the pony went on its knees, and I went on top of the man. After that I went down steep slopes on foot.

In this valley the snow had melted in places, showing black patches of rock, and nearer Dras there was perceptibly less snow, and the road was stony and very muddy. In Dras itself, although it is considerably lower than Matayan, there were high frozen snow drifts, and neither doors nor windows on one side of the bungalow could be opened.

It was cheery to see animals again; cows, sheep, ponies and goats were about, being fed on hay.

We spent nearly an hour that afternoon attending to our faces. R. was still very burnt, and in spite of my face protector, my chin was one large blister, and my lips so swollen that they looked like a negro's. The cold cream was frozen, and had to be put beside the fire to melt. We forgot about it, and it boiled in the tube. We put spirits of camphor on our blistered lips, and calamine lotion on our enormous ears. I thought moulds of our noses would fall off next day, leaving still more tender skin exposed.

We spent another hour repacking yakduns and kiltas. The packing could be much better arranged, as we now changed to pony transport. The boxes could be heavier, and the sacks were emptied into them. We paid off the thirty baggage coolies who had come from Gund; they got about £14; not very much for such hardships. Our money was almost done, and we had to telegraph to get some sent to Kargil, the nearest post office, two marches ahead.

R. had attended to several sick men on the road, but in Dras we had a great sick parade, with the medicine box outside. There were coolies with early snow blindness; men who had lost or broken their glare glasses. In Srinagar there must be an enormous trade in these glasses: the kind used by the coolies cost about fourpence a pair, and serve the purpose well. Other patients had coughs, shortness of breath, several with tummy aches, and a large crowd looked on with great interest.

Khazir Butt suggested that we should share a sheep with two men who were in the other half of the bungalow. Just before dinner he came and said the sabibs were outside. So we went to find them looking at the sheep, not a bad looking ram. Garry followed us out and gave the man who was holding the ram some trouble. We sent him indoors, and listened to the bargaining for the sheep. Both the officers spoke Hindustani well, and the Dras shepherd knew enough. We got the whole sheep for 10s., and our share was 3s. 6d., and included the liver and kidneys.

Again we went early to bed and slept well in spite of the cold. Dras lies in the middle of a wide plain; a very windy spot, and the shikari told me that gales blow there at all seasons.

We started for Kharbu about 6 a.m., and until 8 o'clock all the mud of last night was frozen, and the small streams were frozen solid : even the pony's feet did not break the ice. We had just come from a merciless country, but here we were in a desolate one ; bleak, bare and barren : nothing but rocks, great snow-capped jagged hills, and green rapid rivers.

About half an hour was wasted at the start that morning ; the pony's bridle broke and fell off ; the reins felt loose ; then I felt something hard in my hand, and found it was the bit. The syce tried to mend the bridle, but after three attempts, went to a house and got another in exchange. The reins were made of old pieces of cloth covered with sheepskin. The pony had a wonderful saddle ; a type I was to see often in Ladakh ; but this was a specially fine one. The wooden pommel was six inches high, inlaid with ivory ; the saddle was upholstered in maroon cloth, and looked very gay ; it was very hard, however, and I wished next day that I did not feel the after-effects of it quite so much.

There were a few scattered huts not far from Dras, and it was pleasant to hear the sound of sheep and cattle after the silence of those snowbound valleys. There was a homely farmyard smell as we passed through hamlets. Even birds began to appear again ; several pairs of magpies came quite near us, and we saw some wagtails at the water's edge.

The road was often very monotonous, up and down a shale bank by the side of the river. The soil looked black against the white background, but there was not a blade of grass anywhere.

We rested under a rock for lunch, and started off quite fresh again. The character of the country is quite different from Kashmir ; the path wound round the mountain sides the whole march. The valley was narrow, and every corner presented the same features ; the river, the stony road, and the bare hills ; and we didn't seem to get any further. There were one or two tiny villages, but it was difficult to locate our position on the map, and we had to guess on a basis of three miles an hour. A bridge over the river shown on the map proved our calculations to be correct, which was very cheering, as it meant only six more miles. Still, we were very tired indeed one mile from the bungalow, so stopped at the roadside and had tea. The coolies made a fire with dry sticks of a sweet-smelling aromatic shrub. We rested for half an hour, and the officers with whom we shared the sheep passed us here, one limping badly. They were very glad to hear it was only a mile further. The baggage ponies had passed us while we were at lunch, so the servants had time to have everything ready for us in the bungalow. We walked the last mile feeling much cheerier and less weary after tea. We found beds made and everything prepared ; even a kettle boiling, so we drank more tea while our legs were being massaged. R. found he had a nasty septic blister on his heel.

Kharbu is lower than Dras, well sheltered and decidedly warmer. There was no snow on the road after the first five or six miles, which was a very great relief. R. hadn't been able to shave for the past six days, and looked like a wild man. This was the first bungalow where we had any

privacy; a good room and dressing room; the only drawback was the usual smoky fire.

This was our longest march, twenty-one miles, and after another day on the road to Kargil, we intended to stay there to give ourselves and the servants a much needed day's rest.

On Tuesday, April 27, we were wakened by Jit Ram with tea at 5 o'clock, to find it was snowing heavily, and there were three or four inches on the ground; the willow trees in front of the house were heavily laden with snow, and it was impossible to march that day. I had wakened with a really bad headache, so I was not depressed at the idea of the unexpected day off. We went back to bed but could not sleep, we were accustomed to getting up so early. We had a really good breakfast at seven—kidney, bacon and eggs.

It snowed all day. To Kargil was only a fifteen-mile march, but the first part being in snow made it seem longer. There was a long climb over a spur, then down again, and round to where the Shingoo river joins the Dras. It was a very pretty corner; we could see the tiny path rising higher and higher leading to the Deosai, a well-known plateau for shikar. On the opposite bank of the river, R. showed me Karkitchu village, where he shot his fine red bear fourteen years ago. The road then wound round steep precipices, and we had lunch amongst the rocks.

There is a modern suspension bridge where the road branches off to Skardu; this is the parting of the ways: to the left, across the bridge, to Baltistan and Skardu: to the right, round a high rock at the junction of the Suru and Dras rivers, the path leads to Ladakh and Leh.

Two natives were fishing from the bridge, and one of them came to us offering fish for sale: we bought a couple about two pounds each, and had them for dinner that night. These river fish are very good eating, but are full of bones.

We reached Kargil, a large village with open country all round, at 2 o'clock, and went straight to the post office.

(To be continued.)

Current Literature.

HALDANE, J. S. Gases met with Underground. *Surveyor*. 1932, v. 82, 407-9.

This interesting paper deals with the presence of unusual gases in underground atmospheres. The first considered is choke-damp, or carbon dioxide, which is found in mines, wells and vaults. It is heavier than air, and may cause fatalities, due to men unsuspectingly descending into an atmosphere containing it. These accidents are due to want of oxygen, rather than to any poisonous property in carbon dioxide. Various substances met with underground combine with oxygen, and give a residue of choke-

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K. W. DICKSON, F.R.G.S.

(Continued from p. 461, vol. lx.)

VII.—BEYOND THE SNOW.

Coming into the Kargil valley was like a bound from winter to spring; the fruit trees were in blossom and the willows a soft green; the nibbled turf was like velvet, and so refreshing to the eye after the glare of the snow.

Kargil is really a collection of villages where many valleys converge. The bungalow is high up beyond the bazaar, and commands a fine view of the valley opposite, and a great circle of hills.

We had a perfect day to rest there; a cloudless sky. The servants very soon had the bedding in the sun, and clothes were washed.

We had found our English mail waiting for us the day before, but a later one arrived that day, so we hurried down to the bazaar to get our shopping done before settling down to answer our letters. The chowkidar was given orders to have the chimney swept during our absence, as we had been smoked out the day before.

As we were right away from the snow now, our chapplies were looked out and we wore them that afternoon to get a little accustomed to them again. Wandering up the hill with our purchases—matches, candles, and Sunlight soap—we saw a lama from Leh. I had not realized we would be in Buddhist country the next day.

R. took out the gun, and we walked down to the river and round the old fort looking for pigeon, but saw none.

As I sat down with my notebook at Moulbeck, R. was busy emptying jam from the tin into our jam-pot; doing all the household duties, he said, while I wrote the diary.

Jit Ram had wakened us at 4 instead of 5 o'clock, so we had an early start. The pony men were like a lot of little Chinamen; quite a different type from the men of Dras. Our path lay on a little esplanade by the river for the first mile, then crossed the river by a suspension bridge. The tiffin coolies took R. and the dogs up a steep rocky path, but the pony man refused to go that way, so I was taken by a different route, expecting to see them a few hundred yards ahead; we went up and up and round corner after corner until I really wondered if one of us had missed the road. We emerged on a large plateau, very stony but quite level; even here, when I could see a mile ahead, there was no sign of R. or the dogs. The Ladakhi and his nice little black pony didn't look as if they meant to kidnap me.

At last I saw heads appearing over the hill, and the barrel of a gun glinting in the sunlight, and I recognized them at once. I found that R. had been as irritated as I was at being taken along this road; he had taken the coolies at a great pace up the steep path, then took long breaths and spoke to Subhana, who had no breath to answer.

A disused irrigation channel runs across the plateau, made more than thirty years ago, I was told, only to find that the supply of water was inadequate for any practical purposes.

It was very cold and windy, but we got a fine view. Our path lay right across the plateau, then wound downhill to Pashkyum, a pretty village by the river, its fields shaded by poplars and willow trees. There is an old fort on the hill ahead, its watch towers dominating the valley in both

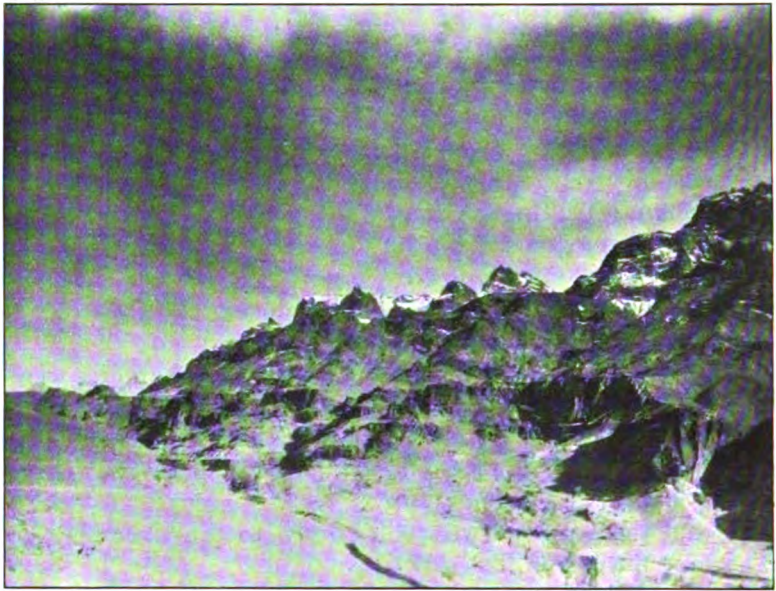


FIG. 4.—Typical cliffs and hills near Moulbeck.

directions. We followed the right bank of the river up steep slopes and over precipices. We saw Topi, a village which has an extraordinary situation on flat ground far above the road; so far as we could see, there was nothing but a goat path leading to it, up the face of the cliff.

We soon came to Lotson, a pretty village built amongst sandstone rocks. After crossing a stream we looked for a suitable place to have tiffin, as we were both very tired and, for once, not too hungry. Our cocoa, cheese, and country meal scones did not taste good that day.

Leaving the village behind, we started off again through the same rocky, stony, barren country. We wound round hill after hill, on and on, past shale-covered hillsides, a few crows about, but not even a weed growing anywhere. We took turns in riding the pony; R. took quarter of an hour

to my half hour, and so the time passed until we saw a little monastery built into the cliffs above Shergol. There we decided to make tea by the river. We sat down among a few willow trees and behind a rock, as there was a very strong wind, and I dropped off to sleep while the coolies made a fire and boiled the kettle. We had come nineteen miles already, so rested for an hour, feeling that we were not far from our destination. Our transport passed us while we were at tea. Even after the rest the road seemed to wind on interminably. I think it seemed more monotonous than usual, as we had no sunshine that day to put colour into the rocks and brighten up the hillsides.

The ancient monastery of Moulbeck was visible from a long way off,

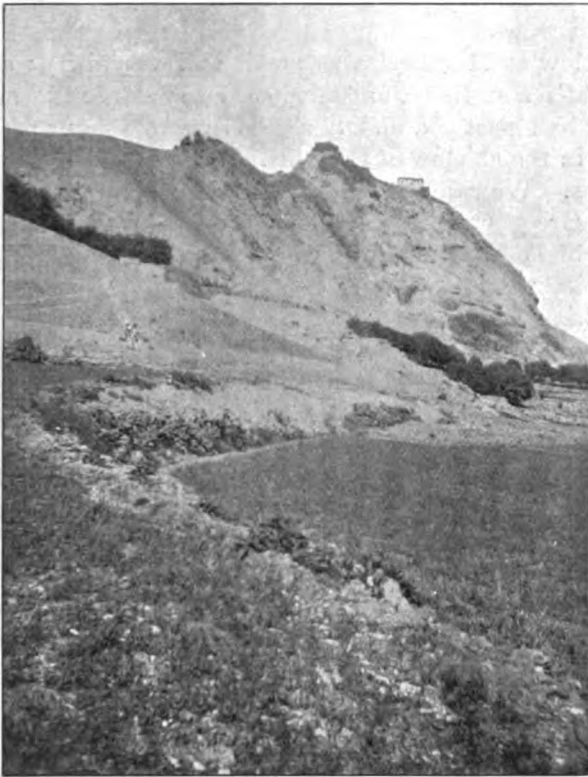


FIG. 5.—Monastery on hilltop, Moulbeck. Taken on our return journey

built on a pinnacle of rock; two buildings intact, but the top of the rock was covered with crumbling ruins. Here we saw chortens for the first time; a monument usually shaped like an urn on a pedestal; they are supposed to contain the ashes of some saint. The people were quite different from any we had seen before; a Chinese type of face, and they all looked so healthy and had really rosy cheeks. Both men and women wear skin-lined caps, usually blue, and lined with black goatskin; these

fold down rather like a Balaklava helmet, and fasten beneath the chin when it is cold. They all wear a long woollen coat of natural-coloured wool, the same colour as the rocks, the hills, the stones, and the road. This cloth is woven by the women in the villages in strips only eleven or twelve inches wide, so a Ladakhi's coat has many seams in it. The men wind a dark coloured sash round the waist ; it has a long fringe at the end, and in the sash some have knives, and all have flints and steel in brass cases, and a brass or copper spoon. Black silk threads are plaited into their pigtails to make them the proper length ; all the men have long thin pigtails, and I saw a little leather tab far down the back of a coat, with the pigtail stuck through.

The people are all engaged in agriculture, and look a happy, contented lot. They show rows of shining teeth when they greet us.

The bungalow at Moulbeck was small and very dirty ; still, we had a very good night's rest there, and made a later start next morning. The sun was up by half past six, and it seemed warm as our path was in sunshine, and not in the shadow of the hills. There seemed to be monasteries every few miles. We came to another small one not far from Moulbeck, with a huge figure of Chamba carved on the face of the rock. Further on, the road branched off to the left quite unexpectedly to me, instead of going up the main valley by the water. Our path was on open ground and easy going, but oh ! in such a desert ; not a blade of grass, not a tree anywhere ; not an animal or an insect, and not a drop of water ! No one was inclined to talk. I thought of the children of Israel in the wilderness, and didn't wonder that they rebelled, if the desert was like that ; they would certainly need manna from Heaven in such a place.

At the end of the valley we came to one well-built hut, but it, too, seemed deserted. My pony man whistled cheerily—quite a contrast to the singing of Indians or Kashmiris.

We knew there was a pass ahead of us that day, the Namika La ; a cheery thought, as it would certainly mean more than a glimpse of new country. Sure enough, we began to climb as soon as we got out of this valley. We saw some chikor, but had no luck with the gun. R. had done a lot of extra climbing after chikor, so I gave him the pony for the last steep part of the pass. I put Garry on the lead and kept behind R., and Garry pulled well. We had a rest at the top of the pass, and got a very extensive view, so got out the compass and map, and with the aid of the protractor, we spotted two snowy peaks, one 19,000 and the other 20,000 feet high ; the latter beyond Leh. The pony man sat and played his tin whistle, while we lay and looked at the hills. Then we started off downhill with a swing ; down, down, by dried-up river beds and drier hills still ; not a sign of life for miles. We had a quarter of an hour's rest under a shale bluff in the sun, and I went sound asleep.

About a mile further on we stopped for lunch in what we thought was a sheltered little gully, but we did not know the climate of Ladakh. In

half an hour it was bitterly cold, a strong wind blowing, clouds over all the sky, and heavy snow falling on the higher hills. We packed up our lunch basket and hurried on, thinking we had but three miles to go. It was cloudy, windy, and very dusty. We saw more chikor, but they were too far away.

There were many tiny hamlets on both sides of the river, but no Kharbu with its Dak Bungalow. One monastery was most picturesque, perched on a rock above the river, its white-washed walls and red-painted eaves the only colour in the sombre landscape. The first Mani wall that I noticed



FIG. 6.—Village on the cliff and the first Mani wall.

was just before Kharbu. I imagined then that it was a sort of cemetery with little tombstones on the top. It was not until I got to Leh that I heard that these were sacred walls; devout Buddhists pay a monastery for an engraved stone, on which are the well-known words, "Om Mani Padmi Hum," a phrase which has more than one meaning but is usually translated "Oh, the God of the Jewel in the Lotus Flower." The donor acquires merit by placing this stone on the wall in the same way as by building a chorten, but no merit is acquired by mending a broken-down wall or chorten, so the ruins of these emblems of Buddhism are scattered everywhere throughout Lama-ridden Ladakh.

VIII.—KHARBU TO SASPUL.

Kharbu lies at the foot of cliffs which are covered by the most wonderful old ruins of castles and huts—looking for all the world as if they had come out of a fairy tale or some legend of long ago—a castle in Cornwall in the

days of King Arthur, or a picture by Arthur Rackham. We had often thought that Dagshai from Kasauli, on an August evening, would give Arthur Rackham new ideas, but that was the wonderful light in the monsoon; here, with no aids in the way of lighting, were real castles on spiked peaks of rock. We spent a little time looking for possible ways of climbing up, which certainly were not obvious. We found the bungalow on the far side of the village, and sat for a long time on the verandah, very tired and weary. Clouds were still coming up and it did not look too well for the morrow. R. went out and shot some pigeon while I gave out stores. There was a hole a yard across in the roof of the room in which we were to sleep; it didn't help the chimney to draw well, but the caretaker put the table from the other room on the top of the hole, and we were very comfortable.

A field was being ploughed not far away, about a dozen people working in half an acre of ground; a man directing the plough, another sowing seed, while others made the ground smooth again. They were using yaks for ploughing, or rather the tzo, a cross between the yak and the bullock. They all sang quite cheerily a rather mournful song. Our shikari's son said the words were, "When death comes to me, may I not die." Whether this wish included the usual hope of being re-incarnated a rich man's son, I do not know.

While I was watching the ploughing a young girl came to fill her brass water jug at the irrigation channel; she was the first woman I had seen wearing the pberak, the Ladakhi head-dress. It is made of paper pasted together, then covered with red cotton cloth; it is shaped like a cobra, the tail hanging down behind; turquoises are sewn on to the red cotton which covers the pberak. A woman's wealth is carried on her head; even a poor woman has usually a pberak worth 30 rupees, but many carry 300 rupees' (roughly, £20) worth of turquoises and corals. The hair is plaited with goat's hair into a lappet worn one on each side of the head; these represent the hood of the cobra. Christian women discard this head-dress, as it is of Buddhist origin. Quite a crowd of girls stood watching us before they went off with their water jugs. Their dark claret-coloured woollen frocks reach down to the ankles; the children wear long dresses too, with little caps lined with goatskin. The people have very fresh complexions, although they are so dark. I was thinking how nice and pleasant they looked when one rather took my breath away by expectorating with great precision just beside me.

The ground was white with snow when we woke next morning, the first of May.

There was not much to relate of sights on the road that day; there were more ruins of old castles on spiked peaks, and we got a nice photograph of some with snow in the foreground. We found the pull up to the Photu Pass a very long one, although the guide book says it is easy. We stopped for lunch in warm sunshine before we reached the top, but once

again we were had by the climate of the country. In ten minutes the sun had gone behind a cloud, and a piercing blast came up the valley; the coolies all crouched down behind bushes, and we got under a coat and hurriedly finished our meal.

After a short walk we were at the top, and a fine stretch of hills came into view, the Ladakh Range behind the Indus. I did love those marches when there was a pass to climb! We ran almost a mile and a half downhill, passing ponies and servants on the way. Then another weary walk on a dried-up river bed with high mud cliffs on one side; a short steep ascent, and Lamayuru came into sight from behind some chortens. On that dull afternoon it looked like a city of the dead, built on the top of honeycombed rocks or mud cliffs, with a bare monastery crowning the village. Set away amongst those hills, Lamayuru looked like some mediæval place of torture, or, as R. said, like a picture from Dante's *Inferno*. The rest house lies just under the village. An interested crowd of children, huddled together in their goatskins, sat and watched us as we had tea on the verandah. I gave the dogs the remains of the tea, and the children shrieked with laughter when Kelpie begged and held out paws. Unfortunately the dogs were too hungry to be funny or do any tricks, and Kelpie ended by making a dash for the kitchen.

Two Lamas passed with ponies laden with grain, and R. took a photograph of them.

Khansamah gave us a good dinner—mutton broth, roast fowl, and rum soufflé; and we were in bed by half past seven.

The march from Lamayuru to Nurla seemed longer than it really was, a distance of eighteen miles. We left at the usual time, but put off some time going after pigeon. We had seen hundreds the night before, so R. took the gun and tried to get as many as he could with one shot; they were badly needed for the pot, as the servants had nothing but chuppatties and salt, and we had not too many cartridges. He got three with one shot, then we moved on and saw more later, but too far away. The path then left the valley and wound down and down the beautiful gorge towards the Indus. It was very narrow in parts, and we got only one photograph as the light was not good, and our films were too precious to waste. There was no vegetation of any kind, but the colour in the hills was wonderful; sometimes looking ahead I thought we might have been on a Scotch moor; the hills a soft purple but with streaks of green sage slate; then we rounded a corner to see a ridge of soft mulberry-coloured hills, with sharp outcrops of russet sandstone like castles built on cliffs.

After crossing a fine bridge over the Indus, we came to Khalatse by 11 o'clock. It was a beautiful little village, with willow trees just green, apricot blossom and green fields. After a weary trudge in soft sand beside Mani walls, we passed a pretty orchard with a house in the centre, and I was surprised to see "Rev. Burroughs, Moravian Mission," above the doorway; a simple mud house, but the orchard was very tidy and well kept.

If only I had known there was a Mrs. Burroughs and children, I would have gone in to see them, but never dreaming that a woman would be settled in such a lonely spot, we went on without calling—an unforgivable sin !

We rested and had lunch on the edge of a tiny field, leaning against big stones which were part of the dam keeping a little irrigation channel behind us from flowing on to the fields. A lot of happy looking little girls watched us, peeping from behind the retaining walls of the fields below ; all the cultivated ground is built up in terraces. They all had little wooden spades, but these were for real work, not for playing in the sand. They were not actually digging, but damming up some channels and opening others to let the water over all the fields. We saw the women in Bod Kharbu using English spades, and, funnily enough, I had seen at Kargil spades with a Sheffield label on them for sale in the bazaar. I have never seen an English spade in use in the Punjab. The Indian pattern is made like a hook instead of being flat, and is used more as one would use a pickaxe.

The road was not interesting after leaving Khalatse, but the colouring of the hills was wonderful, and formations of rock-like ruins of old castles stood out on the nearer ridges. I think the architecture of the monasteries must have been taken, either consciously or unconsciously, from these formations.

The path was rough and stony and covered with boulders ; then it crossed deep sand, past long lines of Mani walls. The road always winds on both sides of these walls. There is a legend that blessing comes to those who pass keeping the wall on their right, so naturally a path is trodden on both sides, and good Buddhists may follow the tradition of their people going in either direction.

Nurla was another pretty cultivated spot, but the Dak Bungalow, although built on a high bank above the Indus, faces the wrong way, and the verandah looks into mud walls. We had come $18\frac{1}{2}$ miles, and we were both very weary when we arrived there. It was Sunday, our day for writing home, but I didn't feel equal to beginning my letter, and even left the diary a day in arrears.

Our pony men would go no further than Nurla, although they had promised to go with us to Leh. We counted up our money and found we had not enough to pay them and leave sufficient for bungalows and other expenses to Leh. We were arranging with the shikari to send the money to the Thesildar at Kargil, when Jit Ram came in very excited with a story about shawls, syces (our own grooms), etc. He spoke so fast I could not understand, and made him speak slowly. I discovered he had brought all the money he had to help us, and did not want it back until we returned to Srinagar. The syces had given him money before he left Lahore to buy puttoo rugs, country-made tweed, for their wives. Jit Ram had been with us for only six months, yet he trusted us with all the money he had, as the

syces had trusted him with their money. One hears a lot about the new type of servant since the war, but here was one you could not help trusting when you looked at him. He got very muddled and never put anything twice in the same place in camp, but he never grouched, and was so honest I felt I had some one with us whom I could trust all the time.

It was a cheery, happy march to Saspul, not such a long road. We kept beside the Indus, and even although the sun was not shining, the



FIG. 7.—Path between Nurla and Saspul.

water was a lovely sage-green colour, and against the mulberry hills the contrast was good. The path had a very rough surface again, and going steadily we did not do more three miles an hour. R. shot one chikor before lunch, but we got no pigeon that day. Kelpie was very afraid when he saw the gun, while Garry never moved, he was so interested. Later Kelpie associated the sound of firing with some shikar, and then there was no holding him when a shot was fired.

We ate our midday meal right down on a little beach by the river, on soft grey sand ; we had to lay a coat down to keep the sand out of our food.

I had a sturdy grey pony and a decent pony man ; he had a fine pair of Tibetan boots made of woven hair with natural coloured woollen cloth tops, and a bright scarlet strip embroidered up the back. The rest of his dress was not quite in keeping with the boots ; his pigtail, which reached to his knees, had soiled his coat so much that it looked as if it had been smeared with blacklead right down the back.

The rest-house at Sasapul stands high above the village, with a grove of poplar and apricot trees in front; the servants' quarters were below and our rooms upstairs. From the verandah there was a fine view over the trees and near fields to the hills on the far side of the river. Heavy dark clouds were hanging about when we arrived, but it cleared up in the afternoon. We wondered what sort of weather they were having in Srinagar, and if it was snowing again in the Zoji La.

R. went off to bed early, but I sat and wrote the diary until after 8 o'clock, while the wind howled in the poplars outside like a November night in Scotland. There was a grand big wood fire and a stuffed armchair, and that was the first chimney we had met that didn't smoke.

(*To be continued.*)

Current Literature.

WULFF, F. Om mononucleosis infectiosa. [**Concerning Mononucleosis Infectiosa.**] *Ugeskr f. Laeger.* 1933, v. 95, 131-5.

Mononucleosis infectiosa was first demonstrated in Denmark in 1927. But it would seem to be quite prevalent to judge by the following observations. For twelve months, from August 1, 1931, Wulff examined the blood of all the 258 patients admitted to a fever hospital in Copenhagen as likely to be suffering from diphtheria. A blood-smear was made immediately on admission, but the staining and differential counting was deferred till the following day. The May-Grünwald method of staining was employed. In as many as twenty cases mononucleosis infectiosa was diagnosed. In none of these could diphtheria bacilli be found, although they were sought repeatedly. All the twenty patients recovered—an issue putting out of court the diagnosis of lymphatic leukæmia. The clinical picture was in many cases extraordinarily like that of diphtheria, even severe diphtheria. Thus, in some cases the false membrane covered and extended far beyond the tonsils. A blood-stained purulent discharge from the nose and fœtor also were suggestive of severe diphtheria. Several patients were given serum before the true nature of their disease was recognized: but they were at least saved from the discomforts of subsequent injections.

With regard to the systematic combing out of these cases in the future from material admitted to hospital with the diagnosis or query of diphtheria, Wulff points out that though enlargement of the spleen and of the lymphatic glands in parts other than the neck is suggestive of mononucleosis infectiosa rather than of diphtheria, the only really reliable test on which to base a differential diagnosis is the blood-count. And he means in the future always to examine the blood before giving serum to a suspect case of diphtheria.

C. LILLINGSTON.

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My thanks are due to Mr. R. Welby, the Chief Engineer at Bentry Colony, for his assistance in the planning and carrying out of the above scheme.

Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 70.)

IX.—NEARING LEH.

Nimu, May 4, the last stage before Leh.

The walk to Nimu was the best we have had since we left Srinagar. It was only $11\frac{1}{2}$ miles, an easy march, first up a steep hill, then up a gradual slope until we were on the top of a fine broad plateau; there for the next three or four miles we could get into a good stride on firm, fairly level ground, with hills on all sides. There was a bitterly cold wind blowing and the sun hardly peeped out, but we kept going and enjoyed it thoroughly. For the first five or six miles there was no stream or water near us, not a house, or any kind of live stock.

We soon came to Basgu, set in a group of villages lining a fertile nullah which leads to the Indus. It must be hundreds of years old, yet it looked as if a shower of rain would knock it all down, but the shikari says rain never falls there, only snow in winter, so the ruins of these old mud castles still remain from the days of Queen Elizabeth. The light was far too bad for a photograph, which was a pity, as it was a most wonderful spot, and looked as if it might be inhabited by gnomes and goblins. There were places where one could picture a pied piper disappearing with his following crowd of happy children.

The crops were far behind those of Saspul, but Basgu is higher, and must be more exposed; the blossom was still on the apricot trees and in its glory, and very pleasing to look at against those austere hills.

We rested a mile or two beyond the village, then started across a plain which turned out to be deep sand, and very heavy going. The map was

very misleading, and we arrived at Nimu quite unexpectedly. From the map it appeared that we had another two miles to go along the river before reaching the village.

We laid out our lunch on a very dirty Dak Bungalow table. One table was scrubbed daily in each bungalow, which the servants thought quite unnecessary. What R. called my passion for cleanliness, was a point of view they could never understand; the shikari sent a message to me one day to say it was dangerous to have a bath when there was snow on the



FIG. 8.—Garry on a rock on the Indus.

ground, and it was safer not to wash in cold weather. He shrugged his shoulders when he heard me talking to Jit Ram about having shirts washed. He was really quite kind and thoughtful for me, but he thought the memsahib and the dogs were quite superfluous on that trek.

We were very glad that I had taught our cook how to make different kinds of scones a year or two ago. We had neither oven nor a good wood fire, and baking bread was too difficult when we were moving daily. I hoped to have a mud oven when we camped for a few days in one place, little thinking there is often no sticky mud in Ladakh, only sand.

We arrived in Nimu really early, and I had a rest before tea, but was disturbed by Garry barking outside. The irrigation water had been let loose in the field above, and was coming down like a fast Scotch burn through the poplar wood in which the rest house stands. I expect the trees need a lot of water too, as the rainfall in that part is about three inches per annum ; we often have that in Kasauli in a day.

It is a very good idea having the poplar trees round the house ; the wind there rises in a minute, and you hear it rushing like a train coming into a station. All the poplars are bent to one side by the wind.

R. went out to look for more pigeon as the larder was getting low.

Lots of goats and tiny kids came to feed in the compound, and Garry found them very trying. He and Kelpie are very obedient now, and keep in to heel when told.

I found my topee was looking very shabby and faded in patches, so I gave it a coat of water-colour paint, which improved its appearance very much.

The water was so soft that I washed R.'s hair. (He had been using my hair brushes !)

There was a plague of tiny moths at Nimu, and they lay about in hundreds. I had never seen so many before.

I got into bed as soon as Jit Ram had removed the dinner dishes, and dropped off to sleep wondering what Leh could be like, a city in the midst of this desert. We were astir early next morning and eager to be on our way. The path wound up and up a steep gully. I rode up the first part of the way, and being so early and in shadow, it was very cold indeed. I had another nice grey Zanskar pony. We again came out on a high plateau with a grand view of the hills, but the going was hard, the surface was so sandy. Our feet sank in as we went along. We passed many laden donkeys with sacks of wool going to Srinagar. The guide book says that although pasture is so scarce in Ladakh, these barren hills support many thousands of sheep and goats, and all the wool for the well-known Kashmiri shawls comes from Ladakh.

Later we passed a caravan of ponies laden with earthenware jars ; chatties, as we call them here, having come all the way from Skardu. These jars were packed in straw in large net bags on the ponies' backs. Even these jars must be comparatively expensive there, as they have to come so far. The cooking pots we have seen are made of copper. In Leh girls carried baskets made of grass and willow on their backs, with large copper jars for water inside the baskets. In Ladakh no one carries anything on the head as they do in India ; even a baby sits comfortably in a basket on a woman's back.

The Tibetans are different in many ways from Indians. They are an honest, cheery little race, and not only are they honest, but they have a reputation for honesty, which is even more uncommon in the East. The shikari left our yakdans on the verandah in Leh, saying half in admiration,

half in contempt, when I asked him why they were not put inside, "Oh, memsahib, if you put a lakh of silver on your verandah at night, it would still be there in the morning."

A few drops of rain fell as we were having lunch, and we stayed for an hour and a half, it was so pleasant.

We passed Spittuk soon after that, with its rocky hill crowned by an old monastery, and in a few minutes the castle at Leh was in sight, the residence of the old kings of Ladakh. It looked three or four miles away,

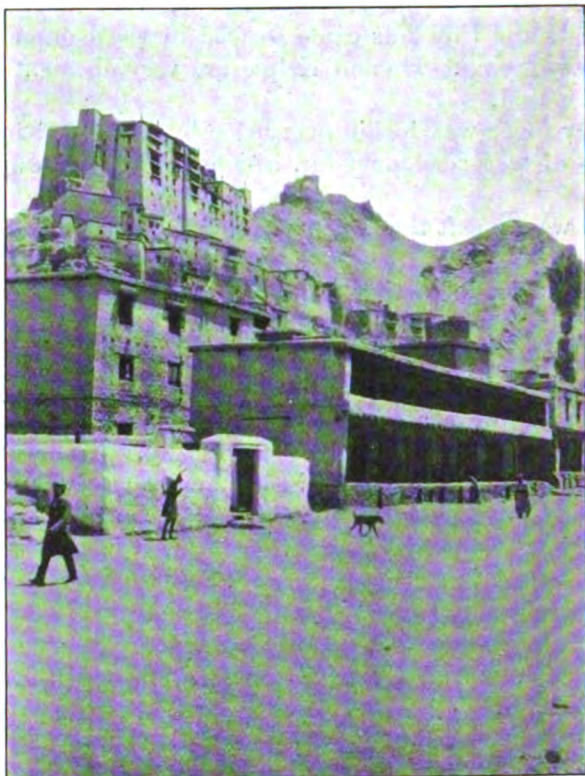


FIG. 9.—Leh. The castle and a monastery. Myself and Garry in the foreground.

but we little thought what a toilsome journey these $4\frac{1}{2}$ miles were to be. There was not a blade of grass, a drop of water, nor any shade between Leh and Spittuk. In a country like this I understood afresh the words, "Like the shadow of a great rock in a weary land." The road lies across a sandy desert, and where it is not so sandy there are huge boulders. A storm of wind came across, blowing the sand in our faces; then snow began to fall as we entered Leh, but luckily the storm blew over for the time being. An hour later we could not see ten yards ahead from the bungalow windows.

X.—IN LEH.

Two officers from Jullunder had arrived at the bungalow on their way back to Srinagar. Tea had been prepared for them on the verandah; however, they insisted on us having it, and I did appreciate their kindness. They had arrived in time for tiffin and had been to the post office to get their letters; they had seen no European for about a month, so were as glad to see someone as we were. One of them had been very successful in his shoot and had brought back a fine ibex head, and what his shikari

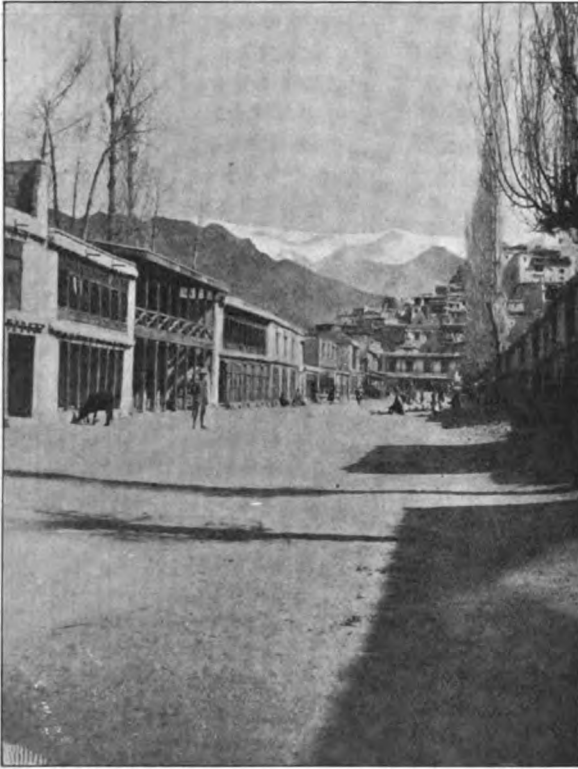


FIG. 10.—Leh. May 6, not a leaf on the poplars.

thought was a record burrhel. They both looked very good heads, especially the ibex, which had fine shaped horns with a wide sweep.

The entrance to Leh is sudden and unexpected. We were coming slowly up a lane with high walls on either side, passing lots of people and lots of cattle, when the tiffin coolies suddenly turned in at a gateway, and following them, to our astonishment we were in the bazaar, the main street of Leh; a long double line of shops, with a row of poplars on the sunny side, and rising straight up before us against the sky stood the old castle. It is one of the most picturesque places I have ever seen. For street

scenes and costumes I don't think it could be beaten, but perhaps it was the setting in a circle of snows that made such a wonderful background ; women standing about talking, with these curious head-dresses and baskets on their backs ; dear little girls with rosy faces, in leather caps with furry linings, and many, many pigtails down their backs. Further on were Lamas, with their yellow caps and long dark red robes ; Yarkundi traders with quilted coats to the knee, long leather boots, and Cossack caps, quite apart in colour and dress from the Ladakhis, and a few Mohammedan shopkeepers wearing the fez.



FIG. 11.—A Ladakhi family.

I wonder if countries are like individuals ; Ladakh must be very poor, and earns its daily bread by the sweat of its brow, yet the people are always cheery and jolly, and never ask for bucksheesh. So often individual people are like that, the well-to-do being too absorbed in prosperity to have time to realize they are happy.

After stopping up broken panes of glass with newspapers and a drawing board (it was freezing hard), we sat down to read our mail, and then to bed, dropping off to sleep with the happy thought uppermost that we could

sleep until 7 or 8 o'clock next morning, as we were spending two nights at Leh.

The best laid schemes o' mice and men gang aft agley! We woke quite as early as usual to the sound of guns, and many of them too. It was the salute being fired at 5 a.m. from the fort to celebrate the arrival in Srinagar of the new Maharajah of Kashmir. We were so sleepy, and just as we were dropping off to sleep again, more guns were fired. I'd certainly give these Gurkha gunners full marks for early rising.

Next day we spent in shopping and in repacking boxes so as to make



FIG. 12.—Leh. Three Yarkundis.

room for all our purchases. All the stores procurable were last season's, as the pass was not open for pony transport. Parcels up to four pounds in weight are accepted by the post office, but nothing heavier until the upper path on the Zoji La is open for ponies, usually about the beginning of June, but this year snow fell much later than usual.

I found some magazines and American newspapers that we could spare, so I gathered up my courage and went down and called on the missionaries while R. wrote his home letter. I found them to be delightful people, and

I stayed and talked for fully an hour. Mrs. Kunick had not seen a white woman in Leh for over six months, and remarked how early in the season we had come up. The postmaster had told us that he had never known a lady come up to Leh in the beginning of May, but I had not paid much attention to him. Mrs. Kunick is the only white woman there through the long winter. They asked what the Zoji La pass had been like when we came up, as the mail had been so irregular, they thought it must have been closed for days at a time. We knew our letters to Kargil had taken thirteen days from Srinagar, as the pass had been closed for several days with snowstorms.

The Kunicks showered all sorts of kindness upon us in the way of potatoes and dried vegetables, and Mrs. Kunick lent me her Ladakhi saddle, which was well padded, and much more comfortable than most.

That night in Leh I was too tired to write up the diary. It seems extraordinary that doing a little shopping and talking should make me so tired, but we had been doing neither for some time.

In Ladakh servants do not live in small quarters in the garden as they do in India. Indoors they have only women servants who come in daily, going home for their meals at two hours at a time; they get Rs. 10 a month, about 15s. 6d.

The Kunicks said they used very little in the way of English groceries and stores, and what they do get, they order by post, as it is cheaper that way. They store their own dried vegetables in a cellar, but they are not always successful.

At that time there was no qualified doctor in Leh, but arrangements had been made to have one up for a month or two while the British Joint Commissioner was there.

Mrs. Kunick was so cheery and had such a happy temperament, it was a pleasure to be near her; she simply hadn't a grouse, and what a long winter they must have had!

The pond in front of the Dak Bungalow was covered with an inch of ice that morning, May 7.

The missionaries wear Ladakhi clothes in winter, made of thick home-spun cloth, and reaching to the ankles; they also wear the real Tibetan boots, just like the ones our pony men wore.

Many people suffer from eye trouble in Ladakh, and come to the Moravian Mission Hospital for treatment. The Kunicks said they would be very glad if R. would operate on some cataracts on his way back, and they would send word to the villages that a doctor was to be in Leh.

XI.—BEYOND LEH.

We left Leh so early next morning that passing through the bazaar the street was empty, and the shutters were up on all the shops.

This was the beginning of the old path to Lhasa on which we were now going; the path that joins Eastern and Western Tibet. It wound

downhill across sandy deserts, passing the longest and biggest Mani walls in Ladakh. Then the valley opened out and our way lay among meadows, and when the sun came out, it almost seemed as if we were back in Kashmir. The country seemed much more fertile here, and so more prosperous; water was abundant, and ploughing was in full swing, accompanied by the doleful chant of the workers.

The monastery at Tikse stands on a high rock, and we passed quite close beneath it. The north side had very few windows; but the front was most imposing, there were dozens of windows, and each had its own little wooden balcony. Windows in better-class houses and monasteries have little wooden shutters, but except in one or two houses in or near Leh, I never saw any glass.

Later Mrs. Kunick told me about the Skushog, or head of the monastery at Tikse. When a Skushog dies, another man is appointed, who is supposed to be the re-incarnation of his predecessor. The present Skushog was found in Lhassa, the son of a wealthy merchant. The lamas said to the merchant, "Your son is the re-incarnation of the Skushog at Tikse; we know it because of the day of his birth, his features, and the pock marks on his face." The father told the son, who was very angry, and said he did not want to be a lama. The lamas, of course, have a great deal of authority, so the boy was taken to Tikse, much against his will, where he lived a life very different from that of the hermit and saint he was supposed to be. He heard about the outbreak of the war, ran away from the monastery, and went down to India, where rumour said he gained credit as the servant of a General. Later he returned to Ladakh, and even found a sanctuary in the compound of the missionaries, where he cooked his own food. He wanted to be baptized a Christian, but neither he nor the missionaries were sure of his belief. His wish may have been policy, as he was afraid to return to Tikse for fear of being poisoned. No new Skushog could be appointed until after his death, so as the lamas were losing much prestige on his account, his death was desirable. It all seemed a sad story of a young man with brilliant qualities having been pushed into a position for which he was quite unfitted.

The road had mud walls on both sides, and was often the irrigation channel of the district, so we were constantly jumping from side to side to avoid the water. The scenery was monotonous, every two or three miles a willow grove, but usually deep sand everywhere. At last we felt we could go no further without tiffin, so stopped under a double row of poplar trees. We had come about fifteen miles, but there are no milestones beyond Leh, so we were not sure of the distance.

The shikari had intended to go on to Ugu, but he had very little idea how far it was from Leh; it was fifteen miles further on. When he arrived with the baggage we decided to pitch the tents in a so-called garden in the village; a walled-in space where there were a few trees, and there we stayed the night very comfortably, our first night in tents.

I think we got away just as quickly next morning, in spite of the extra work of striking tents and folding up beds. I had such a nice little pony man from Leh to Ugu ; he had such a kind old face. He spoke Hindustani well, and said he had learned it in Leh. I tried to get him to tell me a few words in Tibetan, such as horse, saddle, whip, reins ; at first he could not understand, then it dawned on him, and he said, "sumachgya, sumachgya, huzoor, I understand, I understand, your honour." Then with obvious pleasure he entered into the spirit of my lesson, and I learned a number of useful words.

His pony was not so charming ; I think it must have had a sore back, for when R. got on, it bucked and bucked, and he had to dismount. I gathered up my courage and got on again later, and it behaved all right to my surprise and relief, until we arrived at our destination.

A herd of donkeys passed coming from Chimre, a young girl driving them. I saw something in her arms, and it turned out to be a baby donkey. I asked the pony man to call to the girl to let me see it. It was a fluffy little thing, smaller than Garry ; it was only a few hours old.

Another long stretch over a sandy rocky valley with a hill straight ahead, then through a gully to the left of it, we followed the path to the little village of Ugu. There were many fields, but ploughing had not started. Ugu must be about 12,000 feet high, so sowing is later than it is at Leh. We had lunch sitting on close-cropped turf among boulders by the side of a stream. We had outstripped the baggage that day but it soon arrived, and our camp was pitched in another turfy field just behind, a very pleasant sheltered spot. Big storms came up from both sides of the valley. The shikari hammered the pegs well in, and the servants made a trench round the tent to keep us dry underfoot. We wandered about in the evening with the gun, and R. got five pigeon.

We started off next morning in brilliant sunshine at half past seven. This was much later than usual, but it was snowing so hard earlier, we thought we would have to stay for a day, the tents were so wet ; however, the sun and wind soon dried them. It was a perfectly beautiful morning, snow all round, and the sandy road just moist enough to make walking a pleasure. For once in Ladakh there was no dust ; although the air is so clear the almost entire absence of rain makes the ground so dry that we were constantly covered in dust.

R. saw more chikor and went over a plateau by the old road, while we followed the lower path by the river bank under steep bluffs. I saw a black and white duck flying over the river, and then looking ahead there were two animals like deer or gurrhal leaping up the bluffs. I asked Burra Subhana what they were, and he said female sharpu. Garry was after them at once, giving tongue as he bounded up the cliffs. R. saw him on the plateau above, but did not see the sharpu. We went on about a mile, but as Garry did not come back in spite of much calling, I clambered up the bluff, but he appeared by the river just as I got to the top, so I went on to look for R., and wandered about for twenty minutes thinking he was

bound to appear. The Ladakhi pony boy came after me and showed me R.'s footprints, so I knew he must have gone on. I followed the old path to the edge of the cliff, when I saw R. and Garry with the tiffin coolies. There were some chikor about, and R. got one before I clambered down.

The shikari pointed out Upshi on the other side of the river, the beginning of the path to Simla, which goes by Gya, but was not open so early in the season. Later a beautiful golden eagle passed overhead, circling round and round above us. I had watched one near Moulbeck, but never so close before.

It was very warm crossing a sandy desert, but in ten minutes the sun disappeared, and we struggled on uphill between cliffs, a piercingly cold wind against us. We thought we would have to stop for tiffin behind a Mani wall; however, a sheltered spot was found behind a dry stone dyke, and there we shared our cold chicken with the dogs.

Our two lunch carriers, our personal coolies, are called Subhana—a common name in Kashmir. One man is very powerfully built and big in every way; the other is smaller and has such a thin face, he almost looks as if he were suffering or in pain. The big one is known as Burra Subhana, and the other Chota Subhana. Burra Subhana called just as we were settling down to the chicken that a fox was within range, but the rifles were with the baggage, and there were no suitable cartridges for the gun, so we ate our chicken and didn't see it.

The transport, consisting of six yaks and five ponies, passed us there; a dear little foal just bigger than Garry was with one pony. It trotted along the whole fourteen miles with its mother, and about 4 o'clock started back to Ugu. Poor little beast! It is no wonder that horses are mis-shapen here, if they go distances like that, nearly thirty miles, when a month or two old.

In Sherra crowds of children sat on a mound behind the camp and watched us. R. took a photo of the yaks, but the light was too bad when the children were there, or we would have had a nice group of them.

It was a long march and a difficult road to Yiamia or Hamia, our next camp, but it was all very interesting. Soon after leaving Sherra we saw a mountain hare loping along beside a Mani wall. R. got a cartridge ready and I held the dogs while he went on and got it; a great addition to our larder.

It was much colder than starting from Ugu, and we were much cheered when "the glorious lamp" came out. There were fields a few miles further on. I was riding ahead when R., seeing some pigeon, called to me, and gave me the loaded gun and sent me forward to stalk them. I took off my topee and walked behind walls for 100 yards, bending low all the time; the first lot of pigeon all flew away, but seeing more in the next field, I went forward and got one. I hated having killed it and picking it up. I would never shoot birds for sport, but we needed game of any sort for the larder. The servants had had nothing but bread and salt for days, and they did not complain. R. wanted me to be able to shoot with the gun in

case we ran short of food when he was up a nullah after burrhel. I would have liked to get a fox with my rifle, as they go after lambs and kids, but birds with the gun did not appeal to me.

We crossed the Indus by a wobbly bridge before Likche; here the baggage had all to be unloaded and carried across in single bundles; the yaks' heavy weight weighed the bridge well down as they crossed.

We lay on a delightful bank of turf for half an hour while yaks and ponies were loaded up. Beyond Likche the road was a mass of boulders, and going was very slow. Tremendous granite cliffs towered above us, but we could not look up often, as each step had to be taken with care; the path was broken almost the whole way to Yiamia. Those cliffs were a rich burnt sienna turning to gold in the sunshine, but when the rock has been broken by falling boulders, it is a real Aberdeen granite colour; it is only brown and scaly on the surface from the action of the weather. The quartz between the granite glistens with mica, and is very dazzling in the sun.

We started our meal cheerily, sitting by a small backwater of the Indus in warm sunshine, but soon had to hurry, as once more a piercing wind came up the gorge. A specially fine yak passed us, a grand tawny colour, with hair hanging beyond its hocks, and a tail as long as any pet pony's. They carry very heavy loads, and come on at a good pace.

A herd of burrhel were playing about and grazing on the far side of the river as we passed, about thirteen of them, and although Garry went right down to the bank, they only moved a few steps on; there were no full grown rams amongst them.

The shikari pitched our camp by the banks of the river beyond Yiamia quite near another bridge. We gave the servants three pigeon and a chikor and had pigeon for our own dinner, and so to bed by 8 o'clock, with the roar of the river to put us to sleep.

(To be continued.)

Echoes of the Past.

THE ARMY MEDICAL SERVICES AT HOME AND ABROAD, 1803-1808.

BY LIEUTENANT-COLONEL G. A. KEMPTHORNE, D.S.O.,
Royal Army Medical Corps (R.P.).

THE ARMY AT HOME.

THE Peace of Amiens was signed in March, 1802. In less than a year we were making preparations to renew the war against Napoleon. By the spring of 1804 the armed forces in Great Britain and Ireland amounted to 510,000. Large camps sprang up in Essex, Kent and Sussex. Two general hospitals already existed, the York Hospital, Chelsea, and the Hospital of the Hanoverian troops at Ealing. Others were now opened in hired buildings at Plymouth, Gosport, Deal, Yarmouth, Chatham, Dunmow,

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cases out of the five as seen on the fourteenth day, and on the thirty-fifth day after treatment.

The condition when it arises is definitely an alarming complication. Starting as a case of trivial injury with a negative X-ray (if taken), one is suddenly confronted with a problem of threatened ankylosis and grave disablement.

I treated these five cases by complete fixation and rest for three weeks. Two of the cases were put in plaster with the elbow at a right angle, and the other three placed on external angular splints. In four out of the five cases, the bone deposits were almost completely absorbed after a month's rest, and the fifth case, the most obstinate, commenced to improve after six weeks.

I have not had a case in which operative treatment was indicated, and have not seen the condition in any other part of the body except in the brachialis anticus muscle.

I consider that the lesson to be learnt from these cases is to go very easy as regards movements and massage in the early days after injuries to or near the elbow-joint, and further, that on the slightest suspicion of myositis ossificans arising, the limb should be immediately placed at complete rest and the elbow-joint immobilized at a right angle. I would lay stress on the fact brought out by my cases, and not generally described or mentioned, that the condition may arise after trauma in which there has been no apparent or radiologically demonstrated bone injury, as well as by gross fractures and dislocations. The length of time the joint is immobilized must be judged chiefly by frequent radiological examinations.

My thanks are due to Colonel J. W. L. Scott, D.S.O., for permission to send these notes for publication, and to Assistant Surgeon P. F. D'Mellow, I.M.D., for the radiograms.

Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 144.)

XII.—IN NUMBER SIXTEEN BLOCK.

Kiamjun, Tuesday, May 14, our shortest march, only nine miles. We arrived at 9 a.m., and pitched camp in a very sandy field. It was rather exciting feeling we had actually arrived on the ground where R. could shoot. The camping ground was like any other, but there were high precipitous hills on three sides, and only a narrow opening where a little stream came down to join the Indus. It was up this opening that R. had

planned to go next day. A channel was cleverly built round the hillside but there was a break in it just above us, and the water came tumbling down about twenty feet, and incidentally it was very useful for our camp. Between us and the Indus was a huge boulder fifty feet high ; the top was at an angle of forty-five degrees, but the ruins of an old castle, probably hundreds of years old, still remained in a very precarious position on the very top. One heavy shower of rain would have brought the whole ruin to the ground.

We had brilliant sunshine for about two hours after we arrived, then dark clouds came up from the south, and in a few minutes it was snowing on all the hills around. A tearing wind came down the valley until I thought the tents would blow over. Khazir But wanted R. to take a tent and bedding and food for two or three days, and camp as far up beyond Tangyan as possible. As it would probably be very cold, and as they took no beds, R. thought it better that I should stay with the servants and the dogs ; I didn't appreciate being left in such a closed-in desolate spot. I had brought my paint box, but the view was not inspiring ; still I thought I might be driven to try a sketch even of desolation if R. stayed away too long. It was a great chance to get washing done ; parasites had been very troublesome, a variety I had never seen before ; in spite of a daily bath and search in garments, they persisted. I thought if there were many Britishers in Ladakh, Mr. Keating would be as wealthy as Mr. Ford, but even insect powder was little use ; I had to put garments in a solution of perchloride of mercury.

The few willow trees here were not even showing buds. It was bitterly cold at night and during the day when the sun was not shining. R. let his bath towel fall into the basin of hot water, then hung it on a tent rope to dry ; it was frozen stiff in a quarter of an hour, and had to be packed with the lunch basket, so as not to wet the bedding.

Burrhel had been seen in the hills near, and although no large ones had been reported, they were probably not far off. R. left next morning at break of day to go up the valley. One yak went with them, laden with tent, bedding, and provisions for three days in the tiffin basket. Garry and I accompanied R. about a mile ; there were literally dozens of chikor about. I very reluctantly parted from R., thinking at the last moment that the cold could not possibly be worse than those days coming up the Zoji La. Still I was so keen for him to have every chance of a good head, that I might have been a hindrance in some unforeseen way.

I found a nice seat among the great boulders overlooking the camp, and had writing materials with me ; Kelpie came beside me, but Garry was enjoying himself pretending he was a lion, as he chased interested Ladakhis away from the tents. It was a perfect morning, like a September day in Scotland, only the sun was much warmer. I felt stiff sitting so long, and wandered down to the tents where Jit Ram was having a field day with the washing.

I was busy washing my hair when a Ladakhi, coming down the path with a yak, to my surprise handed Jit Ram a note. This was from R. to say they had pitched the tent at the top of the nullah beside a village, and there was no reason why I should not take my bedding and go up for the night. This was cheery news indeed. I had still three letters to write and an order to the postmaster at Leh for Chota Subhana to get our letters, as we were sending him off that day. Leh was our nearest post office, and the journey would take him six days. I wrote quickly while Jit Ram and khansamah packed up my bedding and it was put on the yak's back. I had not thought of taking a camp bed, but in any case I did not want Khazir But to think I could not sleep on the ground if the sahib could. I had no watch, but imagined it was about 2 o'clock when I got to my destination; it was a very hot rough climb of about six miles. Only Garry had come with me, as Kelpie stayed behind with the servants to look after our kit. There were several names of villages in this valley marked on our large scale map, but these turned out to be one or two houses, a few chortens, and perhaps a water prayer wheel. Garry had to be kept in to heel as there were goats and sheep everywhere, and across the stream I saw a few yak calves, shaggy little animals, frisking about like huge black lambs. I had buoyed myself up with the thought of tea on arrival, only to find that by some mistake all the provisions and cooking utensils had been sent with R. Here was the shikari's son, who had been brought specially to cook, with nothing but a paraffin tin full of water, no food, no kettle, no tea. I was rather unreasonably cross with the boy. I had brought up a small tin of milk with me, so had the water boiled, and in about half an hour had two or three cupfuls of hot water with a little milk in it. I never knew before that water and milk could taste so good. Mahamdoo, this Kashmiri boy, the son of the shikari, was always being thrust forward, and our own servants kept in the background. He had a way of marching about two paces behind us which irritated us both. He was in fact a quite unnecessary extra servant. A well-known habit of the Kashmiri is to bring as many of his relations as possible in the service of a sahib. When the boy first appeared we thought he was the tiffin coolie, but when I proposed that he should take the letters to Leh and collect our mail, his father had excuses ready at once: he was a Mussulman and would not be understood, etc. I found out from the khansamah that they were all of the same religion. However, the boy was taken up the nullah "to cook," and Chota Subhana was sent off with the letters.

The only tent, a single fly, was pitched on flat ground close to the last houses at the top of the valley. A rough path branched off on either side of a high hill straight in front of us, one leading to Gun Pass. The shikari and coolies found a lodging in the nearest hut, where grain was usually stored. They had a fire of scrubby heath—the only firewood in this district; there were no trees so high up.

Snow began to fall within an hour after I got up, and the ground was

white before R. and the shikari returned. They were like snow men ; however, most of it shook off and it was not like rain. We had tea at once, while I heard about their doings. They had followed a stream to the north-west, and climbed to about 17,000 feet, when the local shikari, looking over the shoulder of a hill, pointed to four burrhel ; two large and two small, as he said in broken Hindustani. They were on open ground, lying on rocks contentedly chewing the cud. R. said he could see their mouths moving as he watched them through the telescope. They were in full view but out of range, with no sheltered way of approach, bare hillside with no cover. The men reluctantly came back to camp as snow had begun to fall.

It snowed all evening and most of the night. We were fairly comfortable sleeping on the ground, as it was not wet under the tent. Next morning there was an inch or two of snow all round us, and the hills straight above us glistened in the morning sun. There were a great many big dark clouds about, so it was no use going after burrhel unless it cleared. By half past seven it had cleared and the snow had begun to melt ; Jit Ram and the sweeper arrived from the lower camp as the sun was shining, and I set off back to camp with them to bring up more food and writing materials. It was perfectly lovely and sunny, blue sky and fleecy white clouds. As I strode down hill I thought the weather had now settled and that R. had gone up the Pass and would probably get a fine burrhel.

It was good to be alive that morning. Khansamah and Kelpie gave me a great welcome, and khansamah made me a cup of coffee while I gave out stores. Then I had what was a luxury up there—a good hot bath in the canvas tub, while the air was warm outside. Our baths had been rather a mixed pleasure for some time, as the thermometer was so low, and towels very chilly if not frozen.

Khansamah had cooked the hare shot the day before and gave me a piece of it for tiffin ; it was one of the best lunches I have ever eaten. The remainder was packed in a linen ham sack with the other provisions, which the pony man strapped to his back, and we started off up the hill. A perfect afternoon it seemed. As I had the gun, we looked about for pigeon and chikor, and saw a few, but too far away.

A lama in his red robes came up on a pony just behind us. I expected lamas to be clean ; I was wrong. I stopped to listen to a prayer wheel being turned by a water wheel in a little shelter over a stream. When the pony man saw I was interested, he took me to where I could see inside ; a very primitive arrangement—thousands of prayers packed into the little wheel, which had wooden teeth fitting into the teeth of the water wheel. I thought as I climbed the hill that if I were starting a new religion I would have a wheel too, but it would be a wheel of kindnesses. I often feel when someone has been specially kind to me that I must go and do something for someone else at once—almost a superstition, I suppose, about keeping the wheel going round. It would be as good as the Boy Scout's daily kind deed, because the kindness would be done when the heart was warm with gratitude.

Garry had again to be kept in hand. I was surprised at the number of fine black yaks I saw that day ; a herd stood about, scraping the snow with their broad hoofs to get at the short grass beneath. The sky began to be overcast, and in a few minutes snow was falling heavily. Luckily I had a waterproof, but it was bitterly cold, and my hands felt frozen. I thought of R. being caught in the snow far up the hills ; our camp must have been at an altitude of 14,000 feet.

The pony man was at first very afraid of Garry. I tried to find out the word for dog in Tibetan ; having learnt the word for pony, I pointed to it and said "sta," then to the saddle and said, "stega," then to Garry and looked at him ; his face lighted up, and he said "kee," then kept repeating "Garree, Garree" to himself. When another sahib brings a dog to that nullah, he will certainly call it Garree ! Then he pointed to a large mani stone and said "Mani." I said, "Om Mani Padmi Hum," and he beamed and said it again. We passed a very primitive plough on the ground, and he said "Showee." He had such a nice intelligent face although he was not too clean.

We could not see far ahead for the snow. When we got near to what we had been calling the Tinkers' Camp, our one old tent with no beds, table, chairs, bath or basin, to my surprise there was R. standing beside the tent, and I called out, "What luck ?" He had never been out at all. It had snowed all day, although six miles below I had had the most perfect weather imaginable. However, we were quite cheery. I had brought up plenty of food—the cooked hare and enough potatoes ; and we had great hopes for good weather on the morrow. It was bitterly cold going to bed that night. The shikari wakened us at half past four to say it had been snowing all night and snow was still falling. We had spent a miserable night. The ground was so hard and was so damp, we had thin wadded quilts but no mattresses. We could not keep warm, and R. slept even less than I did. We were glad to be wakened, and had tea at once, then breakfast, bacon and eggs, about 6 o'clock.

Chikor were tame that morning and came within range of the tent, so R. got dressed and went out with the gun.

After talking it over, we decided to send Burra Subhana down to the lower camp and bring everything up, as double fly tents and camp beds would make a difference to our comfort, and it seemed as if we might remain a few more days. The shikari made arrangement for eight yaks. Burra Subhana could be most easily spared if R. and the shikari went up the hill, and he knew all about loading up.

We had lunch about 11 o'clock, and after that the sky was so clear that Khazir But suggested going up the stream to the N.E., the path that led to Gun Pass. Off they went, R. with his fur cap and gloves, and some chocolate in his pocket. The local shikari, a wild looking little man with a cheery face, carried R.'s coat. I sat and wrote the diary with the gun beside me, but no pigeon came near. I helped to move our kit over to a

more sheltered place, and very soon I heard Mahamdoo saying the baggage was arriving. Kelpie spotted me sitting on a dike, and nearly ate me up, he was so pleased to see me. We all worked hard for an hour, getting tents pitched, beds made, and everything put in its right place as quickly as possible, as it had become very cold, and looked as if a big snowstorm was coming any minute. I mended socks and sewed on buttons until my back ached with sitting on the edge of the bed with no back rest. Oh, for a comfortable chair!

The party from the hill arrived back about half past four, not even having seen a burrhel; it was most disappointing. We had tea at once, hot drop scones and raspberry jam; then R. had a bath and shave before dinner, and so to bed by 7.30. R. peeped out of the tent flap several times in the night and saw the stars although hazily, so we were prepared when Jit Ram brought tea and eggs for him at 4 o'clock. I sat up and prepared his lunch: coffee and milk, buttered scones and cheese; nothing more solid at that altitude. They were away by half past four. I was so sleepy and tired that for once I didn't get up. Jit Ram brought me a hot bottle, and with Garry and Kelpie snug in the tent, we slept until seven, dozed until half past eight, and had a bath and breakfast about nine—a real Europe morning. Unfortunately my watch was broken, but R. left me his, so I knew how late it was. It was a glorious day, and I felt as if they were having good sport.

I had a great washing of woollies; it is extraordinary how quickly even thick woolly garments dry at this altitude when the sun does shine.

The day before Khazir But told me a man was leaving the village for Leh, so I hurriedly wrote a letter and gave it to him to post, as we might not have had another chance of posting for a fortnight.

(To be continued.)

Current Literature.

KOSCHKIN, M. L. **An Inquiry into the Mechanism of Chlorination with Pre-ammonisation.** *Zeitschr. f. Hygiene u. Infektionskr.* 1933. cxv. Part I, 99-109.

The author considers that the action of chlorination following on pre-ammonization is not clear. The increased bactericidal power and prolonged action of the process are generally attributed to the formation of chloramines of types NH_4Cl and NHCl_2 . Koschkin found that the addition of ammonia before chlorine lessened the capacity of the water to absorb chlorine, but increased its bactericidal capacity. The addition of the ammonia at the same time or after the chlorine had not the same effect. Koschkin states that the increase of the bactericidal action of chlorine following pre-ammoni-

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Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 309.)

XIII.—A GREAT DAY'S SPORT.

I had been thinking of starting up the opposite valley with the gun (there were chikor about and our food supplies were very low), when R. arrived back. I was so glad I had not gone out. He had his legs massaged and drank pots of lemon tea while I heard all about the day. They had climbed all morning and had seen two small herds far away, one herd of five and the other of about seven animals. They decided to do a long detour to get nearer to the far herd to see with the telescope if there were any good heads. Suddenly there appeared from below still another herd of three ewes and two big rams. R. and the three men were clambering among rocks and looking down on them; luckily the wind was blowing up and not down. The local shikari spotted them at once, motioned to R. to drop, and R. had to whistle to Khazir But, who was some distance ahead; the animals were within easy range. The biggest one was shot first and never moved, shot through the heart. This of course did not prevent the tiffin coolie from rushing down and cutting its throat to make it fit food for the true Mussulman. The law of Islam forbids the eating of flesh or fowl killed in any other way; fish they say has already been prepared by Allah, having a slit at the gills.

The rest of the herd made off at full gallop, making a wide detour to a side nullah. R. thought he saw where they were making for, and ran across by a short cut and got within about 200 yards. The first shot the shikari said missed, but the animal stopped, so R. fired again, this time through the heart. When it was all over, Khazir But grasped R.'s hand and shook it warmly; R. was very amused. He went to see the first burrhel skinned, so did not see whether he had really missed the galloping animal. They were shot about 1 o'clock, eight hours after R. started the climb, and he was back with me by ten minutes to three.

There was great excitement in camp. A shikari always has a tape measure in his pocket to measure the horns. As he appeared, R. called out



FIG. 13.—Burrhel heads at Tangyam.

"Kitna?" (how much). "Twenty-seven and three-quarters, Sahib; big head, big head." The other was smaller, but had beautifully shaped horns. They looked to me, when they were brought in, like deer with great rams' horns. We took a photograph after they were brought to camp. Kelpie was greatly excited, and Garry had to be tied up. Soon the servants, in fact the whole camp, were busy cutting up meat. A leg was kept for us, and also the liver and kidneys. The rest was divided among servants, and the local shikari seemed to have assisted, for later in the evening he passed along the fields above, his long woollen coat covered with blood.

We had liver and bacon for breakfast next morning, a fine dish. The dogs had their share of the meat; they had had nothing but chuppatties (country meal cakes) and soup for at least a fortnight.

We spent a lazy Sunday morning sitting on some turf about a mile up the stream, where R. went the day before. He wanted a rest after such a strenuous day. We saw some birds which the shikari calls *ram chikor*; they are large fowl, rather like little turkeys, with a spreading tail.

There was snow by the stream half a dozen yards from where we were sitting, but the sun was warm and pleasant. We had a real Sunday tiffin that day, with a kind of haggis made from the burrhel's liver; Khansamah played up well. The yak's milk was delicious at Tangyam; if we had been staying longer I would have made butter, the cream was so good.

In spite of a great deal of noise in the fields round about, we slept soundly that afternoon.



FIG. 14.—Camp on Tangyam. Winter supply of fuel on the tops of the houses.

For ploughing and sowing the whole village turned out, men, women and children, yaks, ponies, sheep and goats, all seemed to be in the same field. One man leads a pair of yaks, enormous powerful animals they were; another guides the plough, singing lustily a chant with a chorus in which they all join, and accompanied by a kind of tin whistle which is not shrill; a youth plays this, while a woman beats a drum. In the distance it sounds not unlike bagpipes.

These Ladakhis are the cheeriest people I have ever seen. One hears about a hard climate making a people dour and sour, but these little folk are the very opposite, so willing to help, and not expecting an undue amount of backsheesh. The little man who carried the provision sack up from the lower camp fell down in a bed of broken granite; he made no fuss

at all, and was up at once, looking at me and laughing, as if the fall down were a huge joke. Their long woollen cloaks are awkward to walk in.

It was a great experience to me to see how they trusted a sahib so absolutely. While in Tangyam we got milk and wood, and transport was supplied. We were there six days, but paid nothing until the day we left. It says a great deal for the sahibs who have been there before, that the people have never been let down.

XIV.—THE MARCH TO NISS.

We were sorry to leave our cheery crowd of villagers next morning, but many of them seemed to come with us, as we had eight yaks, and at least eight men looking after them.

The road after reaching the Indus was much the worst we had seen so far. We were following the river when the path abruptly turned up the cliff side, 400 feet at least up a zig-zag staircase, wonderfully made, about thirty rough steps at a time, then a steep slope, then steps again. A sudden descent of 200 yards brought us to the river again.

Garry was very bobbery after his rest in camp and went off after marmots. We lost him absolutely for an hour, but Khazir But brought him along behind.

Gaik is a tiny cultivated patch at the foot of a gully, sheer on the Indus banks. The descent to it was worth a photograph, but unfortunately the sun was not shining. We were both very tired, after so much climbing, I suppose. We had chikor for dinner as the burrhel was still "sukhet" (tough) the khansamah said.

Quite unexpectedly Chota Subhana arrived from Leh with our mail, lots of letters, the *Sunday Observer* and the *New York Times*. It was very cheery getting letters again.

I woke very early and did not sleep again, and felt very cross and irritable all morning. Breakfast was a hurried meal, and we started about 6 o'clock on the road. The map was misleading as to nullahs and distances, and R. was not sure how far we had come. The Kashmiri boy would keep walking on my heels. I glowered at him several times, but managed not to say what was on the tip of my tongue.

Another winding staircase, then on the top of precipices most of the way. My pony was pretty sure-footed and well behaved when I was in the saddle, although he danced about when other ponies passed. Its owner was the cheeriest little fellow, so thoughtful on my behalf, looking out for overhanging rocks, and seizing the pony's reins to lead it away from them, so that I shouldn't hit my head.

We met a sahib down by the river, coming in the opposite direction; his nullah was further up the Indus. He had finished his shoot and was returning. R. talked to him for a few minutes, but Mahamdoo again stood directly on R.'s heels, listening to all that was said with open mouth, so that I could hear nothing of the conversation. In a country where

travellers are few and far between, one naturally wants to hear all the news.

A long weary road in soft shale, then a fine purple hill ahead, a white house and some chortens shining in the sun: this was Kiarie. A steep descent down a path all mulberry-coloured shale, and we were there. Here we had to halt to change ponies, so although it was early, we got the tiffin basket and found a sheltered place under the mulberry cliffs, where the wind was not too penetrating.

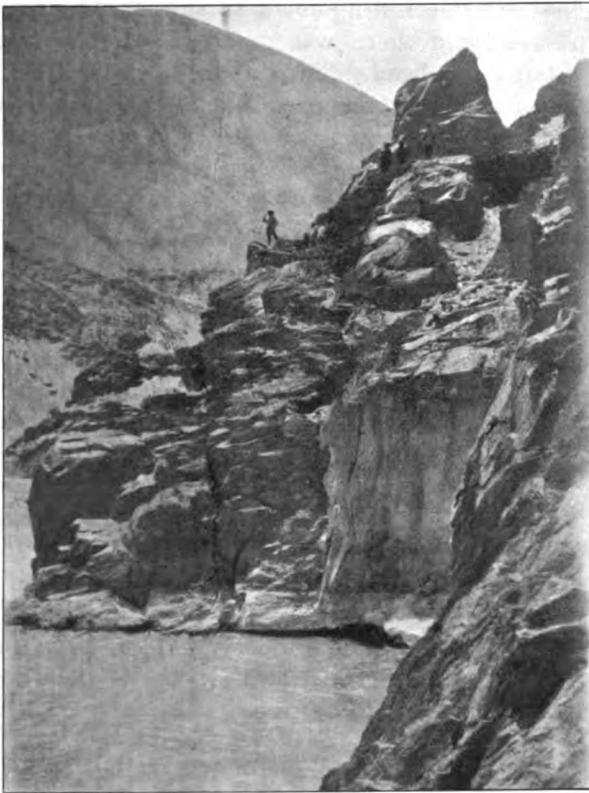


FIG. 15.—Path near Kiarie.

Kiarie is a pretty spot, much opener than Gaik, and the colouring of the hills around almost beats a heather moor in August sunshine—I said “almost.” We were rather tired to have much appetite, so had cocoa, cheese and jam.

The Kiarie ponies were soon loaded up, and our Kiamjun friends paid off, and they went back to their own valley. I got a new pony, a tiny white one, rather difficult to approach, but it seemed all right once I got on. It was a “butcha” (young thing), the man said, just three years old, and

from the feeling of its back, I don't think it had been saddled very often. I walked up and down the most precipitous parts of the road for the rest of the journey.

An hour after lunch, as we were sitting for our usual ten minutes' rest by the roadside, I saw something move on the top of the cliffs opposite, five or six hundred yards away. It was a young burrhel, with its mother standing quite near. We called for the glasses and watched through them. In a few minutes one after another appeared over the top of a rise much lower down. They made a good deal of noise in the perfect stillness, as their feet sent loose stones rolling down to the river below. One by one they topped the rise, and there was great excitement when two rams appeared, one a fair-sized head. Turn about we watched them through the glasses, and counted fourteen or fifteen. The two above joined the herd with a great rattle of falling stones. The wind was blowing from them towards us, and although they seemed to watch us occasionally, they had no fear. We made the dogs lie quiet, and crawled forward to the edge of the cliff on our side of the river. Gradually the whole herd came down like a flock of sheep to the water just below us. We peered over the cliff to see a long line of sixteen heads bent down, all drinking at the same time. R. crept forward to get a photograph which I hoped would enlarge, but the sun was unfortunately behind a cloud at the time. The young ones were the last to leave the river, a ewe waiting behind to see them safely up the hill. The two rams had a fight, and chased two of the young ones up some perpendicular cliffs. They leapt like hinds from one tiny ledge to another: it was marvellous! We held our breath, and Garry sat up to watch this strange sight. R. said it was much more interesting than when he was stalking the burrhel he shot.

We spent nearly an hour watching them, and then went on our way across more wine-coloured cliffs and over a plateau where the hills came down in wonderful streaks of ochre, mulberry and green, as if a giant brush had tried to blend the colours. The path twisted round another of those ruins perched on a rock, and then across a stream and up to the village of Niss.

We arrived to find the tents in a tiny paddock enclosed in mud and stone walls with two big chortens just behind. We had tea as soon as a kettle could be persuaded to boil. Green willow twigs seem to be the only form of wood to be had here. I told khansamah that we were lucky to have had wood so often to burn, as the guide book says wood is scarce in Ladakh, and that scrub and furze bushes are often all that is obtainable.

There were hundreds of pigeon about, so we took out the gun and I got one, and R. got four with one cartridge. We had to shoot them sitting, as by that time we were very short of cartridges for the gun, and in great need of flesh for the pot.

XV.—CHUMATANG, THE END OF OUR BLOCK.

About our usual time, somewhere round about 6 o'clock, we started off for Chumatang, a march of fourteen miles. A lovely clear cold morning; the path lay across an open moor; there was nothing growing on it, but the mulberry shale gave it an attractive look. We soon got down to the river again and saw a few duck, but too far away. The day before, as we came round the corner of a very precipitous path well up the side of the hill, we met quite a flock of sheep and small goats; most of the goats were



FIG. 16.—Chumatang in the distance, 130 miles beyond Leh.

white, and very small, with fine hair. A tiny girl of 7 or 8 was herding them back to Kiarie. She was quite composed until the dogs appeared, but on seeing them she burst into tears, and rushed past us, darting under the pony's legs. R. had been keeping Garry and Kelpie well in hand on account of the goats, but one kid was so afraid of the dogs that it got behind, and we had to catch it and give it to the little girl. We tried to comfort her, but she ran sobbing down the hill, with the little kid hugged close to her breast. In most of the villages the people were very afraid of the dogs although Garry and Kelpie paid no attention to them.

I had the same pony to go on to Chumatang. It was very lazy, and the owner told the tiffin coolie to hit it behind. It bucked and bucked, and at last sent me right over its head, and the man sprawling on the ground. Luckily the ground was sandy, and I was hardly stiff from the fall, only a few bruises on my legs from kicks. The pony was not shod, which again was very lucky for me. If I had been lamed by a kick, my transport would have been a problem in such country.

We walked on up hill for some time after this, and then came to a soft patch by the river again. There were still a good many miles ahead of us, so we thought I might try the pony on safe ground, but it would hardly allow the man to adjust the saddle, and kicked when I went near it, so we decided it was best for me to walk. We climbed up another hill, and came into full view of Chumatang in sunshine, at the end of a long valley, with great brown hills striped like a tiger's back rising up behind and beyond great white snows, one peak rising to twenty-one thousand odd feet. It was the best view we had had, and was well worth a photograph.

We slept for half an hour after tiffin, lying in the sun at the top of the hill. Garry and Kelpie had great runs that day, the country was so open, and they lay panting in the sun while we had tiffin. There had been a bridge of four or five spans across the Indus here, but it was all broken down, only the stone piers left, and even parts of these had been swept away by the current.

We were glad to feel that night we were near the end of our outward journey. Khansamah was looking very tired, and little Jit Ram was needing a rest too. We had heard so much about servants being a nuisance and always grumbling on trek, but both of ours were splendid; never a grouse even in the worst weather, and sometimes I was horribly irritable when things were not quite right—so much so, that I wondered they stayed with me. I would have given them both full marks on that trek. The cold seemed to muddle Jit Ram's brain, for he never seemed to know which were my belongings and which were R.'s. It would have been a blessing to have had a man who put the same thing in the same place every day.

That day the Kashmiri boy had again walked just behind us; his frequent and noisy expectoration was too much for me. I told him to keep further behind, and that he must not behave like that before me. Then I felt I had been rather harsh; he was only 18, but he had to learn the ways of sahib log sometime.

No parasites found for three whole days! I hoped we were getting rid of them now. I must inquire from some of our doctor friends at the Central Research Institute, when we get back to Kasauli, about the life history of this variety. Fleas are gentlemen enough not to inflict you with their nurseries, but these—enough said! I had put garments in a strong solution of perchloride of mercury. R. says I am not a good campaigner, objecting to little things like that.

Unfortunately R. was feeling sick and generally seedy next morning, so

there was no question of going up the nullah. I think even the shikari was glad of a day's grace ; certainly the servants were delighted.

R. had caught a chill when stalking at Tungyam. He had taken no overcoat with him, and they lay amongst the rocks for several hours. The sun had been shining, but at an altitude over seventeen thousand feet it isn't warm in early May. He slept most of the morning however. I found I had a bottle of the forbidden Bovril, which I had brought into Kashmir unawares. Kashmir is a Hindu state, and the cow being the sacred animal of the Hindus, the slaughter of cows is a dreadful crime, and the import of any form of beef is prohibited. I did not know this until we were in Srinagar. R. found the Bovril more palatable than anything else.

Not having a comfortable chair, I sat on the saddle pad propped up against the camp stool set on its side, which made a good back rest. I darned socks and read the *Observer*. These roads were very hard on socks.

The sun shone all morning, and it was delightfully warm. R. got up for tea, and we had it outside ; then he suggested a stroll up the river. We called for the gun and started off. He got three pigeon straight away, then we climbed down to the path by the river. I took the gun and wandered about, seeing several duck, but all on the far side of the river, so that even if I had shot one, we would not have been able to retrieve it. It was a perfect afternoon, and we probably were both feeling the benefit of the morning's rest, as we agreed it was the nicest stroll we had had. The sun was warm and the sky blue, with great fleecy clouds blowing about.

The Tehsildar (a magistrate) of Leh was doing a tour of the district, and arrived in Chumatang while we were down by the river. R. had a talk with him while I was having my bath. He was a good class Hindu, and had been at Leh for a year and a half. When not hearing evidence or sitting on cases, he was studying for the examination for a second-class magistrate, and had a book in his hand when R. met him. He told us he had been in Jammu for some years, but his family had never been well there, and he liked Leh much better. He had "about six children," he said, "a new one every other year." He travelled in great style with a great white E.P. tent with a verandah attached ; our little eighty pounders looked tiny beside his. He had his own ponies, and one looked a particularly nice one, with a good English saddle. It was both fast and sure-footed—the latter being essential on these paths. He gave orders to the lumbadar (the head man of the village) to send us milk daily when we went up the nullah. It was not sent, but later when I saw the road, I did not wonder. He gave R. a letter to his Deputy in the Game Preservation Department in Leh about getting a sharpu, should R. not get one in his own block. Number sixteen was registered as a sharpu block, but the people of the district said there were few, if any, in that part of the country, so it looked as if we would have to go back to Leh without one. Round Leh there are open nullahs, which means that anyone who already had a licence could, on obtaining permission, shoot there without further payment ; this was at least cheering news.

R. went straight to bed when we came in, and we dined in the sleeping tent that night. Khazir But came for orders, and we said chota hazri at half past five, and on the road by the usual time, if the sahib slept well; so tea was brought at 5.30 next morning. On waking I felt as if I had been beaten; I had probably got a chill, and I was very conscious of the places where the pony had kicked me two days before. However, it was, as we thought, a very short easy march about seven miles up the nullah, and it seemed better to get to our destination, as we had already lost a day. A little brown pony was brought for me, but it was the worst we had ever had. It placed its feet anywhere on loose stones, and stumbled every third step. We left at 7.15, and it took us more than six hours to do these seven or eight miles. As Jit Ram put it, "ye subse kharib rasta hai"—the worst road of all. One could not call it a road. Our aim was a more open part of the valley further up, and we climbed and climbed, a piercing wind blowing, then a snowstorm descended upon us. For about an hour I looked in vain for a sheltered place where we could sit and have cups of coffee. At last we got behind a few stones which had been put together for the protection of animals. The place was rather odorous, but anything was better than that wind.

R. had been walking on the other side of the gully with the gun, and had shot two ram chikor; he also saw two big hares. We were both very tired and weary, and we sank exhausted among the stones and drank our coffee while the snow fell. Garry and Kelpie had been off hunting for some time, and Kelpie came back first; then I heard a noise like the howling of a pack of wolves in the distance. What it was I do not know, but I got up hurriedly to look for Garry, when he appeared over the next rise. Here we let the servants and yaks pass, and followed on a little later. There were no habitations of man up that gully, so there was no possible shelter until the tents were pitched, and no point in our going ahead of the baggage. The whole way the stream and its banks were covered with snow; sometimes a part of the stream was in sight, sometimes we only heard it. The path wound from side to side crossing snow bridges. I saw a few ram chikor, but otherwise only the usual magpies and crows which were everywhere.

We were almost exhausted when we reached our camping ground. It is difficult marching when one isn't fit. The servants had been very quick, and even our beds were made up. I really felt too tired to sit up while the men rubbed my legs; the precious aspirin bottle was handy, and I lay down. The ground was very uneven, just a few tufts of grass on an island of rock. Deep snow lay quite near, and the stream seemed to be on both sides of us, only two yards away from the tent, but far underground. I really think the water flowed underneath us too, but towards evening all was quiet; I understood next morning the silence when I saw the frozen stream. I went to bed before dinner. If the weather was fine, the plan was that R. would go further up early next morning, looking out for tracks of Ovisammon.

If I had not kept a diary, I do not think we would have remembered the days of the week. We would have been almost as bad as Ben Gunn when he thought a Sunday was about due, and he went and sat amongst the bones. The Mani walls would have done for us. I sometimes thought that an old-fashioned Sabbath rest would have been a good idea on the march, then I would have been sure of one day's rest in seven, but our leave was limited; we had far to go; and we had many enforced rests on account of weather.

It seemed to snow half the night, and it was bitterly cold. We wore as many clothes as it was possible to sleep in. I wore at least six thick garments, and all the coats and waterproofs were piled on the bed, but that wind of Ladakh pierces every cranny, and a tent is not airtight.

The ground was white and it was still snowing when our morning tea was brought. The weather was thick all round and we could see only a few yards ahead. Such weather was no use for shikar, so we turned over and tried to go to sleep again; even the dogs did not stir. R. dressed and we had breakfast about seven, the last of our precious bacon; somehow it did not seem quite so good as usual. More snow fell after breakfast, and R. wrote some of his mail, while I kept warm enough to sleep with the help of a hot-water bottle and Garry on one side of the bed. I am ashamed to tell that I slept again after lunch, but got up for tea. I sat outside while R. went out with the gun, but we were both glad to get back into the shelter of the tents.

In spite of heavy snow, Garry made at least six expeditions up the hill, after what we did not know, probably marmots; and Jit Ram said he saw him chasing a "burra janwar," a big animal, which I think must have been a hare. Garry was tied to a bed that night in case he thought moonlight suitable for further shikar. In dak bungalows where there was a bedstead he was allowed to sleep at the foot of the bed, but there was not much room for a full-grown person and an Airedale weighing 55 pounds on a camp bed. One night he was turned off the bed, and although a comfortable nest was made for him on old blankets surrounded by Gilgit boots, he was annoyed about it, got out under the flap of the tent, and stayed out for an hour, keeping us awake for that time as a fitting punishment for our cruelty; he usually manages to pull our legs somehow.

The previous night it was very late before the dogs got their food, and our dinner was brought first. Both dogs can be trusted not to touch food on the table, but R.'s plate of strong brown soup was put on a chair as I was in bed, and we had no table in the sleeping tent. This was too much for Garry, and he licked it. The hiding which followed only resulted in him standing under the outer flap of the tent, yawning loudly while we ate the rest of our dinner.

I wrote up the diary in bed that night; the wind had fallen. The day before inside our tents was like being on a sailing ship with sails flapping in a storm. There was a beautiful sunset, the first we had seen. We

looked over Chumatang, over the lower hills of the Zaskar range to the heights beyond. All the peaks were clear and rosy in the evening light, and we thought it augured well for a "good" day to-morrow, as we say in Scotland.

I sometimes wondered if, when I did get back to civilization—a vague dream at that time—I should want to talk a great deal or just sit and listen. The discipline of the march allowed of little or no talking, and men can be very monosyllabic creatures at times, unless they are talking shop.

The night of Saturday, May 22, was the coldest we had experienced. I could not tell what the temperature was, but everything possible froze. A washed handkerchief on the rope over my head was frozen stiff; the

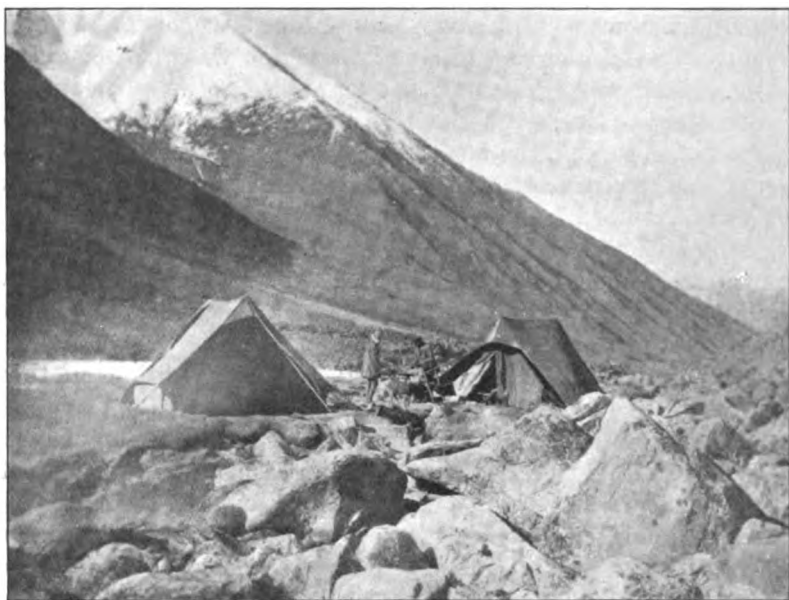


FIG. 17.—Camp above Gungra, over 16,000 feet.

water in the canvas basin and in the bucket was frozen solid. We tried hard to sleep, but the wind came in under the canvas, up the sides of the tent, and through our two little camp beds. We tried several different arrangements of blankets to no purpose. We shivered and remained cold. My fur cap was a necessity for my head, as a piercing wind blew my hair all over my face. We sat up and talked at least every hour, and wondered what we could do to make the tent less draughty for another night. We listened for the bearer coming with tea, but it was cold when it came.

R. started off at six up the nullah in the hope of finding an ammon. The sun came out about 7 o'clock, but in a quarter of an hour it was snowing again. Our camp was over 16,000 feet above sea-level, and we were all conscious of the altitude. When I opened a yakdan or moved a

chair, my energy was exhausted, and I could only sit and pant for two or three minutes. I found that the servants felt this too, and they thought it was caused by the water being bad, and were afraid if they stayed there any longer they would be very ill. I laughed and told them it was only the height, and that the sahib and I were just the same. I thought they had better get busy and stop thinking so much. I put the boy and the sweeper on to making the tent a little less draughty by putting pieces of turf and clods of earth all round the curtain and then stones on top. I gave the khansamah some sour milk and told him to make scones. I called the bearer and got some hot water to do washing. Unfortunately the socks froze stiff hanging in the sun, but the whole camp was cheerier in an hour's time. We heard Garry's distant yapping far up the hillside. It did not seem to matter to him whether the temperature was below zero or not, so long as there were marmots to chase.

I had been wondering what luck R. was having, when about 12 o'clock, as I was having my tiffin of rice soup, we heard three shots, which meant that R. was not far off. I was afraid the shots were too near to mean ammon, but thought he had probably got a hare. In a few minutes they appeared, walking on the snow, and I heard the news. There was no sign of ammon; nothing but snow up the valley, and no possible feeding for animals. The bag was two ram chikor, shot with the rifle, as the gun had been left with me. We gave them to the tiffin coolies, as we had two in hand for ourselves.

We wondered about going down the valley to Chumatang that night, but R., the shikari, and tiffin coolies had been tramping for six hours, and striking camp meant a lot of work, so we decided to stay until next morning. Our tent ought to be cosier, I felt, and would keep out some of the wind now, if not the frost.

After tea, about 3 o'clock, we went out to see if we could get a hare. I heard the shikari sending the boy after us, and I groaned inwardly; not even a stroll without some of these Kashmiris. Luck was with us, however; in a few minutes we got two ram chikor, and R. sent the boy off to cut their throats, and then back to camp with them. We went on our way up the valley, walking on hard snow until we came to a spur on our right, when we scrambled up among the rocks, keeping a sharp lookout for hare, and we saw quite a few in the distance. We were six or seven hundred feet above our camp, and the view was the finest I had seen. There was less wind than we had had in camp, and the sun was warm. There was a fine line of hills to the south, part of the Zanskar range again, and one or two peaks to the north which must have been somewhere near the Chinese frontier. It was very peaceful, only the cry of wild fowl breaking the silence.

We walked on and on, stalking one hare after another until at last we got one, and went down hill to our camp, which had been in shade for quite an hour. We had dinner and then to bed at once, before the cold

was too intense, and the servants were able to wash-up by daylight. I think the temperature was even lower that night, but luckily we were not quite so cold. I slept in my fur-lined coat and again wore the fur cap, and R. had on two jerseys. I kept Garry on the bed all night; if he kept me from sleeping, he also kept me from freezing, and to be fair to him, he lay very still. I was very thankful when tea came at half past five. It was a perfect morning; the sky a deep blue, and not a cloud to be seen. We had breakfast in the sun about 7 o'clock. Our milk was frozen solid in the saucepan. The dogs were having their breakfast when Garry heard a sound and went off hunting, and the remains of his breakfast froze to the dish in a few minutes.

We left before the tents were down, and started with a good swing downhill over the snow bed above the river. There were tiny glaciers here and there, a fine deep blue colour in the morning sunshine. I had to avoid them carefully as I was wearing nailed chappies; R. was luckier with grass sandals.

R. got another ram chikor; and I was picking some feathers out of it for my hat when I saw it was covered with parasites—not a pleasant discovery! At this moment Garry heard something far up the hill, and we did not see him again for hours.

This valley is called the Chumatang Poo; Poo being the Thibetan word for a valley branching off the main stream. I was walking down the east side of it, while R. went on the other side with the gun. My eyes were a little sore after the four miles on snow, as I had forgotten my glare glasses, when on looking up I saw, only ten or twelve yards away, what looked like two Pekinese puppies; they were exactly that colour. I rubbed my eyes to make sure I was seeing all right, and in ten seconds they were in their holes. They were the first marmots I had seen.

We had intended to have tiffin on the top of a bluff overlooking the village, but the last three miles lay across a mass of boulders, much too uncomfortable, and even too hot with the reflection of the sun, so we went right down to the village and sat on a turfy bank beside a pond. Our camp was pitched where the Tehsildar had his tents, purely a matter of prestige with the shikari, as our last place was much more sheltered, had turf underfoot, and so was not nearly so dusty.

I fell sound asleep for more than an hour. The warmth after the piercing cold up the valley made me drowsy I suppose. We had opened our one tin of tongue that morning, and it was delicious. After nothing but game for a month, salt tongue was a delightful change. It had been given to us, and we blessed the kind donor.

R. had a very painful inflamed eye, a slight attack of snow blindness, so we did not go up the river after duck as we had intended, but each had a bath while the sun was still on the tent. After studying the map, R. thought he would like to try going up the streams on either side of Kaiser, as burrhel were supposed to be plentiful there, and we had given up all

hope of getting an ammon. So our plan was to go to Kaiser next day if fuel was available there.

The people of Chumatang were not so pleasant as other Ladakhis. The servants had difficulty in getting milk, and when dishes were given for milk to be brought in, they were not returned. Probably the head man of the village was rather a rogue, as this was anything but characteristic of the country people.

Chumatang has a delightful situation, the valley is broader there, and although I can remember only one stunted tree in the middle of the village, the edges of the fields were green, and the whole place had a tidy, well-kept appearance.

(To be continued.)

Current Literature.

STREETER, H. W. **Experimental Studies of Water Purification. VI. General Summary and Conclusions.** *Pub. Health Rep. Wash.*, 1933, v. 48, 377-400, 10 figs. [Refs. in footnotes.]

Some of the previous reports for the experimental station at Cincinnati have been summarized [this *Bulletin*, 1927, ii, 637; 1928, iii, 275; 1931, vi, 73]. The present report deals only with some of the more important results. Comparisons were made of the efficiency of purification by the method of coagulation-sedimentation followed by filtration and post-chlorination when applied to three different raw waters. Although the ultimate results were approximately equal, the relative efficiency of the different stages was markedly different. It is possible that this divergence is in part due to differences in pH of the raw water as the bacterial efficiency of coagulation-sedimentation is sharply diminished at pH values exceeding 7.0 or thereabouts; the water which was least purified at this stage had a pH of 7.8 to 8.2. The general results appear to justify the current tendency in rapid sand filtration plants to depend largely on chlorination for bacterial removal and assign to the preliminary sedimentation and filtration processes merely the function of clarification.

Experiments on variations in the conditions of coagulation with aluminium sulphate led to the following conclusions: (1) the efficiency is diminished with pH values exceeding 7.0 and improved with values approaching 5.5; (2) the efficiency depends on the amount of coagulant added and the total period of sedimentation. There appears to be no difference between double-stage and single-stage coagulation provided the total amounts of coagulant and the period of sedimentation are the same in both cases.

Studies on the excess-lime process indicate that viewed apart from its function in water softening, the treatment has not the same advantages as pre-chlorination in reducing bacterial numbers. A well-marked bacteria

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(2) *Viperine*.—Destroys the lining of the blood-vessels and breaks down the corpuscles; it also attacks the vasomotor centre, which controls the reactions of the blood-vessels. In their damaged state the walls of the blood-vessels become more than ordinarily permeable. Just as, normally, food substance passes from the gut into the vessels, so now transudation of blood occurs in an opposite direction, leading to internal hæmorrhage. Blood may escape from the wound and also from mucous surfaces. Septicæmia, which is a quite definite form of blood-poisoning due to the presence of germs, may set in. Syncope is to be expected."

Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 393.)

XVI.—KAISSEK.

We started for Kaisser on a perfect morning. It was quite hot marching, a cloudless sky, and the river as blue as the sky, with greens and blues glinting in it. It was hardly credible that we had experienced such frost only one day before. We were feeling a little cheap after the strain of those days up the Chumatang Poo, so I rode most of the way, and R. did not hurry. Nothing would induce me to go again to such an altitude at such a season without sleeping bags, and I would have a canvas floor to our tent, all made in one piece with the walls.

I waited behind to watch some women weaving cloth on the outskirts of Chumatang. Instead of using a shuttle, they had the strands of wool far enough apart to throw a ball of wool left to right hand, and right to left. The material is seldom more than twelve inches wide, so they had not far to throw.

I saw a tiny little stone marten among the rocks. It looked very soft and fluffy, and was a soft grey colour.

R. shot a duck not far from Kilmung, and it floated downstream in smooth water. The Kashmiri boy was there and walked along the edge watching it, but did not attempt to go into the water to retrieve it, much to R.'s annoyance, and the duck was lost. R. asked him what kind of a shikari he was going to be when he was afraid of getting his feet wet.

The river takes a bend round Kilmung, so that looking down, the village lies in the middle of the valley. It would have made a very pretty sketch, all the colours were so clear and pure, the sky and the water, and those

rust-coloured hills. The next trek we go on, I am to be allowed to stop and sketch for a day when we come to a picturesque spot. I am to have a day's sketching to R.'s one day's stalking.

I had a very slow pony and R. had gone about two miles ahead, but I caught up to him beyond Kilmung where we changed transport. Three tiny little foals had followed their baggage-laden mothers as far as this. Eight fine yaks were waiting for us, and another pony for me—a faster one I was glad to find. Some chikor flew up from the rocks beside the path, and R. shot one. The river is much bigger than it was ten days before; now that the weather is warmer, the higher snows that feed the Indus were beginning to melt. The fields were not ploughed here yet.

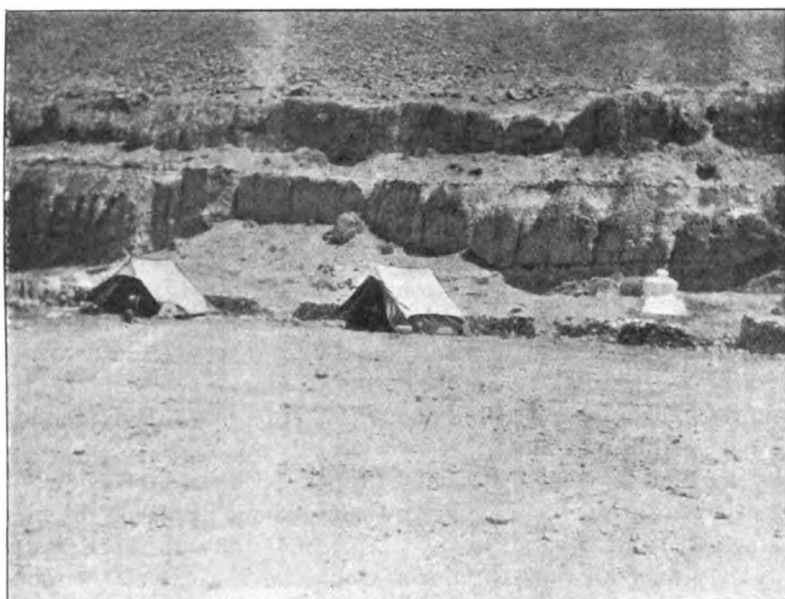


FIG. 18.—Camp below the cliffs at Kaiser showing white chorten.

A high hill stood straight up on the south side of the river, and mud cliffs surmounted by steep shale slopes rose sheer up behind us, so the sun did not reach us until late in the morning.

There was no milk to be had in the tiny village of Kaiser, which consisted of six or eight scattered mud huts. They sent a man off with a brass jug to a village six miles away to get milk. When it arrived it was full of sand, and had to be strained through fourfold muslin before being boiled. It was only goats' milk, but we were very glad to get it. Sooner or later sand gets into everything in Ladakh; it was in our beds, our clothes, our hair, and the store yakdaus were full of it. I found that dressing my hair like a little German maidservant was the best way to keep it from the dust. I wound the pigtails round my head, leaving nothing loose to collect sand.

R. went off about 6 o'clock next morning. I watched the party climb a path in the cliffs, and then across a steep incline to the Yeh Poo, a narrow nullah which wound up to the higher hills. Here they hoped to find more burrhel. R's licence allowed him four heads; so far he had two, so there was always the hope of getting a still larger head. I sat down to the diary and got it up to date.

When the sun was warm enough the bedding was all shaken and hung out, and we got some washing done. We had not had a halt since the days up the Chumatang Poo, and there as little as possible was done, as our one concern was to keep warm. R. says my passion for cleanliness is very disturbing on the march, but if it was not for this so-called passion, he would be complaining of the dirt.

Clouds had come up, and it was very cold. R. had the watch, so I did not know the time. Tea did not come when I expected it, so I started off up the hill to meet R., the dogs very pleased to have a run again. I got a lovely view; there was a fine light on the hills, the level rays of the sun lighting up the furthest peaks. I went right up the cliff path and across the steep incline to the foot of the narrow gorge, but saw no sign of the shooting party. I began to feel empty, and remembered I had had nothing since about 11.30. I walked slowly down the path, the dogs going off on different scents, but keeping fairly near. I crossed the little fields to our camp and when I looked round I saw five men far above me, climbing down the path I had just left. I had missed them by a quarter of an hour. They arrived in camp very tired, having been out for almost twelve hours, trekked sixteen miles, and crossed a hill of about 19,000 feet. They had seen small burrhel, but no head of any size.

Tea was so late we decided to miss dinner and have only a bowl of soup before we turned into bed. Khazir But came about plans for the morning, and R. suggested that I should go with them next day up the Kaiser-i-Poo nullah. They were all very tired, so I would be the excuse for not going too far.

Thursday, May 21, Kaiser: "The end of a perfect shikar day; a fine head is just being brought into camp," was the first entry in my diary.

We left just after 6.30, a fine crisp morning, at first following the path down the Indus, and then turning up north by the tiny Kaiser-i-Poo River. There were about three miles of very rough going over boulders and slate rocks, then we came to a little gorge where the river went through a tunnel, and we climbed up a stairway in the rocks 100 feet high. There was an opening between the rocks at the top, and as we came up the shikari and the local guide signed to us to come quietly, so we knew some game was in sight. We peered through the opening and saw a young burrhel and a ewe feeding on the hill opposite, and climbing as they fed. They were well within rifle range, only a steep gorge between us. We lay quiet for some time to see if a herd would appear. It seemed too good luck to see any when we had only been out for two hours. I was afraid I would sneeze

with the sun tickling my eyes, and any little sound would frighten the burrhel.

No more appeared, and we crept down the path on the other side, following the stream to the right for another three or four miles. Again it was very stiff going, over boulders and uphill to boot. About 1 o'clock we got behind some rocks in a side nullah, and drank our coffee and ate the biscuits and cheese we had brought in our pockets. The tiffin basket was left behind that day, as the coolies had enough to carry if we got a burrhel. The shikari and the other three men went ahead a little and scanned the hillside. We looked round in every direction too, but nothing was to be seen, not a sign of life; an occasional kite flying across made the only movement in the whole landscape. Then we noticed the shikari had the telescope out, and soon they signed to R. to go and look.

A herd had been spotted on the opposite hillside, hardly visible to the naked eye, but very distinct through the telescope. After a short discussion about which would be the best route to take, R. and the shikari and the local man dropped down to the stream, and climbed up where a natural wall of stone hid them from the part of the hillside where the burrhel were feeding. I watched through the telescope. The herd was feeding, but slowly moving uphill as they fed, further and further away from the place where R. had got to. I could count nine, but probably there were more; there were three rams with fine heads. It was very interesting seeing them so clearly, one scratching its head with a hind foot, and two boxing like a pair of billy-goats. I specially noticed one with very dark marking, quite black on the chest and down the front of its legs; this one had the largest horns.

By the time R. reached the "wall" they were out of range, and fresh plans of attack had to be made; a wide detour, coming down almost to the stream before they could climb up behind another ridge of rock. By this time the herd had got wind of their whereabouts and were going fairly fast uphill. Through the telescope I saw the two shikaris and R. cross a very steep shale bank, then a high ridge of rock. At that moment the tiffin coolies asked for the telescope. I heard a shot, but could see nothing. A few minutes later I saw all three sitting amongst the rocks; R. was getting a new grass shoe put on, as he had lost one during the climb. I continued to watch intently through the telescope after that, and saw one man at a time climbing up. Then I heard another shot, but I did not see the herd again. They were probably climbing to the top of the hill by a hollow out of sight from where I was sitting. It seemed only a few minutes later when there were shouts to the tiffin coolies, and both dropped down to the stream and climbed up the other side. I could only imagine the shots were successful, and the tiffin coolies were wanted probably to bring the burrhel down. Soon afterwards, still through the telescope, I saw R. coming down the hill with Chota Subhana, the latter carrying the rifle and the other the telescope. I soon heard all about it. He had got the black-breasted one which looked the best in the herd.

I had meantime moved into a circle of rocks for shelter, as the wind was bitterly cold, and there had been a shower of snow. While we drank the rest of the coffee, I got the details of the stalk, then we started off for home. It was early in the day, only 1.30. We had sighted the herd at 10 o'clock, and the shots were fired about 12.30.

It was a good tramp back to Kaiser by the same rocky road. We had several drinks from the stream, and we stopped for one short rest at the top of the gorge, when a little stone marten came out and looked at us, only a few yards away.

We got back to camp about 3.30. Chota Subhana had gone on ahead to send two village men up to help to bring down the burrhel, and we met the men on the path by the Indus. Tea was ready and we were glad the teapot was a big one. There was no milk, but we found two drops of lemon essence in each cup very refreshing.

We decided on a rest next day; partly to get our mail ready before sending the coolie to Leh for letters. The weather was delightful; just a touch of frost in the early mornings. After giving out stores and seeing some washing done, we got under the shelter of a stone dyke, and got on with our mail.

I had what I felt to be a well-earned rest after tiffin, and R. slept outside. Khansamah came and told me he had a very special dinner for us; as he had now plenty of meat, he gave us a delicious clear soup. It was indeed a treat, and with stewed hare made an excellent dinner.

(To be continued.)

Current Literature.

AYKROYD, W. R. **Diet in Relation to Small Incomes.** *Quarterly Bull. Health Organization, League of Nations.* Geneva, 1933, v. 2, 130-53. [Refs. in footnotes.]

It is estimated that the diet of an unemployed man should provide about 2,500 calories. In order to construct a low cost adequate diet the minimal requirements of the essential foodstuffs must be provided; protein should have a minimum value of 70 grammes daily, of which 35 grammes is of animal origin, and a minimum of 56 grammes of fat is required. The vitamins must also be supplied, but the exact amounts required are still unknown. Of the minerals, calcium, phosphorus, iron and iodine are of chief importance, and the fact that children and pregnant women require larger amounts of calcium than the adult must be allowed for. A low cost adequate diet has been constructed based on English dietary habits and calculated at 1932-33 prices which provides daily 2,505 calories at an estimated cost of 5s. 9d. weekly. This diet is moderately satisfactory as regards quality, providing 81 grammes of protein (36 grammes animal) and

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BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 466, vol. lxi.)

XVII.—KAISSEK TO LEH.

Next day we reached Kiarre, and the last night at Kaisser was the coldest we had since we were up the nullah. Even the near hills were covered with snow, and there was a sprinkling of snow on our tents. The same tiny white pony followed us. The snow melted very quickly, and the hills were a beautiful colour. By midday we were in lovely sunshine, almost too hot. We got to Kiarre in time for lunch, and sat down in a nook in the slate cliffs, but the heat from the reflection off the rocks was so great I had to sit by the river's edge to get the breeze, and yet we had snow that morning; Ladakh is really an extraordinary country!

Camp was pitched a few yards from the river, with boulders to keep the ropes down, as pegs were no use in the sand. Kiarre is a pretty spot, with a picturesque cantilever bridge. Here for the first time we saw trees in leaf. By the path, in crevices in the granite rock, wild roses grew; they were just coming into leaf. It was such a pleasure to see something green in that desert of weatherbeaten granite. I hoped we would soon see the roses in bloom. There were several duck on the river, and even a goose, but the larder was full, so the cartridges were saved for another time. We took a photograph, but wished it could have been in colour. Sand-martins were nesting in the cliffs just above the tents, and there were lots of swifts flying about.

We decided to go very early to bed as there was a big march before us next day, and all the worst parts of the road are between Kiarre and Kiamjun.

A great noise like thunder outside the tent, and R. rushed out to see what it was. An obstreperous yak had been tied to a large log of wood on the sand, and the big beast was dragging the log along with it. The Ladakhi pony men were in fits of laughter; they have any amount of humour, and are the first to see a joke, even against themselves. All along our route we found them so helpful and willing, and neither grasping nor greedy.

We were right in anticipating a long tiring march. We were so weary when we got to the foot of the Kiamjun nullah, we felt inclined to turn into bed without waiting for dinner. It was a perfect day so far as weather

was concerned, and the hills looked so very different in the sunshine ; almost any country looks depressing when the sun is hidden behind clouds, but in a land where vegetation is almost absent, it is more noticeable.

The marches were much cheerier than they had been a fortnight before when we were getting to a colder and even more desolate wilderness. Knowing it was going to be a trying march, I rode whenever it was possible, which was not very often, and the pony was old and slow. R. had to sit and wait for five minutes every quarter of a mile.



FIG. 19.—Path high above the Indus near Kiamjun.

I was delighted to find that instead of approaching a precipice with dread, I found the climb before Gaik really exhilarating. After following a path not more than 20 feet above a river bed, it was a pleasant change to mount up on the cliffs and look down on the blue green river, hundreds of feet in the gorge below.

I spied two or three burrbel on the opposite bank of the river, and as we came down the path the dogs saw them, and giving tongue sent them flying up the face of the cliffs. We got out the glasses and watched them.

It was a large herd of twenty-two. It was satisfactory to note that there was no head of any size among them.

Gaik is only a little circle of fields at the end of a deep ravine. The path to the top of the cliff is almost like a staircase; it is so steep and is also covered with boulders, which made it difficult going for the animals.

On coming round the top of the cliffs we started another herd of burrhel. They had been drinking at the river and were on their way back. The dogs were off before we could stop them, up the side of the hill, leaping



FIG. 20.—On the rocky path near Gaik.

from rock to rock. It gave us an exhibition of how burrhel could leap up the face of a cliff. Garry came back to us when the chase was over, but I missed Kelpie. The transport passed, but no sign of him. Jit Ram said he had seen him miles back chasing burrhel among the rocks; most unlike our quiet Kelpie, but he renewed his youth on this trek. He had been very sick early in March and we were afraid he would not be fit for long marches. We watched him in the snow in case an extra coolie might be wanted to carry him. There was no possible place to leave him *en route*

until we reached Leh, but he gained strength daily. It was grand to see his tucked-up movements in the snow gradually change into a fine free action as he raced along with Garry. I had to send a man back to look for him, and he turned up while we were having tiffin, not very sure of his reception, and he lay in a pool of water panting hard until we finished.

For the next two hours the path wound up and down those long staircases. It was weary going, as even when it was somewhat level it was so rough that a pony was of little use, and walking, one could never get into a stride. We lay on a grassy bank on an island in the river opposite Tirido, and watched the people ploughing. I can still hear the monotonous but cheery chant as they worked. Here even the willows were in leaf, a delightful fresh green.

Camp was pitched on our old ground before we arrived. I spent the evening mending socks as I found we had by no means too many spare pairs. These rough roads rubbed the heels out of anything, and we always wore two pairs under the leather chapplie boot.

We were in Likshi the following day. It was the prettiest camping ground we had struck so far. All the tiny fields were now green. The poplars and willows were both in leaf, and our tents were just above the river in a small willow grove. I never knew before that willow trees had any smell; the flowers of these had a delightful fresh scent. I was longing for the smell of flowers and for lettuce to eat, and here was this satisfying smell.

With these early starts we often go for miles before the sun reaches us as the hills to the east are so high, but that morning we got into sunshine almost at once, although the granite cliffs rose up nearly vertically from the river. The granite was a beautiful golden russet in the light of the morning sun; many tones lighter than the deep blue of the sky.

We rested under a rock before crossing the bridge at Yiamia. Even Garry was glad to give up his hunting and get into shade for a short time. The difference in the vegetation in a fortnight was extraordinary. The villages seemed transformed, and were noticeable now from a long way off. Women were working in the fields, walking about with bare feet, directing the flow of the irrigation water. They have tiny little feet like Chinese ladies.

Great masses of granite towered up on our right, R. said nearly a thousand feet high. The old path had been built up on the north side of the river, but it had been washed away in floods, so bridges had to be built, and the path went on the other side. The people told us these bridges have to be renewed yearly. The longest bridge we had seen was the one between Yiamia and Likshi. Here we rested, as we thought the yaks crossing would make a good photograph. The transport was slow that day and we had to wait for some time. The sky had been cloudless, but clouds were blowing up, and there was not a ray of sunshine when the yaks were actually crossing. It was most disappointing; "damnable" R. called

it! and we had saved a roll of films specially. He took a time exposure, but I was afraid it would not come out well. The river itself looked so different in sunshine, and shadows were needed to show up the rocks.

Khazir But told me that a Ladakhi man had dropped an axe in the river when crossing. I was rather incredulous, and afterwards if anything went missing, I asked him if it had been dropped in the river.

We crossed the river and went on for a mile or two, making the halt for the midday meal on a little sandy beach where there were rocks to lean against. We saw Garry sniffing and sniffing towards the river, and sure enough, between some scrubby bushes, feeding on some turf, were burrhel. Garry's yapping soon sent them up the hill, but they did not go far, and we watched them at intervals during lunch. They lay about on the most precipitous looking rocks chewing the cud. I could see their little mouths moving. Their black tails on a white background show up when they move. They were only 200 yards away, but it was really difficult to see them against the rock, so protective was their colouring.

Tea in camp; then I cut R.'s hair with the clippers (Bill's gift to Kelpie, but they had been sterilized). I am not an accomplished barber, but I flatter myself the result is as good as the barber's, although I take some time over it.

Khansamah delighted to surprise us with excellent meals. That night we had hare soup, roast saddle of burrhel, and a chocolate cream pudding made with strained oatmeal instead of gelatine. Who could have wished for a better dinner, when the best of sauces was not wanting!

On the first of June we reached Sherra. It was a joy to be alive and tramping along that morning at half past six. The granite cliffs were golden in the morning light, and the Indus had all the colours of the rainbow. One didn't want to ride on such a morning, and I walked as far as the second bridge; the path crosses and recrosses the river here. We had our usual 10 minutes halt after 50 minutes walking, and were sitting about fifty yards above the bridge. I heard shouts from below and thought it was a goat-herd by the waterside, but when we got down we found that my pony had fallen on the bridge. In Ladakh if there is a hole in a bridge, instead of mending it, a large stone is placed over the hole so that an animal avoids it. The pony's foot had slipped and gone under one of the stones. With sticks and the help of four men, the stone was raised at last and the pony freed, and it crossed the bridge shivering with fright, evidently hating the rushing water below. Then Garry bounded over, knocking down several great boulders and a spar into the water. The shikari said the bridge was made only a week or two before we crossed on our outward journey. It seemed a nervous pony, and I kept my knees glued to the saddle for the first half hour after I got on to it.

It was a short march and we reached Sherra by 10 o'clock, had a cup of coffee, then sat feasting our eyes on the green fields and tiny poplar groves after seven miles of rocks and sand. The glare from crumbled

granite is almost like the snow glare in strong sunshine. We passed many lines of Mani walls that day. We think they must have become sacred through their usefulness in clearing the pasture land from stones, and so gradually became universal. There must be enough granite in Ladakh to build all the cities in the world, and enough slate to roof the houses.

At Likshi an old man and a boy came to the camp begging for money or food. He looked such a respectable old person I gave him an anna, and he bowed and gave me his prayer wheel to turn. It was a fine old one, made of copper and brass. Another day we met a lama riding a small pony, and driving a flock of sheep in front of him. Each sheep had a little woollen saddle bag on its back like a miniature camel bag. The bags were filled with salt and grain. To my surprise they did not seem to be tied on in any way.

R. took out the gun and got a chikor and a fine big hare straight away. We wanted to take some game to the Padre and his wife in Leh. They live on mutton all the year round as no bullock can be killed in a Hindu state, and the Padre himself had no gun.

We had a nice camping ground beside a stream well beyond the village.

R.'s knees were badly burnt that day with the sun, that being the first time he had worn shorts. He had probably got a touch of the sun from the glare of the granite, as he got quite faint at dinner. I went to the medicine chest for brandy or sal volatile, only to find there was not a drop of either; there were no liquids left in any of the bottles. It was rather disturbing to find there was no brandy when R. was so faint, but I knew I had two tiny bottles of sherry and rum for flavouring tucked away somewhere, so I gave R. the sherry, and kept the rum beside us all night.

We had a good rest by the wayside next day. R. was very much better; he slept well, and we had early tea at the usual time. I was very sleepy as I had not had much sleep for two nights. I got a chill the night we spent at Likshi—still, fresh air was the best thing for want of sleep.

There were many interests on the road. We were coming to sharpu country now, and there was a herd feeding on the other side of the river beyond Upshi. Sharpu are much lighter in colour than burrhel, and are lighter in build too, and the horns are quite different.

The path to Simla which started at Upshi looked inviting. I would have liked to have gone to Kasauli that way instead of going back to Srinagar, but it was not to be thought of; our car waited for us in Kashmir, and in any case Mr. Kunick told me that the passes by that route would not be open until well into July.

A few hundred yards before we reached Ugu, R. and I were both riding along the path on the lower side of a Mani wall. I looked up and suddenly saw a beautiful grey fox stealing up the rocks on our right. Its back was almost black, with white tips, and the under part of its body was light buff coloured. It had a most beautiful bushy tail. I shouted to R., but by the time he had dismounted, and the shikari had got the rifle out of its cloth

case, the fox was well up the bill. R. had a flying shot at it from our side of the Mani wall, but he had no time to get the telescope sight adjusted. I was holding the dogs but Kelpie slipped his collar and joined in the chase. R. had another shot which splintered the rock between the legs of the fox, but it got away. It was very disappointing as even the shikari was very excited; it was such a beautiful specimen. He said he had not seen one like it for many years. R. went up the hill before supper to see if by any chance the fox had been wounded and was still lurking near, but there were no traces of it. I expect it was ten miles away by that time.

Burra Subhana came back from Leh that evening with our mail, and we spent the evening reading it.

Next day we were Cook's tourists, sight-seeing, and a tiring day it turned out to be, although it had many interests.

We had left the granite cliffs now. The range on the south of the river was a gentle slope compared with the cliff country we had passed through. The strata were in horizontal layers, becoming more and more vertical as we got nearer Leh.

We set out to see Haemis monastery where the famous festival is held every year. To see Haemis we crossed the river at Marselong, going about four miles out of our way. On the other side a well-worn track went up and up over a long rise until we reached an enormous Mani wall twenty feet broad, and five or six hundred yards long. The tiffin coolies were loth to go any further so we left them there but took the pony. The path wound for a mile at least by the side of a stream; the far side was terraced and cultivated, but our side was rocks with occasional mud huts perched on the rocks. After going under a large chorten we turned to the right round a high shoulder of rock and came to the village, and soon the monastery itself came in sight. Both the village and the monastery are completely hidden from the valley below. The rocky ravine in which they lie looks just like any other uninhabited cleft in the hills. The monastery seemed very like most of the others we had seen, but larger, with a fine courtyard, and great plumes of yak's hair crowning the roof like the plumes of an old hearse. There appeared to be no lama of any standing about, only carpenters busy building a new right wing, and crowds of dirty children. A young lama, whose appearance I did not like, came and stared at us. In a far porch another lama was painting the wheel of life in brilliant colours. He was a skilled artist and the result was very decorative. The roof of the porch was made of clean willow branches painted a bright grass green, while the great beams were a crude blue. All the walls inside were illuminated with goddesses, devils and dragons. A big Chinese type of dragon just looked as if it had walked off a piece of old china. I think we were unfortunate in not meeting a lama who understood Urdu, as probably we should have seen some of the enormous idols inside, and I would have liked to see the kitchens of the monastery. I had heard about the great copper boilers, and the fireplace where whole sheep could be

roasted, many at a time. We took a photograph of the courtyard, and one of the whole building before leaving.

A short rest where we had left the coolies, and then on our way again over a veritable desert of rubble, stones and sand. This route was higher, and we had a much more extensive view of the Leh hills and those behind. I rode for two hours, and then R. had a turn on the pony. I thought the camping ground must soon be in sight as we neared a village. Suddenly I saw two tents, and as we were very weary, I was indeed thankful, but in



FIG. 21.—Haemis monastery. The courtyard.

another minute I saw they were tattered and torn, and nothing like ours, just a Tibetan gipsy encampment. We came to clumps of tiny irises, very much smaller than those that grow in Kashmir. Mrs. Kunick says flowers are all small in Ladakh because of the altitude. We wandered on and on, through a village, and by canals bigger than any we had seen, one at least eighteen feet wide. The pony man made me dismount, although I felt I would be much safer fording the stream on the pony's back than walking across the bridge, which was a single trunk of poplar, flat on the top, about six inches wide. Crossing it was a feat of balancing. Garry crossed, but

nothing would persuade Kelpie to cross it. He tried several times, but always turned back, then galloped along the bank barking loudly, afraid we would leave him behind. At last, after a lot of coaxing, he came through the water, and we pulled him up the further bank, dripping wet, but very proud of himself.

After another half hour by canal banks we met Khazir But on a pony. He had come out to look for us as he thought we were overdue, I suppose. He got a good scolding for pitching the camp so far away, and was told that a 22-mile march and seeing over a monastery were too much for the Mem-sahib in one day.

The camp was in a delightful willow grove, the Golab Bagh, at Shushot. Water was everywhere, and there was no dust. If we had not been so anxious to return to Leh on account of sharpu, we would certainly have waited a few days in this spot. We watched the sun set over the dim purple hills, and saw it rise over the snows to the east next morning. I thought it was one of the most beautiful camping grounds I had ever seen.

(To be continued.)

Current Literature.

BRANSON, WILLIAM P. S. **Observations on the Health of a Nursing Staff.** St. Bartholomew's Hospital Reports. 1933. lxvi, 125.

These observations have been made on the health of the nurses serving their four years indenture period in the hospital during the years 1922 to 1931. Until 1930 there were 260 nurses, 300 in 1930, and 340 at the end of 1931; they were all in the early twenties.

Most sickness occurred in January to April, the maximum being in February when an average of about 8 per cent were off duty. From June to October the number off duty was about 4 per cent. The writer lays down the following figures which may be expected in the various months—from January to April from 6 per cent in a good year to 9 per cent in a bad year; in May, November and December from 5 to 7 per cent; from June to October from 4 to 5 per cent. During an influenza outbreak in 1922 no fewer than 18 per cent of the nurses were off duty.

A striking table gives the number of attacks of illness each year.

| | Average number at risk | Attacks of illness | |
|------|---------------------------|-----------------------|-------------------------------------|
| 1922 | 255 | 345 | } Total in first hemi-decade—1,551 |
| 1923 | 255 | 300 | |
| 1924 | 255 | 331 | |
| 1925 | 254 | 324 | |
| 1926 | 254 | 251 | |
| 1927 | 261 | 314 | } Total in second hemi-decade—1,444 |
| 1928 | 259 | 264 | |
| 1929 | 261 | 301 | |
| 1930 | 300 | 252 | |
| 1931 | 340 | 313 | |

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Travel.

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Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 150.)

XVIII.—BACK IN LEH.

IT was a wonderful morning ; I woke early and watched the day break.

The socks were so far down I had to sit and darn for an hour before breakfast, which we had outside as the tents were packed up before we were ready.

Shushot is a succession of villages with a large grazing meadow on the south side of the river. If aeroplanes go to Leh, and it becomes fashionable, which God forbid ! the landing place and golf course will certainly be at Shushot.

We passed these little villages with their groves of poplar and willow. Larks were singing overhead, the grass smelt so sweet. I felt if I had shut my eyes it might have been the links at Gullane on an April morning with the Lammermoors instead of the Himalayas in the distance.

Shushot seemed by far the most prosperous place we had passed through for a long time. Large double-storied houses with carved shutters, although no glass in their window frames, stood each in its own poplar grove. There were far more animals, sheep, goats, ponies and cattle, than further up the river.

For the first time I felt tired on a morning march, but the day before had been a long and rather disappointing one. I began to ride sooner than usual. We passed several encampments of nomads. Their camps were obviously placed where grass and water were plentiful for the animals, rather than where there was shelter for themselves. These people, " Changpas," have tents made of goats hair woven in dark stripes, and there is always a flag at the top. Rubchu, Mrs. Kunick told me, is where they come from. The number of ponies and goats on this grazing ground was very surprising. I don't know how they are kept alive through the long winter, as there is so little ground for grazing even in summer.

We rested under the willows at the far side of the bridge. It was a delightful spot, especially on such a morning, and we lay and watched the minnows in the river. Garry and Kelpie lay and slept and looked so harmless that eight or ten baby goats came and fed beside them. We had to keep Garry under our eye in case of trouble.

There was a long tiring road ahead of us ; an ascent of over a thousand feet over deep sand, with the hot June sun above us. Leh is much higher than the Indus, although only a few miles from it. We took turns on the riding pony, and decided to stop for a meal where there was a breeze, probably in a gap between the hills. However, we found it too hot even there to sit for long. The reflection from the rocks and sand scorched our faces. One of the baggage ponies, a tiny grey mare with a foal trotting by her side, was far behind and seemed hardly able to go on even at our slow pace, so we called to Subhana to have the baggage changed from her to my sturdy riding pony. We found the poor little mare had a very ugly sore on her back, so we made the man shoulder the saddle, and she followed slowly with the foal.

The road was very hot underfoot so Kelpie thought he would try the top of the biggest Mani wall in Ladakh. He got up at a broken part of the wall, but at the other end, about a quarter of a mile further on, the wall was so high that we had great difficulty in getting him down.

My pony man had deposited his load at the Dak Bungalow and came back to meet me with the pony. I was very glad to see him. I passed Khansamah, tired and going wearily along, and tried to make him get on my pony, but he would not ; if the sahib could walk, then he could do so too.

I had had a letter from Mrs. Kunick at Ugu asking us to come in for a meal at whatever time of day we arrived, so we took her at her word and went in. Her servant had told her he had seen her saddle on a pony outside the post office where we had stopped to collect our mail, so she had got a few minutes' notice of our arrival.

The postmaster said there was still no other European lady in Leh, and that he had never heard of a lady arriving in Leh so early in the season.

How we appreciated sitting down to tea in a house with a table cloth and china cups after two months of camp life, and Mrs. Kunick made it so much a home that we were not at all strange. She insisted upon us dining with them that night, and I knew our cook would be glad of a rest. She apologized for a vegetarian dinner, but that happened to be just what we were prepared to enjoy as we had had no fresh vegetables up Chuma-tang way, and here we got new spinach and good potatoes, also yeast bread which we had not tasted since we left Srinagar.

We were amused at the dogs when we got into the lane which led both to the mission house and the Dak Bungalow ; they remembered the bungalow and made for it at a gallop, so we were not troubled with them at the Padre's house.

The Padre told us that the surveying party which was going to explore the source of the Yarkund River had encamped in the Residency grounds. He said Major Mason was in charge, so I knew it was the expedition I had heard about in Simla. That evening as I was giving out stores just before the light went, I heard a voice say, "Is that you, Mrs. Dickson ?" I looked

up and saw Major Minchinton. Men do look very different with beards, but I managed to recognize him. We used to know him in Lahore, and we had met again in Corstorphan's Hotel in Simla last September. I saw him last one evening in Calcutta when we went to Firpos after dinner. I didn't know until then that he was on this expedition. He was the expert mountaineer of the party. He brought Major Clifford, the doctor of the expedition, to see us; and Major Mason came round later; we had played tennis with him in Simla.

I got out a map and Major Mason showed us where they intended to go, and what they intended to do, or rather hoped to do. They were waiting to get over the Khardung Pass which was not yet open, as it was a particularly late season. A week later they hoped men would be able to cross without loads to break the track, but it would be difficult even for yaks. The weather was cloudy with very little frost at night, and the snow was soft all the way up. Report had it that there was a drift near the top that yaks would not be able to cross.

Beyond the Khardung the party were to continue on the Yarkund road, turning west at a point before the country where the source of the Yarkund River was supposed to be. A great valley lies to the north-east of K2 which had never been explored, and that was the work before them.

We talked about Simla, and he asked about our journey, where we had been, the condition of the Zoji La when we crossed, and we got so interested in details (even to parasites and the best way of dealing with them) that when R. looked at his watch he found it was a quarter past seven, and we were dining with the Kunicks at 7 o'clock.

Next day R. went to the Moravian Hospital to see if there were any eye cases. I supervised a big washing, and then darned socks for three hours. Later I found that the women in the mission knit socks throughout the winter, and I bought eight pairs so as to make sure we would not run short. They were made of white homespun wool, very soft and cosy, and formed a good pad inside our chapplies.

Major Mason came to ask us to go over to the Residency garden to see their kit that afternoon. We went to sleep and arrived an hour later than we intended at their camp. It was intensely interesting seeing all the special tents, sleeping bags, etc., presented to the expedition by the Royal Geographical Society. The tents were green, made of strong yet light and firm material. They weighed only 56 pounds, and have a floor of the same material all in one piece, so that the wind would not trouble them as it troubled us up the Chuma-tang Poo. The sleeping bags were quite different from what I had expected to see. I had imagined sheepskin bags, but these were made of eider-down, lined with soft brown woollen material, and covered with fine waterproofed cotton; they were green like the tents; they tied at the top, and up the side opening had the new patent metal fastener which so far I had only seen on tobacco pouches and purses. They weighed practically nothing and could be aired and disinfected quite easily, whereas sheepskins are heavy and insanitary.

We also saw the new Swiss surveying apparatus which was to be used for the first time on this expedition. It had a high-power small telescope and a camera side by side on the same stand. This stand had at least four spirit levels so as to be perfectly accurate. The camera was made of aluminium and had plate-glass plates, and a yellow screen for snow. A smaller telescope had glass scales attached, with prisms to reflect light on the scales. Photographs are taken up to a hundred yards apart to exaggerate the stereoscopic effect; these are put in a stereoscope, and a sister instrument projects the contours, so distinctly shown, on to a flat plan or map. Such an instrument is almost beyond the understanding of an ordinary person like me, but it was most interesting to hear about it. Its



FIG. 22.—Ladakhis in Leh. A Mohommedan shopkeeper.

case was even a marvel to me. The camera box had a protective lining of sponge rubber more than an inch thick. From our own experience of transport we knew how necessary this was.

We found the stores most interesting, too. There were thirty-six boxes made of three-ply wood from the Army and Navy Stores, London. One box in four had a padlock and hinge, so that it could be kept for the stores in current use. Each of these cases was specially planned to feed four men for five days, and contained an allowance of everything from sugar, tinned fruit, biscuits, to tobacco and sweets. Boxes labelled A1 contained no tinned milk, meat or tinned vegetables, as chicken, mutton, milk, eggs, etc., could be obtained *en route*. Number A2 contained a change of food from A1, but the same type. The boxes marked B were calculated to be suitable in a high altitude, and so on. I must say they all looked well on the feeding.

Later we saw some photographs taken with this camera of the hills round Leh, as they wanted to test the camera. They had a canvas boat which was also tested on the pond in front of the Dak Bungalow. This was the pond which was frozen the morning after we first arrived in Leh.

Major Mason was O.C. of the expedition, and was to do the actual surveying and photography. Minchinton was the climber and was to collect birds and butterflies; Clifford, the doctor and botanist; and Cave saw to stores, servants and transport, and was responsible for mineralogy.

After leaving the Residency grounds we paid a visit to the only shop in Leh where European stores are kept. One expects stores to be expensive in such a place, but the prices even exceeded my expectations. Coffee was four shillings a pound, and as it could be obtained by post for two shillings and sixpence a pound, I did not buy much. We saw a very pretty Yarkundi whip and put it among our stores, as we thought it might help Garry to keep on his best behaviour.

On Sunday R. was off before sunrise, as he had heard that sharpu had been seen in a nullah to the north-west. I was besieged with vendors selling every possible kind of Tibetan souvenir, from prayer wheels and lama bells to homespun woollen goat bags. I got some spoons, a flint and steel, such as they all wear attached to their cummerbunds, two of the ordinary cups that a Ladakhi carries in his bosom, and a china cup in a copper bowl with a lid. I had watched my pony man drinking from the little wooden bowls by the roadside, but the better class carried these copper bowls with a little Chinese cup inside.

While I was examining the goat bags, a new sahib, Captain Emery, walked into the compound, bearded and brown. I sent to ask if he would have a cup of coffee, as neither his baggage nor his lunch basket had arrived. He told me where he had been shooting, and I saw his heads later. Two ovis ammon, three burrhel, and three antelope. The burrhel were not nearly so good as R.'s heads, but I admired the antelope; they were so very pretty, so light and graceful. The ammon looked very massive. He had had two shooting blocks; a burrhel and ammon one south of the Pangong lake, and the antelope block was further north, over the Chang La, a pass which is over 18,000 feet. It was a very lonely district, and for eight days he had seen no one, and had passed no human habitation. They had to carry fuel as there were no trees, not even burtsa, the shrub that we had used up the Chuma-tang Poo. The cold had been intense crossing the pass, and his servants had been afraid as they heard a story about a sahib's bearer dying of cold on the pass the previous year.

That evening I went for a walk with Mr. and Mrs. Kunick to a very bigoted village to see a large chorten and a prayer wheel which is turned round by a water wheel. "Merit" does not seem to be of much value when it is so easily acquired. This village was studded with chortens; they were even built into the houses. A man in this village is hereditary Prime Minister of Ladakh, and is a knowledgeable person. At that time he was

directing the transport of the survey party over the Kardung pass, and I heard it said that if anyone knew the conditions, he did. But he was a bigoted Buddhist. Quite recently he gave an order that all the children attending the Mission Sunday School were to visit a certain monastery on Sunday afternoons, so that it was impossible for them to attend the mission. Mission work in Leh must be in many ways a disheartening occupation. It seemed to me that what they needed most of all were one or two practical industrial workers who would stay at least a year in Leh, and teach such industries as cloth and rug weaving, carpentering, tailoring and sewing. Boys educated by the mission have been sent again and again to Srinagar to learn these industries and so become teachers, but none have ever returned to help. They have been out of touch with the missionaries, their heads have been turned before they had any stability of character, and when other posts have been offered at a better salary than the mission could offer, they did not hesitate to break their contract. If a school of instruction could be started in Leh itself, the outlook would be entirely different.

R. returned about 6.30, having been out on the hills for twelve hours. He had seen a herd of sharpu, but not a ram of any size among them. Next day he went out again, this time to the east of Leh, but had no better luck, so he decided to take tents out the following day, and go further afield above Sobu village. It was a busy day, as he did seven or eight operations at the mission hospital that morning before lunch, which we usually had at 11.30. I got our large lunch basket filled with cooked food, enough to last him three or four days. Mrs. Kunick had supplied us with bread regularly, which was a great treat.

While R. was away I went down to the Mission House for most of my meals, but having the dogs, I slept in my own tent in the Dak Bungalow compound, and had breakfast on the lawn about 7.30. Garry and Kelpie had a most gory fight that morning over a disreputable looking lady dog who seemed to live in the compound. Garry got his teeth into Kelpie's ear, and the blood poured down. Our tall strong shikari went hurriedly to the other end of the garden and busied himself with a roll of bedding. I had Garry by the tail, but wanted someone to hold Kelpie. I called loudly for the whip and at last got it, and it came in useful for Garry. I gave orders for the lady dog who was the cause of the fight to be taken away.

One day when I was in the Bazaar with Mrs. Kunick, I saw fifty or sixty coolies standing in front of the Tehsildar's office. I heard them protesting against being forced to go up the pass, asking who would look after the wives and families if they died in the snow. When the Deputy Tehsildar asked if they could not cut a way through the snow, they called back with one accord, "No, it is impossible." Mrs. Kunick translated what they said.

On Thursday morning before breakfast (R. was still up at Sobu) I got out the big telescope and got it set on the Khardung pass, and felt quite thrilled to see a long line of coolies going up right to the very top it seemed. However, by the time I had finished breakfast I saw the long line coming

down again, and thought that another attempt to get over the pass had failed. I was longing to hear what really happened, and took the first opportunity to ask Major Mason when I met him at a *tamasha* given by the Khan Bahadur that afternoon. He said they had not tried to cross, but had dumped all their stores at the top of the pass. He and Minchinton had been up that morning and had gone down the other side for a quarter mile, treading out a path for yaks and ponies. They were all very cheery and hoped to get away in two days when he had his accounts cleared. Later when we were watching a game at polo, Major Mason got a telegram from the Wazir saying he had no authority to force the coolies over the pass if they were unwilling to go, as the pass was not "open," so his difficulties did not seem to be over.

However, on Saturday, two days later, the Tehsildar himself (the man we had met on his outward tour at Chuma-tang), came over the pass from the other side from the Shyok river, and went to the Residency to ask why they had not gone over. There were no difficulties about it after that. They had a late lunch on Saturday, packed up, and went to Paulo, at the foot of the pass for the night, nine miles from Leh. Next morning from half past seven I watched a long line of coolies, yaks, and ponies, like a string of ants creeping up the snow. I arranged the telescope on a heap of stones and let Mrs. Kunick watch them too.

XIX.—A PARTY IN LEH.

The Khan Bahadur, Ghulam Mohammed, who gave the party, is a fine old pensioner who has served for thirty-five years, many of those years at Gilgit. He is now revenue officer for hemp coming over the pass from Yarkund. He came along one evening and asked us if we would go to his house to tea one day; a little dancing first, then a polo match after tea, he said. We watched the dancing for quite an hour. Several Ladakhi dances, a man from Gilgit, then a Yarkundi. It ended up with a Ladakhi doing a very slow dance with scarves. It was all interesting, but I was glad when the drums and whistles stopped and we went indoors for tea. I sat between Major Mason and a Pathan, a Khansahib, from Peshawar, who was one of the mountaineering experts of the expedition. After tea the Khan Bahadur asked Mrs. Kunick if she and I would go in and talk to his wife and daughters. To my surprise I had to act as interpreter, as Mrs. Kunick does not talk Hindustani. I almost made a *faux pas*. I began to ask if the very small children were grandchildren, as the parents looked much more like grandparents. There were about five grown-up young women and four tiny children. They proudly showed us a new addition to their house. It was crowded even now, according to our ideas for such a family. There was a large bedroom in which were five large single beds. In this room about eight people slept, and all the cooking was done on a stove in the middle of the room. The girls asked if I sewed, and wanted to see some of

my sewing. I didn't say I had spent most of my leisure in darning socks lately!

After talking to the Indian ladies for half an hour we went to watch the polo on the long sandy ground behind the English store shop. The Khan Bahadur's side played the team of the English stores manager; he had a Yarkundi trader in his team, who had two fine Yarkundi ponies with black silky coats. The Khan Bahadur rode a grey Zanskar pony. The trader played left-handed, a most dangerous thing to allow. There were several narrow escapes, but no accidents. After a goal is scored, one of the team canters down the field with the ball in the palm of his right hand, the stick being held in the same hand. Then he throws the ball up, hitting it towards the goal as it falls. One man was very clever at this, almost scoring a goal from the original hit, and never failing to hit the ball with his stick. There were a few real polo sticks in the teams, but the Ladakhis used ordinary sticks with a half crook at the end. Major Gompertz (Ganpat), the author of "Harilek," was among the guests that afternoon. He had just arrived and was camping alongside the surveying party in the Residency grounds.

I walked home with Mrs. Kunick; she could tell me so much about the people and about Leh, and told it in such an interesting way that I was always very glad of her company. She told me that in 1919 a heavy shower of rain fell in and around Leh. It didn't last more than half an hour, but the result was that an avalanche of mud descended from a glacier in the hills above, obliterating miles of cultivated fields, and the main street of the bazaar is now two or three feet higher than formerly. Before the avalanche the shops stood a few feet above the ground and now they are on the ground level. Fields are still being reclaimed that were buried in 1919.

R. had returned on the morning of the party, having had no better luck. He was tired with so much trekking and rested the following day, while I went down to help Mrs. Kunick with a little tailoring job she had begun, and in the afternoon we went on a shopping expedition. First to the house of a wealthy trader from Yarkund to look at silks and stone marten skins. We had seen the trader himself playing polo, but as he is a Mussulman, his wife does not go out, but she gave us a great welcome in her room. She was a fine looking woman, spotlessly clean, and made me think of a portrait of an English lady in the sixties. She had black hair smoothly brushed, worn in two pigtailed down her back. On her head was a small dark blue skull cap, finely embroidered in grey silk thread. She wore trousers which only showed at the ankles. A short tight-fitting black satin jacket covered her blouse, and a full silk skirt covered most of the trousers. She had a fine face, of the type that a portrait painter would love to paint. When we came into her room two little boys were lying sleeping at the far end on a padded quilt with a long circular cushion under their heads. The cushion was covered with gay Yarkhundi silk, and the children were covered with an English travelling rug. These people love getting English goods. I saw

an eider-down sleeping bag, just like those that had been supplied to the survey party, in the room where the furs were hung. It would have cost £7 to buy in London.

The lady pressed us to have tea, but we assured her we had just finished tea, so she went for a plate of almonds, sultanas and dried rose hips, and set them before us. I bought some China silk and then went to look at the furs. The stone martens were not so good as we get in Lahore, and were the same price. I looked at the snow leopards; they were beautiful, but I do not like them for personal wear. The fox were all of the yellow variety. I described the fox we had seen at Ugu to Mohammed Bahud Din, and he said it was probably worth four hundred rupees, about £30. The pointed fox are very uncommon even here.

We went back to the bungalow to hear if R. had got any "khubar" (news) as to the whereabouts of sharpu. Four men had been out and two had now come back having seen a herd to the north-west of Leh, near where R. had been before, so he made arrangements to go off at four on Sunday morning.

On Saturday morning there was an influx of visitors to the Dak Bungalow. While we were eating our tiffin on the lawn a lady and gentleman rode in on good Kashmiri ponies, followed by a lot of servants, some riding, and many pack ponies. This was Donna Edwige Toeplitz, an Italian lady, wife of the director of a large Italian bank and Mussolini's financial adviser, and a Mr. Stuparitz, the manager of the Lloyd Trestino in Bombay, who was accompanying her. Mr. Stuparitz had a very kindly Scot's west country accent. They went into the bungalow and did not use tents.

Not long afterwards Mr. Newman, a young subaltern, arrived. He, too, like Captain Henry, was on his way back from a shikar trip. R. asked him to come and have a cup of coffee, but he would not come until his beard was removed. I heard him asking for a barber. He had been on the Frontier for three years, and the only woman he had spoken to during that time was the wife of his Commanding Officer, who had once gone up on a visit. He told Mrs. Kunick when he dined with them that she was the first lady he had spoken to since the summer before. We considered that the Dak Bungalow was quite crowded now, but while I was having tea, a single lady came, wearing khaki riding breeches and coat. She rode up to the bungalow as if looking for someone, and I thought she was probably a friend of Donna Toeplitz; then she went away. Thinking she was probably very tired, I ran after her and asked her if she would have some tea with us, but she said in broken English that she was looking for a place to pitch her tents. She told me afterwards that she was a French artist and had been some time in India painting, and had come up there to make sketches. Her name was Mdlle. Lafugie. I thought her extraordinarily plucky to go so far all on her own, and she had gone to monasteries and made quick sketches of the lamas.

Just as we finished dinner at 8 o'clock that evening another party arrived. Two ladies with a little Ladakhi servant girl. One was a nursing sister from a Zenana Mission in Kashmir, and the other was a friend who had come out from a big school in Ireland to see India. They pitched their tents on a grassy part of the compound where we had been having meals. There was really no other place, but it meant that even when I was resting I had to keep the flap of the tent down, or the servants would see right inside.

R. was away before dawn next day, and I stayed in the compound nearly all day doing some very necessary mending and re-soling leather socks. These roads would wear the pads off an elephant!

We dined with the Kunicks that night, and Mr. Peter, the other Moravian Missionary, was there, too. We discovered the possibility of going over to Stok on the other side of the river. I was very anxious to meet the hereditary King and Queen of Ladakh, who are now Rajah and Rani of Stok since the conquest of Ladakh by the Dogras, and R. was keen to try an open nullah on the far side of the river for sharpu, as he had not even seen a good head among the herds in the Leh nullahs.

(To be continued.)

Current Literature.

WEIGL, RUDOLPH. *Faits d'Observation et Expériences démontrant l'Efficacité du Vaccin à Rickettsia pour la Prévention du Typhus. Archives de l'Institut Pasteur de Tunis.* 1933, xxii, 315.

The vaccine used is obtained by anal inoculation of typhus virus into lice, the intestines of which are collected after eight days and a carbolized suspension is then prepared. Three injections at seven days' interval are given, the *Rickettsiæ* contained in the intestines of 120 to 170 lice being required.

The vaccine has been employed for the last three years in Poland, in French North Africa, and in Belgian Catholic Missions in China.

In Poland over 6,000 people have been vaccinated. In 1931-2, 2,755 individuals received three injections; they were doctors, hospital employees, and persons who had been in contact with typhus patients. Among these there was only one case of the disease, and that was a doubtful one.

The author states that during the course of vaccination of contacts about 0.5 per cent developed the disease in from a few days to fourteen days. These individuals were in the incubation stage of the disease when vaccination was begun, and in them the disease was mild or of an abortive type. He considers that vaccination is not inadvisable during epidemics. But, as the result of guinea-pig experiments in his laboratories, he considers it

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Lumbar puncture was repeated at 12 noon on that day, and yielded a fluid intimately mixed with blood, but not under increased pressure.

Her condition showed little change until 6 a.m. on October 15, when respiration took on a Cheyne-Stokes' rhythm, the pulse became steadily weaker and more rapid till she died at 7.30 a.m.

Permission to perform a post-mortem examination was refused.

The cerebrospinal fluid was examined at the Leishman Laboratory and reported on as follows :—

“Globulin, no increase ; sugar, normal reduction ; smears, no T.B. seen ; culture, sterile.

On centrifugalization, supernatant fluid shows very definite hæmolysis.

Film of sediment, cells disintegrated and differential count impossible.”

Conclusion.—The history, clinical signs and symptoms, and report on the cerebrospinal fluid fit in with the picture of cerebral hæmorrhage due to congenital aneurysm of a cerebral artery, as described in “Recent Advances in Neurology.”

Our thanks are due to Lieutenant-Colonel C. J. Coppinger, O.B.E., R.A.M.C., for his examination of, and report on, the cerebrospinal fluid ; and to Major-General J. A. Hartigan, C.B., C.M.G., D.S.O., Deputy Director of Medical Services, Aldershot Command (now Director-General Army Medical Services) for his permission to forward the case for publication.

Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 233.)

XX.—IN THE KING'S GARDEN AS STOK.

WE had arranged with Mrs. Kunick to go to Stok for one or two nights. The Padre found he had too much work in hand and he could not leave Leh with a peaceful mind. The Tehsildar himself had come to see R. to explain to him that the nullah beyond Stok was preserved, but that with the licence for sharpu he could shoot in the Stok nullah. We started off after lunch from the mission house, Mrs. Kunick on her own little grey Zanskar pony, and I on a hired one ; the baggage and two tents had gone on ahead under the care of Khazir But. We left Jit Ram in charge of our baggage and other tents in the compound, and the sweeper to look after Garry and Kelpie. I was loth to leave the dogs, but thought they would be better in Leh if we were only away for one or two nights. I missed them so much in Stok ;

I had not realized before what good company they were when R. was out all day. We took three and a half hours to reach Stok. Although Leh looked so near, distance is very deceptive in that clear atmosphere. We came by the same sandy path to the river by which we had come from Shushot ten days before. Mrs. Kunick and I walked almost all the way as it was downhill, and we could talk as we walked.

The willow grove by the river was now carpeted with dwarf irises, a lovely blue against the fresh green turf.

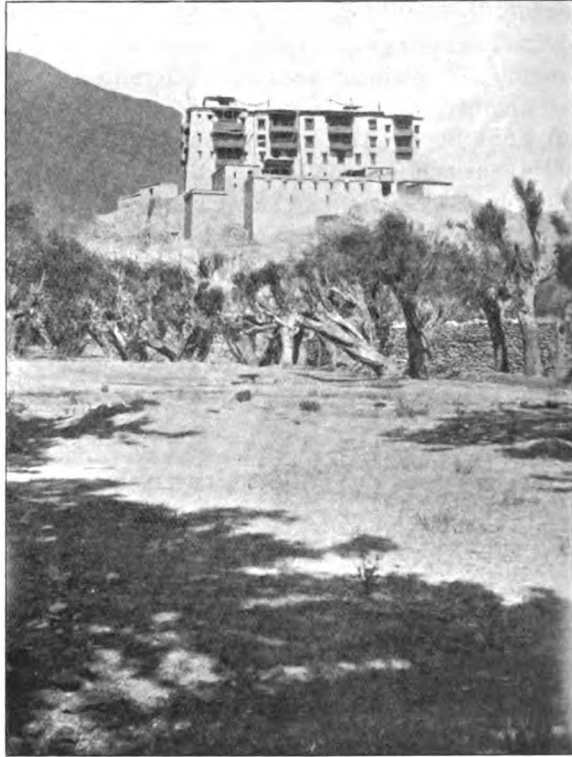


FIG. 23.—The King's palace at Stok.

We saw two men fishing, and bought two good-sized fish for twopence each. We had seen them caught, so we knew they were fresh. That helped to make up for the extraordinary number of bones. We had never been able to have fresh fish for dinner, as candlelight did not show up the bones; nor was it suitable for breakfast before a march, as it took so long to eat.

There were so many high walls in Stok that we could not find the camp, and we hung about for some time before the pony man found it in a walled-in garden just under the castle. Mrs. Kunick had intended to go to the castle to pay our respects to the Queen the same evening, but we had arrived late

and were tired, so we just put our few possessions straight, had dinner sitting on the beds in our tent, and went to bed.

Next morning R. set off with Khazir But before it was light. Mrs. Kunick and I had breakfast at a civilized hour, and shortly after we had finished, the Rajah, or Gyalpo, as Mrs. Kunick called him, came to welcome us. He was accompanied by several servants carrying wood, flour, rice, eggs, milk in a brass vase, and half a cone of butter. It was just like a stage picture of King Alfred and some of his Saxon followers. The men were ragged in natural home-spun coats; their legs were wrapped in pieces of felt tied with black hair braid wound round them like a puttee. The King wore the red robe of the lamas, but his head was not shaved, and he wore his hair in a long pigtail tied to his sash. His cap was of red silk brocade edged with gold, but no part of his dress was fresh or even clean. He had an intelligent face with keen eyes which lighted up when he was pleased or interested, but when in repose a look of hopelessness came over his face. He sent his servants off on various errands until we were alone. We all sat on a small rug as we had brought no chairs or tables from Leh. The King leant forward, and in a quiet but very excited way talked to Mrs. Kunick in Tibetan. She told me that the Queen was ill, and he apologized for not being able to ask us to the castle on that account. He had not been told of our arrival the previous night, or he would have come down himself, and would have sent wood and milk at once. He asked several times if we had all we wanted. Could he not send more wood or more eggs? As it happened we could not have stayed in Stok as long as we did had it not been for the extra food he sent us; so indirectly we were indebted to him and his kindness for a record sharpu. He talked for some time to Mrs. Kunick, always sending any servant who came near off on another errand. He seemed to me like a man who had had his thoughts bottled up for months, and was only now getting an outlet. Mrs. Kunick listened and was clearly most sympathetic. She told me after his departure that there was a great secret which according to their custom must not be told for another month yet. The Queen had given birth to a little son ten days before, and she was still very weak and ill. The news of the birth of the prince must be kept absolutely secret. The lamas said if the news leaked out the evil spirits would change the boy into a girl, or the boy might die. He said the Queen had been very ill, and had lain like wax for three days, not moving or speaking, but now she was a little better, and had sent messages to Mrs. Kunick. It was terrible to think of the poor girl lying in total darkness in that dreary castle on the rock above us. I had heard that after a birth all doors and windows are tightly shut in case the evil spirits get in. As her condition had to be kept secret, probably she had not been outside the walls for some months. The King seemed very fond of her, and was so delighted when we asked if we could send her some chocolate. Sometimes sweets are allowed when food touched or cooked by Christians is forbidden. He asked Mrs. Kunick later, would she make a cake and send it to the

Queen. I am sure he left us a much happier man. I said I would like to see the little Princesses ; his face lighted up, and he said he would send them down later with his grandmother, after he had made her tidy her hair. I was very amused when Mrs. Kunick translated his last remark.

Within the hour the old lady arrived with two little girls and a Ladakhi serving woman. A little boy in a lama's purple robe followed them. The old grandmother had been operated on some years before for cataract by Dr. Heber, a former missionary in Leh, and she has sight in one eye. She



FIG. 24.—In the King's garden at Stok. The King and his daughter Urgyan.

had rather a fine old face, very clever I could guess, but I am sure life would be easier in that old castle if she were not there.

Mrs. Kunick asked about the children ; the elder was nine, and the other six years old. The elder one was dressed as a typical Ladakhi girl in the purply woollen frock worn long to the ankles, which gives them an old-world look. The younger was dressed as a little nun, in a red robe, with a tiny mitre-shaped cap like a lama. I asked her name, and they said she had been christened "Urgyan" the day before. We thought it a very charming name, but asked why they had waited until she was six years old

before they gave her a name. They had waited, said the grandmother, in the hope that she would turn into a boy. She took off her little cap and proudly showed us her shaven head. She was a dear little girl, and it made me shiver when I heard she was to go to Hemis Monastery in a year or two. Mrs. Kunick had brought small presents for them all, as when the King and Queen visit the mission house they bring presents with them.

It is customary for the King of Ladakh to have not more than two children, so if the new baby had been a girl, perhaps she would have been given away, and her birth might not have been announced at all.

The old lady asked us some very embarrassing questions about our husbands having other wives as we had no children. She sat on long after our efforts at conversation were exhausted, and her servants had told her twice that they were calling from the castle. She simply answered, "I will stay a little longer." As I did not understand the old lady, I played with the children, throwing the balls that Mrs. Kunick had brought them. The little nun was a most attractive child; although she was shy at first, she chuckled with laughter when I pretended to take her ball away. The Kashmiri boy came once or twice with cups and plates and then asked the time. I had R.'s watch, but the old lady took no notice until she had made up her mind to go. I am sure Mrs. Kunick must have been very tired trying to entertain her, I know I was tired sitting doing nothing. She had brought us a dish of dried apricots. Luckily they were the ones from Baltistan which have sweet kernels and require no sugar when cooking, as we had run out of sugar.

R. got back by four o'clock, again disappointed. The following morning the King arrived very early. He did not look at all healthy. What a life for a man, living in that castle with no work to do, and with no real authority; servants given to him and food supplied; just sufficient for his needs; no need for labour, and yet no scope for charity! There is a chapel inside the castle, and I expect the lamas who live there are the real rulers. We heard loud drums and cymbals at regular intervals all day, and they began before seven. I suppose the same noise goes on even if the poor sick Queen has just dropped off to sleep.

Mrs. Kunick once suggested to the King that he should play polo. He said, "Yes, I must; I will get sticks and practise in Stok," but nothing came of it. Probably a lama said that some great evil would befall the King if he played polo. If only Ladakh were under direct British rule the King might travel and have his interests widened and learn how to work. He might even become Wazir, and his son could go to the Chiefs' College in Lahore to be educated.

Somehow since learning so much about the Royal Family, my desire to see the festival at the monastery of Hemis has dwindled. Now that we had seen what influences are at work, our interest in the devil dancers had gone. They were by no means too polite to us at Hemis, and I felt I would rather go up the Khardung Pass if it was possible, than attempt to go to the

festival. All our neighbours at the Dak Bungalow had probably left that day for Shushot on their way to Hemis.

Mrs. Kunick was to have lent me her pony to ride back next day, but the Ladakhi evangelist required it to go to Hemis. He went to preach to the crowds in the intervals between the dances.

Mrs. Kunick and I stayed in the wood next day, and I heard many interesting things about Buddhism, reincarnations, etc., from her. R. came back about four just as she was leaving for Leh on her grey pony. We stopped and talked to let her take the news to Mr. Kunick. They had seen some wonderful heads, but had come upon them so suddenly round a corner that the herd took fright and were off. They had been watching two others when these beauties appeared unexpectedly from another direction, and the big ones made straight up the hill. R. had his rifle ready and had a flying shot at a very big one. The animal staggered, and they found some blood at the spot, but it bounded off after the others. It was at least cheering to know that there were such heads in the nullah, but we could not spare many more days if we were to attempt the Khardung Pass. This was his thirteenth day stalking sharpu. Another morning on the hill in the hope of having better luck, and then we decided to return to Leh on the Friday morning. There was no sign of any of the large herd on the hills on Thursday; they had probably gone to a bigger nullah to the west which was closed for shooting. It was most disappointing. We spent the afternoon quietly in the wood. As we had not intended to stay so long in Stok we had run out of stores. We had no tea, coffee, sugar, butter or jam, so we had rather unusual meals. Mrs. Kunick had promised to send tea, sugar, and butter from Leh, but the little boy who brought them took eight hours to come with the parcel a distance of eight miles. We had milk and hot water at tea; not a very refreshing drink!

We made an early start next morning as it was beginning to get warm at midday. It was a perfect morning, and the hills looked so beautiful, they might have been the Grampians round Boat of Garten; surely I could pay them no higher compliment! There was an unusual freshness in the air too. We walked to the river where we waited for the riding pony. In the distance there were many people on their way to the festival, which was to begin next day, the 19th of June. At the bridge many pack ponies passed us with Sahibs' baggage, and many Ladakhis in gala dress, making charming colour pictures; even the ponies had coloured saddle cloths.

In the marsh near the river we suddenly saw two storks. R. tried to stalk them with the camera, but although they did not fly away, they just moved as he moved, and kept out of range. After he had snapped them he walked straight towards them, and they stretched their wings and flew a few yards but settled down to eat again.

I had a lazy pony and it would not go without being led. The man got between me and the wind, and I wished I was not so conscious of my sense of smell!

We got back to Leh for lunch, and were kept busy all afternoon looking out stores in preparation for going up towards the pass next morning. We dined at the mission house that night and told Mr. Kunick all about having seen the big sharpu heads after a lot of stalking, and then coming back without one in the end.

XXI.—CASTLE AND MONASTERY.

After tea Mr. Kunick took us to the castle. I rode Mrs. Kunick's pony, a very sure-footed beast, up the steep hill. We got a fine view of the city even from the entrance. The gateway was surmounted by a great lion whose head moved and mouth opened when a rope was pulled. The castle itself was a collection of great empty rooms with mud floors. There is no glass in the windows, and even at that time of year the wind howled through the corridors. In winter it must have been a terrible place. We went up uneven wooden ladders to get from one room to another. Later a lama came to show us over the chapel. He was quite a pleasant gentleman. Lamas are the only well-fed looking people in Ladakh, and this one was no exception. We climbed to the top storey and stood out on a little balcony. The view was very extensive and gave me a much better idea of the geography of Leh than I had before. The castle is oblong-shaped with sloping walls, which give it an appearance of great strength and solidity. Mrs. Kunick remarked to her durzie one day what a lot of labour must have been employed when it was built hundreds of years ago. He said the building materials, earth and bricks, would probably have been carried to the top by flocks of sheep, each with its small load in its saddle bag.

There was probably more arable land round Leh long ago, as I heard on all sides that the water supply is diminishing. The rainfall has always been negligible, but the snowfall is not what it was. Some of the older inhabitants remember when the barren sandy plain between Sobu and the Indus was covered with pasture.

We next saw the rooms of the King and Queen, the Gyalpo and Gyalmo, as the lama called them. They too were very bare. These rooms are only used when the royal couple come to Leh for the New Year Festival. There were two or three small pieces of furniture, old Kashmiri lacquer work with Chinese designs. A hearth stone in the middle of a room showed where an iron stove had been placed, and the painted roof which had once been beautiful, was begrimed with smoke. The lama took us into the chapel. The first thing I saw was an enormous bowl filled with butter. It was made with a lip turned in round the top to shelter it from the wind; a light is always kept burning there. In front of each god were seven small bowls of butter, then seven small bowls of water. One had fourteen, but always a multiple of the number seven. It made me think of the Tabernacle. One god was the all-seeing, and had eyes everywhere. Under his feet were all mankind and all the beasts of the earth.

We asked the lama to show us how he read his service, so he took us to

an anteroom, and began reading. The reading was punctuated with clashing of cymbals and the beating of a big drum. I wondered if *Selah* in our Psalms meant the clashing of cymbals. I think Buddhists have many rites and feasts like those in the Mosaic Law. The scapegoat is always one of the tableaux at the Hemis Festival. While reading, the lama held what looked to me like a little hollow brass dumb-bell in his hand between finger and thumb, the palm of the hand upwards. The lama called it a *Dorso*, and Mr. Kunick said it represented the thunderbolt which was supposed to have fallen at Darjeeling. *Dorso* the thunderbolt, and *Ling* a place, hence Darjeeling, our version of "Dorso-Ling." The handle of the bell which the lama used was a model of half of the thunderbolt. The bells come from Lhasa, and were for sale in the bazaar, but since the Americans have been in Leh, prices of souvenirs have increased 200 per cent, and we did not buy one. The vendors were asking about £2 each for them.

In a corner of the chapel proper the lama showed us a pile of trumpets, long and short, made of brass and wood. These are made in Leh, he said. In the same room round the walls was the library, old lacquered stands with piles of old manuscripts rolled in calico, with polished or lacquer boards above and below each pile. This manuscript is painted black, and the lettering is in gold and silver. In any other climate where the atmosphere is not absolutely dry the manuscript would get mouldy and stick together, but these were probably hundreds of years old, and had no other protection than the thin piece of calico. On the far wall of the chapel was another part of the library. Here the stands were made of the roughest poplar boards. The manuscripts were rolled in calico, but there were no polished boards to protect them. It just looked like a poor class laundry with bundles of washing. I asked the lama why the boards were missing and the stands so poor, and he said that many years ago when the Dogra soldiers came to Ladakh they used the old lacquered stands and boards for firewood, and they had never been replaced. He lifted the curtains before some of the idols, the better to let us see them. Most of them are draped with old Chinese silks, now falling to pieces. Banners of old silk representing dragons and goddesses were hung on pillars, the more precious of these having a covering of muslin.

We thanked the lama and suitably rewarded him, then left the castle to climb still higher to the monastery on the hill above. This belongs to a different sect, so the same lama could not show us round. I mounted the grey pony and went as high as possible on her by a path that certainly did not look fit for any animal but a goat, but luckily one gets accustomed to heights and steep paths after some weeks in Ladakh. We first went to a small square building which had nothing inside but one great yellow idol, which in a sitting position is at least 20 feet high. It was draped in old Chinese brocade and had earrings and necklaces of precious stones. The face had the usual long slit eyes turning up at the corners, and the hard supercilious mouth. We mounted still higher to another chapel but found

it locked. The Draba, or boy priest, who was our guide, said he could not get the key as it belonged to the yellow sect, so we went on to the very top of the hill where another of these places is perched on a pinnacle of rock, and here the boy opened a small door. The verandah was falling to pieces; even the roof was in an unsafe condition. The Draba lit one or two joss sticks, the incense they use in these places. Next we went up another storey to a little balcony round the tower where the view was magnificent. Leh and its surroundings lay like a map before us, but the footing was very insecure. In the floor were many loose and missing boards, and the drop below was considerable, several hundred feet I thought as I looked down.

Sightseeing is very tiring, and we enjoyed our evening meal in the mission house that night. Mr. Peter was there, and the talk was mostly of passes and their difficulties, and tales of lone travellers being overcome with mountain sickness. As R. said, if suggestion had anything to do with it, we ought to feel mountain sickness up the Khardung next day, but I was much too keen to get to the top of the pass to worry over stories about other people. Mr. Kunick was not sure if we could manage it. He said the only possibility was to have yaks meeting us to take us up the worst part, so we sent a note to the Tehsildar, asking for two yaks to be sent to Paulo for Sunday morning.

XXII.—THE SHARPU HEAD.

On Saturday we had to give up our Europe mornings and begin our early starts again; early tea at five; and we were on the Yarkund road by half past six. We took two riding ponies, as it was a sandy uphill track to the foot of the pass. It was a cloudy day, but we hoped for better weather on the morrow. A stop was made by the wayside and a fire lit to boil the kettle. The only fuel was a dry grass which grew in tufts among the rocks and had a strong aromatic smell. We heard marmots, but did not see many. There were a few yards of turf on either side of the stream most of the way up, except where the stream disappeared altogether under large boulders. On this scanty pasture yaks and donkeys were grazing. We camped on this narrow belt of turf not far below a little stone hut which looked as if it had been built for animals, rather than for men to sleep in. R. went off almost at once with the shikari and tiffin coolie up the nearest nullah in the hope of seeing sharpu. It seemed as if we would have to return to Kashmir without one. It was much colder than it had been in Leh, and a strong wind blowing, but it was in reality not nearly so cold as we had experienced before, and we had quite a comfortable night.

After tea and eggs at 4 a.m. we got up and dressed, and were off by 5 o'clock. We looked about for the yaks but none appeared. Two of our pack ponies were still at the camp so we rode them for nearly a mile, and then the snow and ice began, and the ponies could go no further. It looked a long way to the triangular rock on the skyline which is at the summit

of the pass, and it took us two and a half hours to reach that rock. The path was slippery; the snow had melted a little and become frozen again. I wondered if a yak would have been very much help. We had borrowed some Kashmir grass from Mr. Newman to make grass shoes, so I wore them. They have an extraordinary grip, and I felt quite confident on ice-covered rocks.

The Zaskar range behind us was covered with mist but it cleared somewhat in the evening and we saw the tops of the highest peaks for a few minutes. To the west a snow-capped peak appeared with two glistening glaciers on the face of it. The sun shone on it with a perfectly dazzling brilliance, which showed up the more as we were in shadow.

As we got higher, clouds gathered from every side, and the last few hundred yards meant just pegging on in the face of a snow storm. We could see only about ten yards ahead. Breathing was difficult, and we climbed slowly at the end, stopping every ten paces for breath. We thought if we could find shelter behind a rock at the top it would probably clear, the clouds blow away, and we would get the view we had come so far to see. I was not tired as the air had a certain exhilaration in it, but breathing was not easy.

Major Mason and his party had just managed to get across the week before, and we saw the remains of a poor yak that had fallen by the way-side, not able for its load. The kites had left nothing but the skull and backbone and a leg with a hoof showing a little of its brown hair. It died in harness—a thing to be thought much of in a country where no merciful bullet is allowed to end the sufferings of the cow tribe, however great their pain. I was told that even Bovril is not allowed to be brought into the Hindu state of Kashmir. I had brought a bottle unwittingly. I had not connected it in my mind with beef.

We had a cup of coffee from the thermos half an hour before reaching the top, and had to open a tin of condensed milk as no fresh milk was available so high up as our camp. After that the tin had to be carried level, so there was nothing for it but for me to carry it myself, slung in a napkin. More coffee and sponge cakes at the summit, and R. had his usual hard-boiled eggs.

I had been warned so often about mountain sickness that I was fortunate in feeling no bad effects whatever from the altitude. It seemed natural that we had to stop often to take breath. On reaching the top I peered down on the other side and could just see a winding path for a hundred yards ahead, then snow began to fall and in ten minutes there was an inch of snow, and we had difficulty in finding my gloves and the cork of the thermos which I had placed beside me on the rocks. We had to give up all idea of waiting at the top until the clouds cleared away. The tiffin coolie had carried our two coats, but even when wearing the coats it was very cold, and R.'s topee had half an inch of snow on it.

We had walked downhill for an hour before the storm cleared away.

and there was blue sky overhead and to the north. Luckily for our peace of mind this did not last long. The whole ridge was very soon enveloped in mist again. To the south the clouds broke apart and we saw the green cup of cultivated fields where Leh lies, with the Indus beyond, and further still the Zaskar range, gleaming white in the sunshine. It was like a peep of the land of Canaan after such a morning of storm and clouds.

Kelpie was with us, and although he must have been tired, he hunted marmots the whole way down.

A golden-headed eagle circled round us far up the mountain side, and we did not lose sight of it for at least two hours. There were several new flowers which I had not seen before.

While we were out our servants had moved camp four miles further down the valley to Ganglas, the nearest village to the pass, so that R. could start early next morning on a last search for sharpu.

These last four miles seemed like ten. It is a stony path, and probably the height had affected us more than we knew, as we were both very weary and thankful to get into camp. Our tent was pitched under willows beside the village. There must have been a festival or a wedding that day, as when we arrived there after midday all the women were parading in their best attire. Pberaks and cloaks were very gorgeous. A band of drums and whistles began to play on the roof of the house behind our tents. I would fain have slept all afternoon, but just as I got drowsy the band started again, and sleep would not come. They even played far into the night. We turned in at half-past seven but had rather a disturbed night.

Rain fell for a few minutes next morning, and the tent was quite wet. Dark clouds had gathered up the Indus valley, and thunder rumbled in the distance. It was very unlike the usual weather in Ladakh. R. did not start so early. We had to give the tents about an hour to dry, so Kelpie and I, with a Ladakhi coolie to carry the tiffin basket, started for Leh, four or five miles away. The air was delightfully fresh and clean after the rain, larks were singing lustily. I met women taking their small flocks of goats and sheep up to pastures. I got a great welcome from Garry who had been left behind as he was rather thin. Mrs. Kunick was most kind, bringing me lettuce and fresh butter—both great treats in a country where such things are not available to travellers.

Burra Subhana, the big tiffin coolie, had been sent off two days before with a Ladakhi to Stok. There was just a possibility that the sharpu R. had wounded might be found. It might have kept going for some time before it dropped. We had sent a man from Phayang, but he had gone straight back to Leh, so R. thought it better to send one of our own men.

I asked if Burra Subhana had come back, but there was no word of him.

We slept in the Dak Bungalow as we hoped to move off in two days, and it was easier to pack in a room. It is so tiring in the tent never being able to stand up straight.

R. came back having seen nothing, and Mr. Peter came with some

bowls to show us, and some stone-marten skins that he had got from trappers in the Zanskar. They were not cured, but a very pretty colour and so soft that I could not resist them. Mr. Kunick came up to ask us to dine with them, but I had a nasty bilious headache and R. was tired, so we went off early to bed after a light meal.

Two men came to say that sharpu had been seen on the hills behind the bungalow. R. had not intended to go out again, and we had planned to have a day free for packing, but on hearing they had been seen so near he thought he would have one more attempt. After I was in bed and R. was looking out field glasses and ammunition for next morning, I heard Burra Subhana's voice, and then Khazir But talking very excitedly on the verandah. R. went out to ask what had happened, and I just heard the word "mila" found. By the light of a candle the head was examined and measured. It measured 31 inches and was a beauty, better than any we had seen or could have hoped for. I sat up in bed and wrote a hurried note to the Padre. He had been so kind in helping that I wanted them to know the good news at once. As we told Mr. Kunick afterwards, if it had not been for them we should never have stayed so long in Leh and so would not have got a sharpu. In a few minutes he himself arrived just as pleased and excited as we were over the good fortune. Two ladies from the Dak Bungalow were dining with them, but he had just run up to say his congratulations in person.

We went off to sleep very happy that night, feeling that all those days of strenuous labour had been of some avail.

(To be continued.)

Current Literature.

CUMMINS, S. L., and WILLIAMS, ENID M. An "Acid-Fast" other than Koch's *Bacillus Cultivated from sputum*. *Tubercle*. 1933, v. 15, 49-53.

The organism described in this paper was obtained from the sputum of a young lady suffering from acute pulmonary disease which had come on shortly after a confinement. The clinical, radiological and systemic picture was that of acute phthisis, but the sputum had been reported negative on several occasions. The patient had suffered from the œsophageal condition called by Hurst achalasia of the cardia, and in the course of X-ray examinations in connexion with this a year before the onset of the acute lung disease an opacity had been detected in the right lung. With the sudden onset of acute pulmonary disease she became intensely cachectic, with high hectic temperature accompanied by much cough and sputum and appeared to be in the last stages of "galloping consumption." Blood examination

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(7) They are most easily palpable in the upper part of the body, the abdominal wall, chest, back, arms, neck, and face.

The patient should be examined stripped and in a good light, preferably daylight. His skin should be closely scrutinized while he is told to move all his muscles in turn ; this will frequently enable the observer to see the nodules appear or move under the skin. If this fails, the patient should lie down and the inspection be repeated, moving the muscles as before. Finally, a thorough search should be made, palpating the whole body surface, at first running the hand lightly over the skin and then with deeper pressure and a kneading motion of the fingers feeling the substance of the muscles.

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Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 376.)

XXIII.—GOOD-BYE TO LEH.

Next morning I got up for breakfast and saw R. off, but had to lie down as I was very sick and giddy. The room was like a Paddy's market with everything laid out for packing. However, I felt better by lunch time and got everything stowed away ready for an early start next morning.

We dined at the mission house and stayed much later than we intended, but it was our last night in Leh. Mrs. Kunick said at dinner that she felt she could go on for another year without a holiday, we had cheered her up so much. She felt it wouldn't matter now if she didn't see anyone for months. Her remark brought the fact home to us how very lonely they were in Leh, and how very plucky they were in their loneliness. Such selflessness was almost beyond my comprehension. We sat late round the table and talked of many things. They told us about people who had stayed in Leh ; and of their work in still more lonely places, Poo and

Kailung. We were saying good-night and good-bye, when Mrs. Kunick insisted that we should come in for breakfast next morning at whatever time we wanted it. After some persuasion we promised to come in shortly after six o'clock.

The sun was just touching the top of the castle and the monastery heights when we went into their compound next morning, and we remembered it was the longest day. We let Ramzan, the sweeper, take the dogs with the baggage, and our ponies waited for us at the gate.

The first four miles from Leh were downhill to Spittuk, by the river, so we went on foot. Both ponies were fast walkers, and kept up well. A small rounded hill which divides Upper from Lower Ladakh was our objective for lunch, but thirst rather than hunger made us call a halt before we reached that point. The desolate appearance of the Mani walls struck us afresh. I had asked Mrs. Kunick why there were so many broken-down chortens and Mani walls. She said that no merit was acquired by mending the walls and building up the chortens, so no one touched them, and they seemed to add to the desolateness of the countryside.

We had a few minutes' excitement as we thought we saw a memsahib in a white topee riding towards us. However, when we got nearer we found it was only a Yarkundi trader in a white leather hat lined with fur. It had the appearance of a lady's topee in the distance. His saddle was piled high with two gaily coloured saddle-bags, bright reds, blues and greens. The man himself might have passed for a Frenchman, certainly his skin was no darker. A caravan of ponies followed him with a Yarkundi servant. We were very amused to see two green parrots in cages tied on to the laden ponies.

Apricot trees do not grow so high as Leh, and I was surprised to see them as near as Nimu. The new copper-coloured leaves at the top of the branches caught our attention at once, after seeing poplars and willows only for two months.

We camped in the wood which surrounds the Dak Bungalow. We had dinner outside for the first time, the air was so warm and soft, and it was light long after we got into bed. A thousand feet lower does make a difference in the temperature. We slept with the tent wide open, and watched the light of the moon through the trees.

The first few miles to Saspul were in deep sand; we had impossible ponies, and we seemed to take hours to those few miles. Basgu is very picturesque, and we were unfortunate in getting no sunshine when passing through on our way to Leh. Now it was prettier, as little blue irises were in bloom, bordering the fields. Clouds came up, and we thought we were to be unfortunate again. There was just enough light to make it worth while to take a photograph.

The dogs did ten miles to our one on the plateau between Basgu and Saspul. There were no sheep on this barren stretch of country.

Tents were pitched in a garden amongst waving poplars. A monastery

overlooked the garden, and some interested lamas watched us at our evening meal. Saspul covers a large area where the river bends, the ground is somewhat level, and for a mile or two all this land is under cultivation.

We had two riding ponies for these marches, as R. had worked so hard after sharpu he had had enough walking for a bit, but we always did the first hour on foot. The ponies were following when some sound startled them, and off they went at a canter, and it was another hour before we reached them and they were caught.

Here we saw roses in bloom for the first time. They grew in crevices in the rocks, often large bushes, six or eight feet in circumference. On turning a corner one knew they were there, the scent was almost overpowering, it was so strong. The colour was a glorious bright magenta, not a soft pink like the English wild rose.

While following the ponies we met two ladies riding in thick coats and veils, and we said "Good-morning." We certainly would never know them again, their faces were completely hidden. A servant riding behind was carrying a gun across his saddle, and we wondered what he expected to shoot.

We opened our last tin of cheese for tiffin, but when the tin was opened it bubbled out and rose to twice its normal size, and had to be thrown away. This was rather serious as well as disappointing, as our stores were getting low. We had only one tin of butter and one of jam.

The river was getting more swollen and muddy every day with the melting of the snows. It was three times as large as it was on our outward journey. It was much warmer that day and I was tired, so we decided to do a half march from Nurla, and stop at Khalatse on the morrow. With meals out of doors, only one tent was pitched under a walnut tree, whose fresh young leaves had a delicious smell. Khazir But told us that two English ladies had camped at the far end of the village, but I had no energy to go along to see them, and we were off before they were about next morning.

The march to Khalatse was uneventful. We found the Dak Bungalow compound very dirty, too insanitary for a camping ground, so we walked on to the far side of the village and had found a suitable spot between fields, when Mrs. Burroughs and her little daughter Monica came towards us, and asked us to camp in their garden under the apricot trees. They had heard from Mrs. Kunick that we were coming, but had not expected us that day. It was hearing Garry bark that called their attention. Monica had said, "That isn't a Khalatse dog barking," so they came to look for us. We had tea and supper with them, and had a nice long afternoon talking. Mrs. Burroughs was anxious about Monica's eyes and R. was able to reassure her; then when he found that Mr. Burroughs did quite a lot of eye work, although he is not a doctor, they sat and talked together, Mr. Burroughs taking notes about treatment and operations. Although he lives so far from civilization he keeps himself up to date by reading.

That evening they kept us enthralled by telling us their experiences in Poo and Kailung; especially in Poo, where they had been the only white people, and their only visitor was the Forest Officer, who came once a year. It was in this station that Mrs. Kunick had been for five years without seeing another white woman. Mrs. Burroughs' second son had been born there, and ten days after his birth, while she was convalescing, word came that a man had had a terrible fall and split his skull and must have his head sewn up. Her husband had to do it, and she must go to the hospital above the house to give the chloroform. It was the first time she had given it, and she was scarcely able to stand, but as she said, their prestige in Poo depended on the man's recovery. During their first six months in Poo their house was just beside the village dancing ground. These dances, to the accompaniment of pipe, whistle and drum, took place three or four nights a week, and the crowds did not disperse until three or four in the morning. The missionaries could get little or no sleep, and found it difficult to carry on their work. The morals of the place were very low indeed. Mr. Burroughs said it is difficult to make any headway against the complacency of the Tibetan. He is a cheery mortal, but is too pleased with himself to be at all impressionable.

The path to Poo is a very bad one, and grain and small baggage is carried by sheep. The slopes are so steep that when the snow melts big boulders are loosened and come hurtling down across the path to the foot of the gorge, and up several yards on the other side. One day as they were returning from Simla (I don't remember the distance, but it was twenty-one days' march), Mrs. Burroughs was riding with her baby son on the saddle in front of her, when one of these boulders came thundering down from the hillside above and passed between the pony man and the pony. She said that the only thing her children were afraid of were these avalanches of boulders.

The mission at Poo has now been given up but there are still missionaries at Kailung.

Mrs. Burroughs was very amusing about visitors to Ladakh, and she always found them interesting. The youth who dances all afternoon when on leave at a hill station never goes to Ladakh. They often get queer people she said, but they always interest her.

The crops were much further on in Kalatse than in any of the other villages. The fruit had formed on the apricot trees, but would not be ripe for some weeks yet. Kalatse gets very little sunshine in the winter as a high hill rises to the south east.

We were as quiet as possible next morning striking camp so as not to disturb our host and hostess, and I had to see that the servants left the garden tidy. We heard a caravan passing while we were at breakfast and thought it was probably the Countess and Mr. Stuparitz, who we heard had spent the night at the Dak Bungalow.

We had a specially nice tiffin on the road to Lamayuru as Mrs. Burroughs

had given us lettuces, and we sat by a stream and let the baggage pass us. It was very hot and tiring climbing up the gorge, so we determined to start an hour earlier next day and get the better part of the march over before the sun was high.

I went up to see Madam Toeplitz while R. went out after chikor. She didn't seem to be enjoying her trek very much. She was writing a book about Lamaism, and spent all her leisure writing and studying. Mr. Stuparitz

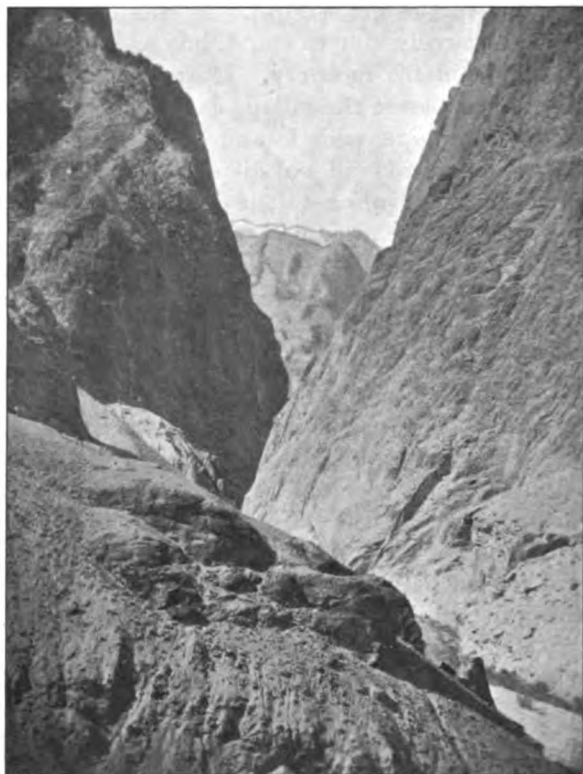


FIG. 25.—A gorge.

was very anxious to see the sharpu head. He had heard about it being found, and came down with me to the wood where our camp was pitched.

We had told our bearer to wake us an hour earlier than usual, but in his anxiety not to be late he brought our tea at 3 a.m., so we got up and dressed by candle-light. Breakfast in a dark wood, a moon shining through the trees above, and a candle on the table, was like some scene outside a robber's cave. We were well on our way before the dawn broke, and later the old monastery stood out against the morning sky. R. thought it was too cold, but walking was a sheer delight on such a frosty morning. I always enjoy getting over a pass, and that day was no exception. We met

about 200 yaks and ponies coming towards Leh. I was riding quietly uphill when suddenly I saw a yak advance on Garry and toss him in the air. Luckily the horn caught in his collar, so he was not hurt, and I thought he would know better than to get in a yak's way another time.

From the top of the pass we had a long look at the Leh hills, all a soft purple in the morning light. The path was clear and open on the far side, so we raced downhill for about two miles. R. got a good photograph of a rocky clump of hills with snowy peaks on the other side of the gorge.

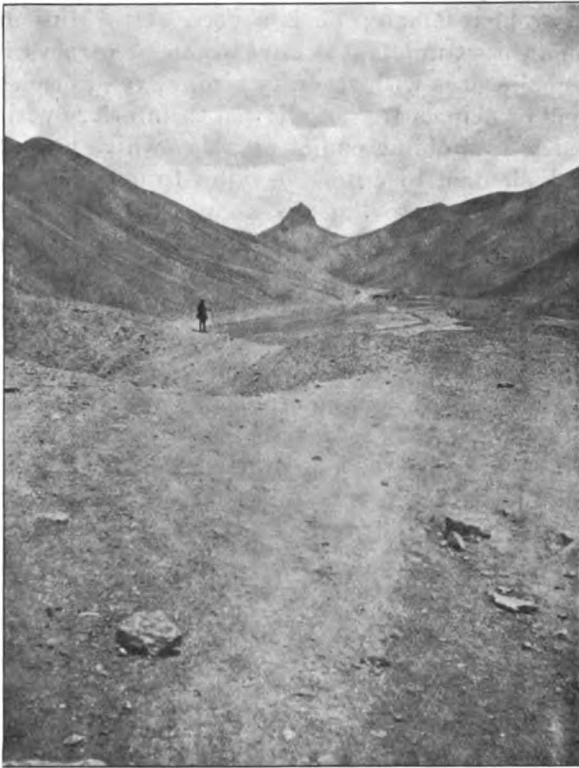


FIG. 26.—The peak at the summit of the Namika La Pass, 13,000 feet.

Our one tin of pâté de foie gras was opened for tiffin and eaten along with the last of Mrs. Burroughs' lettuce.

Bodh Kharb was white with snow when we left it on our way up ; now there were crops coming up everywhere, and the camping ground was a pretty one. We did not start so early as bearer would have liked for the next pass, the Namika La ; he tried to get us away by half-past four. It was a monotonous road to the foot of the pass.

Every day we met more traders with their strings of ponies. I had a nice grey Zanskar pony and rode to the top of the pass. I climbed the little peak on our left to get a better view of the Leh hills 50 miles away.

They were a lovely colour, soft reds and browns and purples. The valley on the far side is a most desolate one; even in June there was no vegetation and no water. We stopped at a milestone 149 miles from Srinagar, and R. took a photo of the pass with the peak in the distance.

We camped on the polo ground at Moulbeck, and I cut R.'s hair, much to the amusement of the villagers who watched from the cliffs above us.

Our larder was getting low, so R. went out with the khansamah and they got 13 pigeon. The natives were delighted as the pigeons were in such numbers and they were eating the crops. We were very amused at Hassan Shah, our khansamah; he is a good caste Mussulman and will not cut a pigeon's throat unless it is alive when he catches it. When the Kashmiri tiffin coolie goes with R. every bird, alive or dead, has its throat cut; his religious principles are not allowed to interfere with his appetite.

We had a pair of stumbling ponies next day which made the way seem longer. We had planned to cross the valley to get a photograph of the monastery which is built into the cliff above Shergol, but it was further than we thought. I saw villages far up the mountain sides which had been scarcely visible on our way up, the houses being the same colour as the mountains. Now that the crops were green, they were a marked feature of the landscape. The crops in the Lotson valley were the finest we had seen. There is a plentiful supply of water there. The wild roses were wonderful; bushels of flaming crimson. We were constantly seeing new flowers at this stage. A few days before we had seen nothing but the caper plant growing in the bare shale on the hillside. It spreads along the ground and has a flower which is reminiscent of the passion flower. I had no idea what plant it was until we were having supper with the Burroughs at Khalatse when Mrs. Burroughs tried to make me guess what it was. Even when she told me I imagined it was the seed capsule which was the caper, but she said it is the bud of the flower which is pickled for sauce.

It was warm that morning and we sought shade on the far side of a stream for our lunch hour. We saw the servants and baggage passing as we smoked a pre-lunch cigarette. R. called to Kelpie, who pricked his ears and when he saw us, took no thought about picking his steps in mud or stream, but galloped through both, and arrived a dripping mass on my lap very pleased with himself.

We did not attempt to go on to Kargil that day but stayed the night in a little wood beyond the village of Lotson, almost under Tapi.

XXIV.—KARGIL.

We got a good start for our half march of eleven miles next morning. The sun was behind a cloud and it was quite cool. It was interesting to see the irrigation channels of Tapi built up for miles along the hillside far above us. The village itself lies in the top of a cliff, I should think 600 feet above our path.

We again found several new flowers and tried to press them. I did not

know then what a paradise of flowers we were coming to in Kashmir. As we came through the long straggling village of Pashgyam there were roses everywhere, again wild roses of course; the bushes as large as those in Devonshire lanes, but the flowers are larger, and when they first come out are brighter than a Dorothy Perkins rambler, but in the strong sunshine they rapidly fade to a pale pink. Some of the bushes were really wonderful, they held such an amount of blossom.

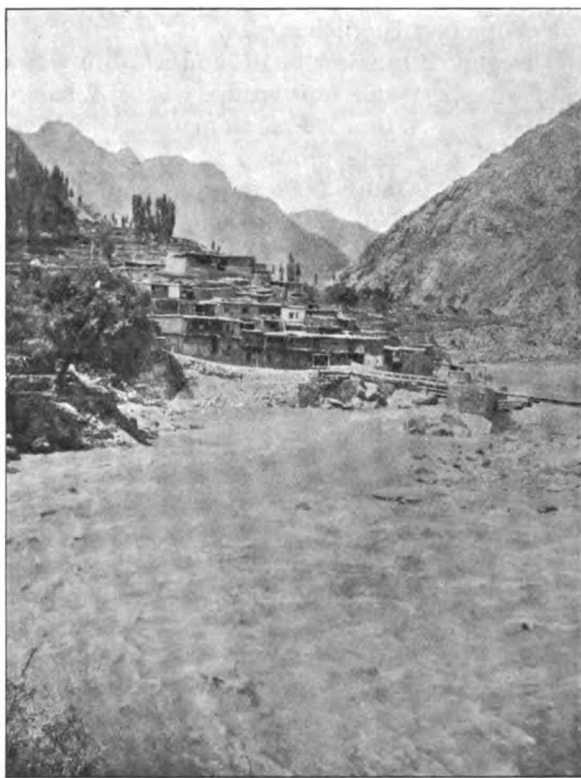


FIG. 27.—Kargil, bazaar and bridge.

At least a dozen caravans of ponies passed us on our short march from Lotson, going up either to Leh or Yarkund. If I were a millionaire I would start a hospital for these poor ponies, but a law would have to be passed to have them examined at certain stages and detained when unfit. It is very distressing to see tiny ponies very lame with swollen joints, their bodies thin with pain and want of food, being whipped to make them keep up with the rest of the caravan. Ladakhis do not beat their ponies as Indian tonga drivers beat their horses, but at nearly every stage we saw the remains of a poor pony that had fallen by the wayside. Eight ponies all showing ribs, with horrid sores on their backs, were being driven down from Kargil to Kharbu, and we passed and repassed them on the road.

It was a fine march, with a cloudy sky, over the plateau to Kargil, the barrenness a great change after the fertile fields of Pashgyam. We rested at the top of the downward path and R. took a photograph of the Suru nullah. The valley of the river with big shadows here and there would have made a nice sketch.

Our stores were running short and we made out a list of things to get in the bazaar at Kargil. We were at our last tin of butter and jam. We had bought candles and matches there on our way up, and the shikari said that by June the shops had English stores.

I rode up to the Dak Bungalow but found a sahib was occupying half of it, and it looked so dirty and uninviting, we went back down the path and sat in a willow grove. Here we read our mail which had been waiting for us at the Post Office. Waterproofs had to be pulled out and my old parasol put up as it rained steadily for a quarter of an hour. I quite enjoyed the rain, and it laid the dust before the baggage arrived. Then we hurried off to the bazaar to buy our stores, only to find that the only thing on our list to be had in the bazaar was Sunlight soap. We had no tinned fruit, tinned meat, jam, butter or cheese. There were no vegetables except potatoes to be had and very little meat, so when I came back I had to give some time to a readjustment of our menu. We had enough sugar, flour, dried fruits including raisins, but these do not make for variety, and tea is a difficult meal without butter or jam. However, we could get eggs, and I bought a lot of milk when possible so as to get the cream. One of khansamah's new sultana cakes seemed very good when tea time came.

We had mail letters to answer. I was very tired at night and my temper was short (in consequence only I hope). When Jit Ram knocked over and broke our precious large thermos flask, I was really cross; it seemed the last straw. We had always carried hot coffee or cocoa for tiffin in this quart bottle, and now if we wanted a hot drink, a fire would have to be made, and in many places there was no wood. Looking back on it now, I really should have been grateful that the thermos had remained intact so long. What we should have done without it in these snowy regions I do not know.

The shikari brought two riding ponies for us to look at. They were fine strong animals, two hands larger than any we had ridden, and much better cared for. The sahib at the Dak Bungalow had brought three Kashmiri men with nine ponies as far as Kargil, and now the men were anxious to get work on the way back. The two ponies we were to ride had only pack saddles; a blanket over the wooden fork which forms the base of the pack saddle. There were no stirrups of any kind, but they adjusted loops of rope. I was not very sure about it as these were big animals, and I didn't want to be dragged by a rope if I came off. However, I agreed to try the rope, as it is very tiring going a long journey without stirrups.

Next morning, while we were enjoying our usual ten minutes' halt at the end of the second hour an officer and his wife appeared round the

corner, riding the usual tiny ponies. They stopped, and we had quite a long talk. He was a Major Williamson, a Gunner from Calcutta. They must have made a very early start from Kharbu, as they had already done about twelve miles. He had taken a block in the Chang Chen Mo for antelope, so they had to cross the Chang La, a pass over 18,000 feet. Mrs. Williamson looked very white and delicate and I wondered how she would stand the rough journey. A man has the interest of the shikar to keep him going, but a woman has to be pretty keen on the trek itself. She was very interested to hear how I had got on. I felt very tough and weatherbeaten beside her, but she had been wearing a dark veil to protect her face.

We managed to light a fire of dried grass among the rocks to make our coffee, but the milk had gone sour, and I don't appreciate black coffee; to me it has associations with sea-sickness. We had a cold pigeon each, so fared very well even without butter and jam.

The Kashmiri pony went well, with quite a different action from most of the poor little Ladakhi ponies. Four or five miles from Shimsha Kharbu we saw a great storm coming over the crags far above us, and in a few minutes we had to stop and put on waterproofs. I got very wet indeed, but I quite enjoyed the storm, even the heavy hail, it was such a delightful change after the dry air of Ladakh. Unfortunately the sky was so threatening we thought it unwise to pitch our tents, as we could not risk having heavy wet tents to carry next morning, and we were compelled to go into the not over-clean bungalow. We had our meals on the verandah, however, and I even had the beds made up in a sheltered part of it too. The verandah was just a few feet back from a steep bluff rising from the river Dras, which was then a roaring torrent. We could hardly hear each other speak for the roar of many waters, and we remarked as we went to bed, how often our camp had been pitched by a river and we had dropped off to sleep with its roar in our ears. It certainly did not keep us awake that night.

A Sahib and Memsahib arrived at the bungalow very late, but we were up and away next morning before they were astir. It was so bitterly cold on the first part of our march to Dras that we hardly rested at all, and it was too cold to ride. The path lay in deep valleys, so the sun was longer in reaching us. When I did ride again the Kashmiri man told me that his pony had eaten "kharab ghas," i.e. deadly nightshade, and he was afraid he would be very ill. I told him the Sahib would look at its eyes, and could probably give it some medicine. Still the poor man was so worried he spoke to everyone he met on the road and asked their advice about it. First a small boy with a raucous voice walked about three yards behind me with the men, giving his ideas about the symptoms and what should be done. Then a man he met by the roadside told him to give the pony two seers of hot milk (about two quarts). Later we came to a village where a man walked alongside feeling the pony all over as I rode, and saying his

word about it. In a few minutes the man said he must take the pony back to the village to give it a draught of warm milk. By this time I was thoroughly annoyed, and asked him if he did not believe what the Sahib said. He looked sulky, but I allowed him to take the pony away, as nothing else would satisfy him.

I rode R.'s pony for a mile or two, when to my surprise the man made up on us. He could get no milk in the village as the goats were all out at pasture. So I rode the pony again but soon saw flies settling on its left ear, so I asked if it had hurt itself. Then it came out that he had let the man put a knife in to bleed the poor animal. We took longer on the road on account of all this trouble with the pony.

It was extraordinary to see the difference in the countryside; even up the sides of some high hills it was green like a picture of the Alps, and the Dras valley was a plain of verdure in the afternoon sunlight. Opposite Tashgyam the rising ground on the far bank of the river was covered with wild rose bushes, and on either side of our path among the stones and rocks was a plant resembling hedge parsley; the flowers were yellow and the leaf like sprengeri fern. I noticed cows eating it with zest, so it must have been some use for fodder. There was a great deal of deadly nightshade on waste ground here too, and round the edges of the tiny fields, but not so much as in Ladakh; there it seemed to grow everywhere.

We sat beside the river and I used the small amount of spirit I had left to boil the kettle for tea about three o'clock. We did not arrive till after four, having been on the road for ten and a half hours.

(To be continued.)

Current Literature.

ELDERTON, ETHEL M. *The Lanarkshire Milk Experiment.* *Ann. of Eugenics.* 1933, v. 5, 326-36, 12 diagrams.

PEARSON, K. *Appendix to Dr. Elderton's Paper on "The Lanarkshire Milk Experiment."* *Ibid.* 337-8.

For four months in 1930 in certain schools in Lanarkshire 5,000 children were given three-quarters of a pint of raw milk a day and 5,000 children in these same schools were selected to act as a control series; in another set of schools 5,000 children were given three-quarters of a pint of pasteurized milk and another 5,000 children served as controls. The children were measured and weighed at the beginning and end of the experiment. The results were reported by Leighton and McKinlay [*vide this Bulletin*, 1931, v. 6, 436] but have been criticized on various grounds [in papers referred to in this study]. One difficulty was that the initial heights and weights of the children in the control series were greater than

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Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 440, vol. lxii.)

XXV.—DRAS: THE FOURTH OF JULY.

We had our camp in a lovely grove of young willows with nice moist turf underneath; no dry dusty sand as in Ladakh. Red bear had been seen not many weeks before in the nullah to the south and R. thought he would try to get one. So next morning at three o'clock he got up and started up the nullah. The moon was shining and I could see the Plough from my bed—it seemed to be resting on the top of a hill. I lay awake for an hour or more, then went to sleep and did not waken again until the sun was well above the horizon. It was a perfect morning, blue sky and a soft breeze, the air laden with the smell of willows coming into the tent. Even the dogs slept until after eight o'clock.

The night before we had not been able to get baths as the wood supplied by the chowkidar was so wet it would not burn and khansamah had difficulty in getting dinner ready by eight o'clock. I called for my bath—a morning bath being a luxury that can only be had on days spent in camp. Breakfast was served on a little table under the willows; porridge and cream and scrambled eggs with khansamah's very good girdle scones. The larks were singing, and to my great surprise I heard a cuckoo calling. It was really an Arcadian morning; I didn't want to do anything but just sit and be happy.

I gave my old topee another coat of brown water-colour paint, as it was looking shabbier than usual I thought, and there were more people on the road now. We were getting back to civilization. I had hardly finished when there was a shout, and R. and the shikari appeared. They had no luck; they had seen no red bear, only traces a few weeks old, but they brought back a nice marmot skin and a bundle of rhubarb; both very welcome, perhaps the rhubarb especially so, as we had by that time neither vegetables nor jam, and our potatoes were running low. Rhubarb seems to grow in quite high parts of Kashmir; later I myself found it coming up just where the snow had melted, in black moist soil, when the grass had not yet begun to appear.

We had a delightful quiet day lying on rugs under the trees; then dinner about six o'clock, and so to bed. It was a real Sunday for once.

The shikari brought down the visitors' book from the Dak Bungalow

and looking through it I found R.'s signature in May, 1912, when he was on his way to Baltistan after ibex. We were interested to see who had gone up "the road" to Baltistan while we had been in Ladakh.

The next day from Dras to Matayan was one of the easiest we had had. It was extraordinary trying to recognize the country we had passed through in April. There had been so much snow that the only feature of the landscape that was recognizable was a little wood beyond Pandras. Pandras itself looked so different, and the valley beyond, over which we had walked on hard snow as quickly as possible before it melted, was now a perfect meadow with many flowers.

We camped beside a stream of grey blue snow water at the foot of a nullah not far from Matayan village.

I was hot and dusty after the march and the stream looked cool and tempting. I put on my bathing dress and had a plunge in a pool just beside the tent. It was what it looked, icy cold, and it freshened me up a lot.

In the Dak Bungalows between Spittok and Macchoi the Joint Commissioner has supplied six novels in each bungalow for the use of travellers. These are a great boon and we appreciated them very much. They can be taken out one at a time from one bungalow to another. We had been reading one by Anthony Hope and lit a candle and sat up in bed to finish it, as it had to be returned next morning.

XXVI.—BALTAL.

July Sixth (Tuesday we thought.)

How well I remember my feelings on reaching this place on the way up; very very weary after two days marching, nine hours each day in soft snow, and the pass still ahead of us. The fire in the grate only heating a small circle round it. Icicles all round the roof, and the floor of the verandah covered with drifts of snow. We did not go up to the bungalow again, and there were plenty of delightful camping grounds near the river.

It was a bitterly cold start that morning. I wore a jersey under my coat, but was glad to pin the woolly Ladakhi saddle-bag round me until after an hour and a half marching we got into the sunshine about a quarter past seven. R. had the gun with him as there was a chance of getting more marmots, and we saw four playing about. They were within easy rifle range but he could not get near enough with the gun; the ground was too open and there was no cover of any kind. They sat up, looking for all the world like little brown dogs begging, and then whistling, disappeared into their holes. I suppose these little animals must store food underground for the winter, for their holes must have been under many feet of snow for four or five months. Several times we crossed the debris brought down by avalanches; great piles of unmelted snow with rocks and stones embedded in it.

Progress was slow as the ponies slipped if they did not go very carefully. Soon we rounded a corner and came to the place that I had called "the great white valley"; its stillness and lifelessness were awesome, and we had been glad to leave it behind us. Now it lay before us a fertile meadow with a broad river running through it, *green* hills on either side, and flocks and herds of sheep, goats and ponies feeding everywhere. Kashmiri shepherd boys had their camps all over the valley, either using tents or some rough temporary shelter made from turf and stones. There were all kinds and colours of goats, some very big ones from the plains and all colours, brown, grey, white and black. It made me think of Laban and

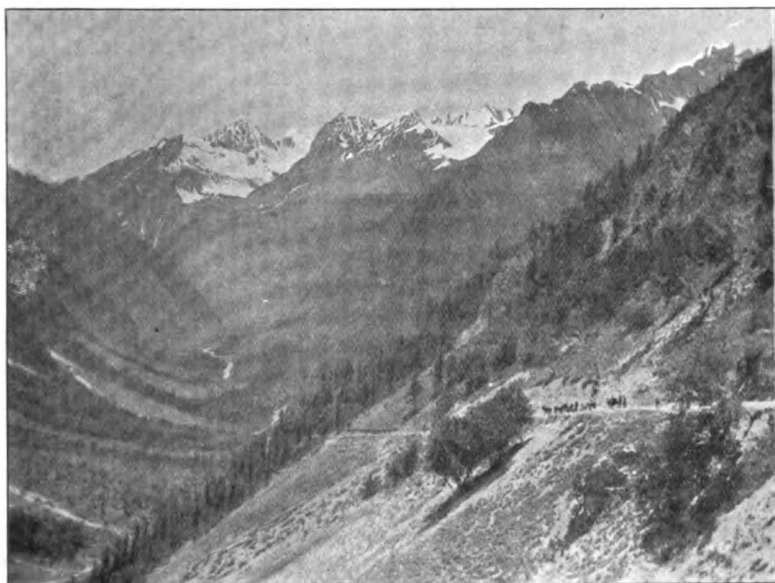


FIG. 28.—Our baggage ponies on the Zoji La path nearing Baltal.

his herds, but no water had to be drawn from wells here. It was a paradise of pasture!

Further down the valley towards Macchoi ponies covered the hillsides; I do not remember ever seeing so many ponies together before. We met families moving their live stock further up the valley. A herd of goats would come first, nibbling the grass as they came, then ponies, cows and dogs. The father usually carried a younger child on his shoulder, the child clinging to his neck in the usual Indian fashion. Another child aged two or three years was perched on a pony above piles of bedding; these children were not tied on, but the tiny hands clung to the rope which bound the bedding to the pony. I saw ponies going up most precipitous paths with children perched on blankets in this way. I thought for several days that the women in addition to carrying the family cooking and water pots,

carried their rations of flour in the black cloth across their backs, which is slung from their heads. I discovered later that it was their infants that were carried in the sling. No part of the baby was ever visible and it could get little or no fresh air, but probably the actual position in a sling of cloth is more comfortable than being carried in arms, but it could not be healthy. I do not understand how these poor women lived in the open as they do for months; during an illness they have no real protection from rain, and it could be very cold indeed on these high pasture lands when the sun was behind clouds for a few days.

I had not expected to see many wild flowers until we got to the other side of Zoji La, down in the Sind valley, but here to our delight before reaching Macchoi, knolls were blue with forget-me-not intermingled with a tiny white flower which I have seen cultivated in rockeries at home. Anemones were everywhere, tiny single ones, and larger ones growing in clusters. Wild strawberries were in flower, and yellow pontentilla, and we found at least four varieties of primula; the little short blue reptans, the common blue, the rosae, and a very small pale one. Buttercups were everywhere like a meadow in England in a buttercup year. There were yellow marigolds in thousands among the rubble where a stream came down the mountain side, and white marigolds on the level ground.

There a caravan of pack ponies passed up laden with a Sahib's kit. There was so much furniture we said to one another, "These people are not going far." Later two men walking, and a lady on a white pony, with a red parasol which looked very civilized, appeared over the rising ground. We said good-morning in passing, and then recollected the faces of people from Ambala who had been in Kasauli the year before. How small India is so far as Britishers are concerned!

There was still a mass of drifted snow to cross 20 or 30 yards long before we had gained the upper path which is cut out of the hillside. Looking down into the actual pass, still deep in snow, it was almost impossible to picture that we had climbed up there following an almost indistinguishable track. The gorge is impossible to look down on from the higher path, and the size of the cliffs opposite could be appreciated. It was terrible to think that three men and five ponies had been swept away by an avalanche three weeks after we had crossed. We heard that they had made a late start after the sun was up, and that was asking for trouble.

It was easy going down by the high path, and we soon came to a corner where we got a fine view of the Sind valley lying at our feet. R. took photographs, one looking down the Sind river and the other looking towards Amarnath. Coming up there had been nothing but snow, and here we suddenly looked down on this English park-land, with verdure-clad slopes above, then rising to snow-capped peaks. It was amazing; so delightful to smell pines again after all these months.

Our servants began to collect firewood; it was not sold at a premium here at this season. It had been brought down from the forests above by

snow drifts and was lying about everywhere. The tents were pitched on the meadow close by the river, a very turbulent stream compared with the river we had seen at Gund coming up.

XXVII.—SONAMARG.

The road and the scenery between Baltal and Sonamarg were both new to us. Only one or two snow-capped peaks were familiar. We rode most of the way as it was a warm morning and the path was good.

There were quite a number of people going up to Baltal ; ladies riding, and a party of people who had a special "doolie"—a variety of dandy carried by coolies for their dogs. It looked as if we might meet many more travellers on the road before reaching Sonamarg, but we got there sooner than I expected. Those nine miles did not take us nine hours this time.

We called at the Post Office for our mail and were glad to find a parcel of stores ordered from the Army Agency in Srinagar. We opened new tins of butter and jam for lunch, which we ate sitting under the pines on the hillside. The baggage soon made up on us and the shikari said he knew a nice spot a mile further on where "Sahib log" usually camped, so we followed on later. It was a very warm day so I sent word with the tiffin coolie to be sure and pitch our tent in a shady place. We wandered along with the dogs shortly afterwards by a small path. There were one or two flowers we had not seen before, Jacob's Ladder and a small primula.

The camp was in a delightful spot beside a wood, but our tents were in full sunshine, while the kitchen ones were under the trees. However, we took a rug out and had tea in shade. The hills opposite were perfect ; very satisfying to look at in the evening light. Barren Ladakh has a fascination which is its own peculiar treasure, but the smell of trees and grass and flowers and the very dampness in the atmosphere were soothing and restful to us who had been without them for so long.

Sonamarg was, I believe, a great camping ground in the 'eighties but since Gulmarg has been built and Pahlgam developed, it has lost its popularity. It must be an extraordinarily good centre for climbing and walks, but as there is only a footpath from Gunderbal to Sonamarg, four coolie stages, and there are now motor roads to Gulmarg and Pahlgam, one can understand why they have developed. I have met old ladies, officers' wives, who have asked, was it the same still ; it was forty years ago they were there ; and I was able to say, " Yes, I am sure it is just the same."

The snowy peaks to the west were all rosy in the morning light before we left our camp next morning. We saw the little hut where we had taken shelter under the gables and hurriedly eaten our lunch during a snowstorm. Three and a half months before no stream had been visible, but now a river as big as the Indus at Leh in May was tearing past us with such force and noise we could not hear each other speak at all. There was still snow by the river but nowhere near our path. Everywhere here there was a heavy

undergrowth of some weed which has a flower like Queen of the Meadow ; its smell is somewhat similar too, very sweet but heavy.

A large caravan of over 300 ponies and mules passed up the road on its way to Leh while we were resting. A large Hindu family was with it, women and children all being well mounted on sturdy ponies. We were glad to be off the road while it passed as the dust was considerable.

We rested at midday, and had tiffin under a big pine tree about a mile from Kulan, where we camped for the night. We had planned to cross from the Sind valley to the Lidar. There were good hunting grounds for red bear off the higher waters of the West Lidar and R. wished me to see the Lidar valley. The path to the pass at Khemhar branches off the Sind at Kulan, so we hoped to start next day. The shikari had great arguments with the local coolies that night, who said the pass was not open yet, and they could not be forced to go, and so could demand what rates they liked. They brought us chits from a man who had crossed by an easier route, they said, ten days before. He had been obliged to give them double the usual rate. Our shikari argued that the weather was better now, while they argued that the weather was the same, and this was a more difficult route. At last arrangements were made for 25 men at a little less than double the usual rate, which was almost £10, to take our kit to Pahlgam, a distance of $5\frac{1}{2}$ marches. It seemed a lot at the time, but I didn't think so later when I had seen the pass. The shikari suggested a pony for me for the first stage of seven miles ; after that I must walk as the road beyond was impossible for ponies.

XXVIII.—ZAIWAN. A PERFECT CAMPING GROUND.

July 9th. If we had been trying to find a change from the camping grounds of the last two months we could not have found a more complete one than up at Zaiwan. From Kulan, after crossing the stream, the path, a very rough one, wound up and up. We climbed at least 2,000 feet in the deep shadow of a thick pine forest all the way, then suddenly emerged into sunshine on the comparatively flat grazing ground called Zaiwan, where we camped. The pines were very tall and the forest thick to the north, but there were vistas across the hills above Sonamarg across the valley, and to Haramokh away to the north west.

After settling in to camp we tramped for about three hours to see if there were any marmots in the near neighbourhood but did not even see any holes. There were sheep, and sheep, and sheep, everywhere. A flock of a few hundreds had their temporary home about 500 yards from us. The shepherds and their families cooked their food and slept and ate under a large pine tree. They had no other shelter. We could only get sheep's milk, but it was very rich and very good—the best cream we had since we got yak's milk. The sheep went abroad grazing in the early morning and in the afternoon. During the heat of the day they were herded together

under the trees, and the servants said they ate salt. I certainly saw rock salt lying about. The camp smelt even stronger than on a big sheep farm in Scotland the day before the dipping when the sheep are collected in pens.

Garry watched them, and I had to keep an eye on him. Kelpie was so wearied with chasing wasps that he lay in the tent. I had never been stung by a wasp or a bee in my life, but these wasps were most aggressive; no buzzing about or giving warning; they stung you before you had time to see them. My legs were covered with stings.

The shikari said there were bears near at hand. We met a man who had seen two red bears five days before five miles away, so R. was planning another early morning expedition. Not so long ago I would have wondered at there being so many sheep when bear were about. I did not know that bear are strict vegetarians.

Having had no fresh meat for some time the shikari suggested that we should buy a lamb from the shepherds and it would give the whole camp a change of diet. I sent him off to inquire the price, and he came back and said, "He want three rupees four annas, Memsahib," so I agreed. One doesn't buy a whole lamb for about five shillings every day, even although it was not very large. We had plenty of time to read our *Sunday Observer* and noticed with satisfaction that lamb was $1/10\frac{1}{2}$ a pound in London!

We were reduced by now to our last bar of Sunlight soap. Toilet soap was finished before we left Kargil, where I had hoped to buy some. R. had rather overestimated his requirements in the way of shaving soap and we had two or three sticks in hand. Travellers on the road sometimes exchange superfluous stores. We thought of offering to exchange the shaving soap for toilet soap, but on thinking it over we did not quite like to ask some of the bearded boys we met if they wanted any shaving soap; the inference was too obvious.

We arrived at Zaiwan on a Friday morning. That evening R. got word again that red bear had been seen, so on the Saturday he was out from half past three in the morning until five in the afternoon. They came back tired and disappointed, not having seen any tracks. The shikari said there were so many sheep and shepherd folk about that the bear had to go much higher up the hills to be undisturbed.

I was thoroughly lazy while R. was away that day. I carried a rug and books about fifty yards above the camp and sat under a pine tree where I could get a view of the Sind valley. The dogs were quite content to be lazy too.

If we reached our camping ground after the transport and servants had arrived, we usually found the tents had been pitched looking straight into a wall or facing up a hill, and this time was no exception. We could see nothing but pine trunks from the tents. There were beautiful camping grounds a hundred yards further up, with a magnificent view, and a spring of clear water beside them.

Next day broke cloudy and sultry--such a change from the climate of

Ladakh ; then the rain came down and we were storm-stayed for three days. When the rain ceased the air was so damp, nothing would dry, so there was no chance of being able to move the soaking tents until we had either a strong wind or some sunshine. The cuckoo called all day even in the rain, and we heard wood pigeon too, so took out the gun and went for a stroll in the mist and R. brought one down.

The flowers and green things had such a wonderful smell that morning. The forest was full of plants with dainty leaves like columbine, thalictrum and maidenhair fern. There was white columbine at this level, and the deep purple variety is found higher up. There were tiny yellow pansies all over the open grazing ground, and little purple violets under the trees quite near.

The rain was very depressing. We heard it in the night and knew there was no hope of getting away next morning. I did all possible mending and sorted out the yakdans. We both wrote so many letters that our writing paper was nearly finished.

Milk was very cheap, about twopence a quart, and when meat was scarce we gave the dogs milk, so we used two quarts a day. The cream was so rich we took it off and put it in a lime-juice bottle. In twenty minutes there was such a large lump of butter that it could hardly be coaxed out of the narrow neck of the bottle. After eating tinned butter for three weeks, it tasted specially good. Khansamah played up very well ; with a little help from me in suggesting dishes he managed to give us a good variety with the few stores we had left. These wet days we dined at half past six and went to bed immediately after. We had a brazier brought inside the tent with red charcoal in it as everything, our bedding included, was heavy with damp and we ourselves were not too warm.

Garry caught a mouse in the lunch basket, and that night he snuffed and snuffed and went outside once or twice to investigate. I wondered what he was doing ; he would certainly have given the alarm if any men had been about, but we understood when the shikari told us in the morning that a Barra Singh (a Kashmiri stag) had come to their tent door in the night. Our neighbours the shepherds had moved the day before with their flocks to other pastures. The sheep left the ground quite bare ; they ate even the leaves of the dockens, leaving the stalks bare.

(To be continued.)

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The sensory and motor tracts and centres were not involved nor was there any interference with muscle sense and co-ordination. The diagnostic symptoms and signs of pontine hæmorrhage were absent, i.e., alternated paralyses, ocular palsies, pyrexia and contracted pupils.

The existence of such advanced renal lesions without any interference in the patient's routine Army life is very remarkable. Careful inquiry elicits no history of any acute nephritis or oedema.

Travel.

BEYOND LEH.

A SHOOTING TRIP IN LADAKH, 1926.

Being a Diary kept by

K. W. DICKSON, F.R.G.S.

(Continued from p. 134.)

XXIX.—BELOW THE PASS AT KHEMHAR.

Thursday, 15th July : We woke to find the sun shining on the snows, a perfect morning, the air so clear and balmy after the rain. We dressed hurriedly, with more zest than usual, and got away immediately after breakfast, the two coolies following with the gun and the small rifle, as the shikari said there were lots of marmots on the way to our next camp.

The path was the steepest ascent we had done so far, although not the most difficult, and three days' rain on fallen leaves made it very slippery. We were both shod with grass sandals but even they had no grip of the ground.

No Sahib had crossed by this route this year ; the other route joined our path further on.

Our baggage followed several hours later as the tents had to be pitched in open ground in the sun to dry before they could be carried up.

The shade of the trees was pleasant as we were very warm with the exertion of climbing. Emerging from the forest the view was perfect, great sloping pasture land above us sheltered by a semicircle of snow hills ; and almost directly below—so steep had been our ascent—lay the Sind valley with its white foaming river, little hamlets and walnut trees.

Our track wound downhill for about two miles towards our next resting place, over snow-filled gullies which alone would have made the road impossible for ponies. The snow was so soft that even we had difficulty in crossing, and R. unintentionally tobogganed down one gully.

We left the last of the birches behind and I found all sorts of new flowers ; wild marsh mallows and saxifrage ligulata, and anemones as thick

as daisies on a lawn, where the snow had melted, but nothing green was to be seen.

There were just enough tiny pieces of wood lying about, from last year's fires probably, for us to make a fire and make our coffee. After lunch the coolies were glad to rest, and we started off on a round of the lower hills looking for marmots, but not one did we see.

There was a frozen lake, a clear emerald colour, at the top of the far valley. We crossed over the top of the ridge dividing twin valleys to get back to our camp. From the higher ground we got a glimpse of another partly frozen lake only five or six hundred yards from the camping ground, but hidden by a rise. Here was a natural rock garden, covered with saxifrage in bloom, and abounding with many varieties of rock plants.

Suddenly there was a shrill whistle and we took cover; then R. went forward with the gun and got that marmot. There were many about quite near the lake but they darted into their holes if we made any movement at all. I left R. to continue the hunt and went on to show the shikari where we wanted the tents pitched, and to give the khansamah flour for drop scones for tea. He made them as soon as the fire was kindled, and served them hot, and there were none left over.

The tents were pitched on turf near a stream, but higher up the snow had just melted, and the ground was a dark colour like peat. Grass was just beginning to appear but pale yellow anemones and blue gentian were everywhere; the gentian was a wonderful colour.

The colouring of the landscape was like one of those coloured prints I have seen of the Alps, so clear cut, and the sky so blue.

I loved Ladakh, but there was something very satisfying about this scented air.

XXX.—ZEKWA: IN THE WEST LIDAR VALLEY.

R. spent the following morning from seven until eleven o'clock hunting marmots, but although he saw quite a lot, he got none. The baggage got away about nine, as soon as the tents were dry enough to carry; there had been a heavy dew overnight. To get into the sunshine, I climbed to the top of a ridge and sat on a rock. There was a fine view to the north, and I looked down on the lake. The ice and water were a hard chalky colour against the fresh green of the pasture. I got glimpses of R. across the valley occasionally.

The coolies and servants wandered up a zig-zag path and disappeared over the hill, and then to my astonishment I saw a line of men slowly mounting up what looked like the face of the cliff just above me.

R. came shortly afterwards and we started off for the pass. It was indeed what it looked like, the face of a cliff, but there was a track slanting across some ground between rocks; this was covered with soft snow and was very slippery, the sun being well up. We climbed and climbed, pausing often for breath. The feet of the man ahead of me were on a level with

my face, and yet I could have touched his feet with my hand. Two coolies had been sent to cut steps in the snow further up, and going was easier then. The last part was in a chimney with soft snow filling the middle; we got foothold in mud and rock on one side. It was a fearsome view that we got all the way up, straight down into the frozen lake. At some of the halts for breath we did not dare look down.

It was pleasant to find a small plateau at the top, even although it was covered with several feet of snow. R. took a photograph of us all; the line of coolies, servants and dogs.

The descent was an easy slope, snow for half a mile, and afterwards dark wet ground, where gentian and primula *rosa* grew abundantly. Here I gathered some wild rhubarb quite near where the snow lay.



FIG. 29.—Top of Khemhar Pass, 13,500 feet. Sind Valley to Lidar.

There was a good deal of climbing over boulders before we reached the valley. The pass we had climbed was 13,500 feet, and we had come down about 2,000 feet, we guessed, when we passed several small pools of stagnant water. In India one is always looking for mosquito larvæ, and here they were sure enough even at this altitude.

We had tiffin beside some rocks where the coolies could get a sheltered spot to make a fire. All around the ground was covered with the rose-coloured primulas, and I picked a bunch for our camp table. They have a delicate scent which reminds me of narcissus, but more especially just of spring at home. That is what we miss in India—spring. We jump from our pleasant Punjab cold weather into summer by the middle of March,

and we never smell spring coming as we do at home. In Kashmir there is a real spring.

We camped about four miles down the stream, and decided to stay for a day or two, as there appeared to be lots of marmots.

Next day R. followed up a tributary of the West Lidar, and I spent the morning up the hillside writing letters, with the dogs beside me. I had prepared lunch in the tiffin basket and went off with the tiffin coolie about eleven o'clock up the river where R. had gone. It was a perfect day, blue sky and white snow above and green grass below, and birds singing everywhere.

R. returned in the evening with four marmots. It had been so lovely that I was tempted to take sketching things and spend the day out, so I started next morning after getting R.'s lunch ready and seeing him start back up the valley towards the Khemhar pass. I had just got settled and had sketched in the hills in charcoal, when down came the rain. Quite a big river had to be crossed to get back to camp. The tiffin coolie usually carried me when I was going out, but returning I walked through the stream as I could get dry stockings at once. That day the current was tremendous and the water was well above my knees, and I had to change more than my stockings! It was safer to keep one's eye on the far bank and feel for safe foothold, otherwise the rushing water beneath is apt to make one feel giddy and overbalance.

It rained all that afternoon and all the next day. We emptied our dining tent, storing the yakduns in our bathroom, and let the coolies sleep in the tent. They had been sleeping behind rocks and must have been very cold indeed. The temperature dropped considerably after the rain came. Everything in the tent felt damp and it was difficult to keep warm. I, who had kept perfectly fit through all the cold weather in Ladakh, got a nasty chill, and in spite of an opium pill hardly slept that night.

R. had got only one marmot that day and he was very anxious to get enough to make a rug, so next morning he went off in the rain, but got none. It is very boring sitting in a tent when it rains. I wrote more letters, and had quite a budget ready to post when we got to Pahlgam.

I had breakfast in bed next day and didn't get up until the sun was on the tent, which was about eight o'clock; not really late, but it seemed late for us. I took out the Kashmiri flower book and verified some of the new varieties. I saw the tiny purple anemone first at Zekwas; the hillsides were covered with it.

Two Sahibs passed on the path from Khemhar while I was sitting in the tent; the shikari said they were going to camp further down the river.

XXXI.—LIDARWAT.

July 21st. R. had one more try with the gun before we started for Lidarwat. I kept Garry for company and one tiffin coolie to light a fire and carry the basket. Many families of Kashmiris with ponies, dogs, and

flocks and herds passed up the valley while I waited. A man brought a child which he said was ill and asked me for medicine. It looked very under-nourished and had an enormous head. I told him to bring it to the Sahib later. Then a mother brought a tiny baby which she said was a year old. I understood what was wrong with it and gave her some medicine. I first tried to persuade her to wait for two hours to see the Doctor Sahib, but she pointed to the sky where clouds were gathering and held up the black cloth sling which was all she had to cover the baby.

Many of these wandering folk come from beyond the Pir Punjal, the range which separates Kashmir from India, and I found quite a few of them spoke a little Hindustani, or at least understood it.

R. had shot two marmots, but both had fallen down into their holes and could not be recovered. We crossed the river, the tiffin coolie carrying me, although I forded many streams on foot later in the day. I thought it better not to start out with wet feet, but I had no fear of catching a chill while we were marching; it was sitting in the tent that was so trying.

We had tiffin on the hillside, and then R. went up another valley while I sat and wrote up the diary. Garry meantime burrowed for either field mice or lizards, I don't think he knew which. R. came back sooner than I expected with one marmot, and we started for Lidarwat, a seven mile march. It was the first time we had done an afternoon trek, and we thoroughly enjoyed it, making tea by the riverside, and arriving in camp in time for bath and dinner. It was a lovely march. We had a good many streams to ford, and it was impossible to get across dry, but as we were wearing quilted felt boots and grass shoes we didn't mind. The valley closed in after the first two or three miles but it was always beautiful. Pine forest rising steeply on one side and pasture land on the other. There was still a certain amount of snow in the gullies, and in some places there were snow bridges across the stream, but these were just ready to fall in.

We reached Lidarwat and found our camp just as a heavy storm broke; however it passed over quickly.

The shikari came to our tent after dinner and plans were discussed for the morrow. He had got word that there was a side valley about eight miles away where marmot abounded, so we decided to stay two days at Lidarwat, to give R. what seemed to be a very last chance. We had eleven marmot skins at that time; not quite enough to make a rug. I thought I would go part of the way with R. and see Kolahoi, the Matterhorn of Kashmir. Between that peak and its twin peaks there is a glacier.

We were late in getting to bed and had made no preparations for next day's tiffin, and found at breakfast that the scones were almost finished and there was no cold meat, so we hastily got eggs boiled and divided the scones, which were tiny; R. got two boiled eggs and two scones and a piece of cheese, and I got one egg, one scone, and cheese. There was no time to prepare coffee or fill the thermos. We were away before seven up a winding path through dense pine forest, then open glades with a rushing tumbling dancing river coming down between big rocks on our right.

About four miles up the marmot nullah opened off this valley and this was the parting of our ways. I had taken a pony, thinking I would go only a little way up to see Kolahoi, but having gone so far, I determined to go right up to the glacier if it were possible. We had to ford six streams, and there was so much water that my legs were wet well above the ankles even when riding. I didn't like to tuck them up too far in case I overbalanced and got a ducking.

We passed many encampments of these nomad shepherds, dirty untidy people, very unlike the Ladakhis. Ladakhis may be dirty, but their children are well cared for, and they are not slovenly as these people are. The children, even the tiniest tots, ran out crying, "pice, pice," as I passed. I never carried any money, so they got none. Our khansamah remarked about these gypsy shepherds that they were so dirty it was no wonder they were ill.

There was a fine waterfall about half way up ; a tremendous volume of water coming down. I terrified the tiffin coolie who accompanied me by climbing down a bank of soft shale to get a photograph. He followed me down, and when it came to climbing up, I was glad of his help as the shale was so soft I made no headway until he put his stick horizontally in the ground for me to tread on. Probably he felt very responsible, seeing I was out on my own. He and the pony man stopped to get a drink from a very dirty woman at a turf hut. I sat on a rock and watched a man on the far side of the stream who was carrying a sheep on his back with its legs round his neck. To my surprise he put it in the river and gave it a very thorough bath. Then I saw the women folk further up washing another sheep ; it took two of them to hold it. It seemed a primitive way of doing it after having watched a "dipping" on a big sheep farm at home. I passed a big flock a few minutes later and I counted fourteen very lame sheep and lambs in the rear. The tiffin coolie told me these shepherds get fourpence a head a month for tending sheep, and the same for goats. It sounds very little, but a family may look after as many as two or three hundred, which might bring them in £5. Their food would cost them only threepence or fourpence a day ; their milk supply is unlimited, and they have no rent or taxes !

As we topped a rise a large white tent came into view, a Sahib's camp. It was funny to see a washing hung out to dry in that lonely spot. The tent was much larger than any we had and looked very comfortable.

We were now within a few hundred yards of the base of the mountain, the West Lidar river flowing out of the mouth of the glacier. I began to think that if I climbed up the hillside to the left I would get a much better view in better perspective, so up I went. The pony came as far as possible ; then I dismounted and followed a goat track on foot. It was well worth the climb ! There was a magnificent view of all the peaks with the glacier between them. Kolahoi towered far above the hills around. At first I did not realize the size of the glacier, the lower part was so heaped with

moraine, but I understood when I saw the river coming out of the great mouth beneath it. This mass of moraine filled that part of the valley, and higher up must have been hundreds of feet deep; then came obvious snow all chopped up and standing in pinnacles, and still higher, smooth looking snow with terraces of blue ice glistening in the sunshine. These terraces rose one above another; it was a fine sight. I was very sorry I had not brought a telescope. I took several photographs, trying different size of aperture and exposure for the same view in case the light was too strong. They all seemed to come out equally well when developed later.



FIG. 30.—Kolahoi. The twin peaks, showing the source of the West Lidar river in the glacier.

Then I ate my tiny lunch with a large appetite; I at least had plenty to drink, as a stream rushed down a little gully quite near me, coming from under a bed of snow above, so I did not think there was any risk of the water being contaminated.

A man with a large flock of sheep came up the way we had come. He and the tiffin coolie sat and chatted away below me, the sheep wandering up the hill in long lines. They looked so peaceful and made such a nice picture, I took another photograph of them, but it did not turn out well.

We went down the valley much faster than we came up. I had no watch, but from looking at the sun I surmised it must have been about half past two when I passed the entrance to R.'s nullah. I was far too hungry to wait for him, so went straight back to camp. It was past four when I got there so I had tea at once under a big pine tree, with a dog on each side. I got a great welcome after being away all day.

It did not seem likely that R. would be back for another two hours and he would be both tired and hungry, so I sent the pony back for him with the little thermos filled with tea. He was very glad of both. He brought back four fine marmot skins. Fifteen skins seemed big enough for a rug ; at least, as R. said, big enough to cover one person. He had climbed about a lot amongst rocks and snow and his face was very burnt. He had seen a great number of marmots, but there was so much snow it was often difficult to get near them. While he sat waiting for one to reappear, a tiny grey animal peeped out of a hole and after a few preliminaries, snuffing with its little nose in the air, it gathered courage and went straight to the little paper parcel of lunch which was lying on the rocks. After it had licked all the outside paper and began to tear it with its claws, R. thought it was time to put the lunch in his coat pocket. When he moved to do this, the little beast ran back into its hole, but not for long. It came and sniffed for the lunch packet again and after searching the place where it had been lying, came and licked the tunic pocket, making the cloth quite wet ; then it scratched quite angrily. R. put out a hand and gently stroked its fur, which was longish and soft and downy, and to his surprise it did not run away. Its little feet were like a marmot's, the paws covered with soft fur, but otherwise it did not resemble a marmot at all. The head was too pointed and it was a soft dove-grey colour. It must have been a young stone marten of the Tibetan variety. I had seen a tiny one among the rocks at Chuma-tang, but I only got a momentary glimpse of it.

XXXII.—THE FINAL MARCHES. .

The march to Aru was delightful, through shady glades with the river on our right and high pineclad hills on either side. The turf was so springy and the flowers and the pines smelled so good, it was sheer joy to be on the road. The dogs leaped over each other with pure delight.

It was such a nice pony I had going up to Kolahoi that I asked for it again, although it was such a short march.

We had been going steadily downhill for the last two marches, and R. said at this rate we would soon be below sea-level. Aru, our next halt, was about 9,000 feet, and our plan was to follow the river down as far as Islamabad. There were plenty of sites for camps at Aru, and very attractive ones too. We kept to the edge of a ridge under a clump of pines overlooking the valley towards Pahlgam. We got all the wind that blew, and we needed it, as we felt the heat, coming suddenly from that cold spell at Zekwas.

Aru was such an ideal spot that I was surprised to find no other camp there. It was an open valley, perfect turf, a natural golf course, not too high, with good water and wood in plenty. There was a tiny hamlet where milk and eggs could be bought and it was only one march above Pahlgam.

Our oatmeal had come to an end, but we were enjoying stewed rhubarb and cream, after our eggs for breakfast every morning. I picked some

mushrooms near the camp. I thought they were mushrooms; R. said he didn't know, but the Kashmiri boy said he knew, and had tried them with a two anna bit to see if they turned it black. So we risked it and enjoyed them very much, and suffered no ill-results.

I was loth to leave Aru next morning. It was so pretty and so peaceful. Our route lay through the village, about eight or ten houses roughly made of wood with sloping projecting roofs and verandahs. They were rather like the Dalecarlian houses in Sweden, but not nearly so well built.

Our next stage was to Pahlgam, a beautiful path again, but we were feeling somewhat depressed at getting back to civilization and nearing the end of our trek. It was warm that day. We saw a nice sheltered spot by the river and I had a quick bathe; the water was icy cold, but it was very refreshing.

We saw several men fishing, and then rounding a bend we met Major and Mrs. Scott, whom we used to know in Lahore. They were going fishing a mile or two further up. They were camping with their family at Pahlgam. We could see many tents in the distance as we neared the village; then near the bridge was an ayah and a Sahib's baby; this was indeed a civilized place.

We chose a site for our camp on the ridge across the river, then went straight to the little bazaar, and in quite a spacious shop R. had a small bottle of beer. He had been talking about it for some time past. There we got cigarettes and sweets, sugar almonds were my choice, and also a few necessities, like soap. People who have never had to do without soap cannot appreciate our pleasure at getting a nice big cake of Pears' soap for our baths again.

I asked at the Post Office for a list of visitors to see if there were any people we knew, but we knew none of the names.

It was very hot and sultry, obviously a thunderstorm was not far off. We had done some repacking and had settled down to read the papers I had bought, when we noticed some Indians looking at a site for a camp not 20 yards below us. We thought at first that they were Sahibs' servants, but in half an hour a family of Indians arrived, two men and two women, and then three or four children. If some of the people who talk about fraternity with our Aryan brothers had been in our tent that night, they would undoubtedly have changed their minds. Our stream of drinking water was polluted before our eyes; children squabbled, and men in very easy undress lay on native bedsteads basking in the sun. If we had stayed even one day more at Pahlgam, we should certainly have changed our camping ground. There were several permanent camps quite near, people who stayed for two months, and I felt sorry for young mothers with children having undesirable neighbours like these.

Motor cars passed along the main road while we sat having dinner outside. We had not seen a car since the middle of April, and it seemed strange to see them so near a lonely little place like Aru.

It was still very hot and sultry when we left about seven o'clock next morning. The Kashmiri policeman had come round the night before to put our names on the register, and he told us that the police patrolled the camp twice during the night. We heard them some hours later blowing their whistles, as R. said to warn any thieves that might be about.

My feet soon became very sore walking on this hard motor road after the soft bridle paths of Kashmir and the sandy ways of Ladakh. I had a blistered heel and I could have shaken the shikari for saying we had only six miles to go when the six miles lengthened out into nine. It was extremely hot and sultry and we did not enjoy that march.

We camped on a bit of meadow land above a canal. Here we had lots of mosquitoes and sand flies as well as ordinary house flies. We had no mosquito nets with us, so smeared our faces with cold cream and covered them up as best we could before we went to sleep.

The shikari had got "khubar" (news) from a village the night before that a black bear had been seen in an apricot tree close at hand. So in the evening R. went up the hill to watch the gully where it had come down the previous night but he did not see it. A thunderstorm was passing over and it rained heavily so "Mr. Baloo" probably stayed at home. We waited another day, in spite of mosquitoes, to see if he would come down the following night.

We had a dish of delightful stewed fruit that night; a crimson "black-berry" that grew on the cliffs by the roadside. They tasted more like raspberries, but the bushes had long trailing branches like English blackberries. Whatever they were, they were delicious to eat.

We had a late breakfast and a good slack next morning. One of the servants climbed a tree and got us some wild apricots, which were too sour to eat raw, but were very good when cooked.

My feet had recovered somewhat by afternoon, so before five o'clock we started up the hill, the other side of the gully this time, to look for the bear. It was a steep climb, but not really long. We sat perfectly still on open ground where we could see if anything came over the hill and down the gully. We sat from half past five until past eight o'clock but no bear appeared. I was very disappointed as this was the first time I had gone out with R. after bear, and I had the gun loaded with lethal bullets, and was to have first shot. It was very pleasant sitting in the scented evening air, the level valley stretching away far down to our right. After the thunderstorm there was a great deal of water lying about in the fields, which reflected the evening sky. But after sundown, which was the time we really expected the bear, and nothing happened, I got rather disheartened. It seemed to be our very last chance, only one more night in tents, and then Islamabad and a motor lorry to Srinagar. We unloaded the guns and started for home. It was quite dark when we got back to the camp for dinner. The dogs heard us a long way off and gave us a great welcome.

The servants tried to get us a tonga, a native pony cart, to take us to our next stage about eleven miles away, but we had to be content with two tiny riding ponies which would not even trot, but as I said, I was content to have my feet off the hard high road. It was still very close, the air heavy and hot, and one felt conscious of a very moist skin. We made coffee by the roadside at lunch time but did not feel inclined to eat.

There were beautiful little kingfishers flying about by the canal and I saw one on a willow tree with a fish in its mouth, knocking the fish's head against a branch before swallowing it.

The villages round here looked dreadfully poverty-stricken, and so very dirty. Nature helps the people here so much more than Ladakh that one wonders. The Ladakhi children looked so much cleaner and healthier than any of these children; yet here there is abundance of water for household and crops, rich soil, cheap grain, and walnut and fruit trees in profusion. I suppose a soft climate does not breed a hard-working people, but there must be something in race too. The first neglected children we saw were at Pashgyam above Kargil, where Hindu influence from Kashmir first becomes obvious. Since then we had not seen a clean healthy child, and the women looked so dirty and unattractive.

The valleys were very picturesque with their chalet type of houses made of mud bricks and wood, with a rough thatch of straw. There was a charming spot under willows a little distance from any village where the stream divided, going round several islands. Here we camped on one of the islands. Garry spent most of the day after he arrived in camp chasing frogs. Needless to say he never caught any. He had to be tied up as he got so thin when he was hunting all day.

R. took a photograph of our permanent staff, the seven servants, and one of me with Kelpie in my ordinary marching kit, which was so soon to be discarded.

That night we were attacked by every form of parasite. Fleas were rampant, and mosquitoes were everywhere. We cleared the tent of flies before we went to sleep but it soon filled again, and I even found the special parasite of Ladakh once more in my clothing. We got little sleep and were glad when early tea was brought and we dressed and got out of the tent. Luckily a tonga had been secured and we started off for Islamabad, leaving the baggage to follow on ponies. An empty motor lorry was returning to Srinagar, and we bargained with the man to take us all, servants, dogs and baggage. We were glad a lorry was available as we did not want to waste a night at Islamabad.

We had "elevens" beside the temple at Avantipur. By one o'clock we were at Major and Mrs. Skinner's house near the Sonwar Bagh. R. went on to the Army Agency to return some of the kit, as he thought it better to do this himself. The Kashmiri servants were paid off next day, and all had to get written testimonials.

I found a washing silk frock a very comfortable garment on a hot day after months of shorts and a riding coat.

The next few days were filled to overflowing in spite of the heat. R. had promised that we should have a fortnight's rest before returning to Kasauli, but we had not decided where to spend it. Gulmarg seemed the most suitable place if we could get rooms in a house in a quiet position. A house-boat sounded attractive, but we knew it would be very hot and mosquitoes troublesome. Major Broome suggested that we should go up to Gulmarg and have a look round, but first we had to see the skins and heads which had been entrusted to Salaama the taxidermist. That occupied a whole morning, as his workshop is far down the river. I was most interested to see his store. A large room overlooking a court-yard was



FIG. 31.—Our permanent staff. Jit Ram in the centre.

littered with a great variety of heads and skins. In a corner thousands of fox skins were piled one above another; bear skins were nailed on the walls, and stone martens were hanging from the roof in bundles like rabbit skins, but I saw none so good as those we got in Leh.

He brought us tea while we waited—what they call Lhasa tea, boiled with sugar in it. I thought it safe if we didn't take the milk and I found it most refreshing. The heads were not yet ready, but we arranged to have the marmots made into a motor rug.

XXXIII.—A BEAR.

Mrs. Skinner had lunch made up for us next morning and we started off in the car after breakfast for Gulmarg. It was an easy run. We parked the car and got two ponies to ride up the hill. It was a lovely day and the air was delightfully cool. We had lunch near the gap leading to the natural

basin where Gulmarg lies. We then rode to Mrs. O'Connor's, a boarding house that had been recommended to us, but were disappointed to find that a tent was all she had to offer. We didn't mind tents when we were dressed for camping, but to dress for dinner in a tent in the rains did not appeal to us. Other places we tried with no success before we had tea at the club with Mrs. Renshaw, a friend from Lahore. We both felt inwardly that we were not yet ready for club life. We saw girls walking about the golf course in high heeled shoes, and the people who turned up at the club for tea were, as R. put it, very much togged up.

No; Gulmarg was too fashionable for us, and so we returned to Srinagar; the peaceful life on a house-boat appealed to us more and more. We talked it over with Major Broome at dinner that night, and went with him next morning to look at boats. We decided on one called "Zaffaran"; it was large and airy, well furnished, and had gauze windows which would help to keep out mosquitoes. The caretaker was told to have the boat well cleaned as we would be moving in next day, and we returned to the house with the intention of packing up. The temperature was 95° in the shade, and it was unpleasantly moist.

Major Broome had told us an amusing tale about two young subalterns firing off 49 cartridges at a black bear with no result. The local shikari was very depressed about it, and said that a sahib who could shoot would easily get one. He had heard about the big heads R. got in Ladakh, and had been hanging about the Army Agency in the hope of seeing him and persuading him to go. During lunch this shikari appeared at the house and said there were two bears in a nullah about twelve miles away. R. was quite keen to have a try, and Major Broome was very keen for him to give the shikari a chance. The man's reputation depended on a bear being brought back. So R. went off for his rifle, changed into his old coat, and he and the shikari had started in the car within ten minutes.

He was back in time for dinner, having shot a bear. The place was much further away than he expected, and he had motored for miles across country on a rough bullock cart-track, taking great risks of smashing up the car crossing streams and broken bridges. Then he had miles to walk, but sure enough the shikari spotted a bear in some dense jungle. There was no chance of a shot, so about twenty villagers were collected to drive it out. The drive commenced in the proper way, very quietly, the men gradually converging on the bear. The stillness didn't last long. Soon every man, including the shikari, was yelling himself hoarse, and they hurled great stones into the jungle, getting nearer and nearer. There was now no hope of the bear slowly slinking away as R. hoped would happen, and at last it darted out with a grunt. As the next cover was only a few yards away he had only time to have a snap shot which wounded it badly, and he killed it with a second bullet. All the villagers went mad with delight, and with great shouts and laughter they dragged the body into the open. It was now getting dark so R. hurried back to the car, rather dreading

that awful country road in the dark, but he got back without mishap. The skin arrived next morning. It was a very good one, uncommonly soft and glossy black, and it was sent to the man who was setting up the heads.

XXXIV.—THE HOUSE-BOAT.

Our baggage was put on board the "Zaffaran" and she was moved to the Nasim Bagh on the Dal Lake. We drove round by the road later in the day.

It was a happy fortnight on the house-boat. After so much trekking we were very glad to rest, as we had done nine hundred miles marching. There was plenty to think about and as much as we wanted to do. Unfortunately the temperature hardly dropped although we had frequent thunderstorms. These usually started about four in the morning, and as we slept on deck, we had much ado to get ourselves and our bedding down the little stairway and under cover.

It was a restful routine. Day after day we got up at six o'clock and I went sketching on the lake, getting back for breakfast under the trees. Later we took the dogs out in the shikara, our small boat, and put them overboard in turn. We wore our old shikar clothes on these occasions as sometimes we were nearly as wet as the dogs. In the cool of the evening we rowed far out and I had a swim. The clear waters of the lake, with their beds of lotus lilies, the hills above and the green turf under our feet, made perfect surroundings for our last two weeks.

Pedlars came with their wares in small boats; one boat so full of crockery there was not a square inch of space in it. Beautiful embroidered bedspreads were opened at our feet as we drank tea under the trees.

It was all arcadian and made me feel I was living in a story book. It was so peaceful that in spite of the heat and the myriads of mosquitoes, I was very sorry when our time was up. For four months we had been away from the usual little worries of life and the daily routine with its narrower outlook. These last days had a peculiar charm, but the strings would soon have to be picked up again. Our thoughts were flying ahead to work awaiting us in Kasauli. R.'s happy busy Sundays there with crowds of poor people from near and far distant villages, then long walks with the dogs in the evenings. Looking further ahead, we might even be in London in a year's time, the greatest possible change after the freedom and open air life of India.

This had been the kind of holiday that we and many others had dreamed of, and for us the dream had come true. Some people said they would not call it a holiday at all—it was too much like hard work—but it was a very real recreation to us, and is such even in memory.

Two more nights in Srinagar, and we started on our six hundred mile motor run to Kasauli, the very end of our long long trail.

FINIS.