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PERMANENT WAY THROUGH THE KHYBER

. . . . . And all unseen
Romance brought up the nine-fifteen.
Kipling

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PERMANENT WAY THROUGH THE KHYBER

CHAPTER I

PRELUDE TO ADVENTURE

THE two Lord Sahibs sat silently on the heights above Michi Kandao. Three thousand feet below them the map of the world appeared to be spread out. Behind them lay the Khyber Pass through which they had driven and ridden that day. At that time, a generation ago, the motor car had not yet come to vex this strange land. In front of them the horizon was bounded by the snow-covered Hindu Kush. Between the two watchers and the white ranges lay perhaps two hundred miles of tumbled broken country, unmapped and unexplored. In the middle distance the Kabul River could be seen winding up a long wide valley to Jellalabad and Kabul.

Kabul, the capital of Afghanistan, and beyond Afghanistan, Russia !

Russia ! The Viceroy stirred and turned to his companion.

" Well," he said, " what do you make of it ? "

The Commander-in-Chief did not reply for a minute. His eyes swept round from the peak of Spinat Suka to Bagh and Tor Kham, a magnificent natural amphitheatre on a titanic scale. They were sitting, as it were, in the centre of the grand circle looking down at the

stage whereon one mighty host after another had camped before starting on the great adventure of the conquest of India.

Then he drew a breath and said, "Warburton is right. It's impregnable. I'm no believer in sitting still in a defensive position. But this—it's different. Give me two Army Corps and a railway behind me and I'll defy the whole of Asia, and Europe too. But, of course, it's too good to be true."

"What do you mean?"

"A railway up to this position is impossible! Simply that. You saw yourself the lie of the land this morning. A railway through the Khyber Pass! It's ridiculous. I'm an engineer and I ought to know."

The Viceroy laughed.

"I suppose," he said, "this is where I lean back and drawl, 'My dear fellow, there's no such word as impossible,' while a steely glint comes into my——"

The Commander-in-Chief grinned.

"You've been reading another of Seton Merriman's novels."

"I have. I'll lend it to you. But seriously, do you mean a railway is impossible?"

"Yes, I do. Not only are the engineering difficulties insurmountable, but it would mean a Frontier War to force it on the Tribes. Are you prepared to face a war for such a fanastic purpose? Besides, what would Russia say!"

The Viceroy fell silent again. India impregnable! The invasion bogey laid for ever! The Tribes . . .

The Viceroy stood up and flicked his boots.

"I suppose we ought to be getting back. The Political Agent wants us safely back in Peshawar before dusk. It's a pity." He hesitated. "Impregnable, you say." He looked across to a group of Pathans standing at a respectful distance. "I think I'll have a word with the Maliks." He beckoned to the Political Agent, who strode quickly forward.

"Your Excellency."

"Can I have a word with the Maliks? I want to ask their views on a railway through the Khyber."

The Commander-in-Chief started.

"But it's an impossibility," he repeated. "Why stir them up unnecessarily? This will create a crop of rumours. Russia . . ."

"Please," said the Viceroy.

Six Pathans detached themselves from the rest and strode easily up the slope. Fine, upstanding men, blue-eyed and six feet high, in dignified robes over baggy trousers and embroidered waistcoats. Mohomed Zaman Khan, an unusually handsome man with a long white beard, led them and saluted the Viceroy with easy dignity as from one equal to another.

After an exchange of formal compliments the Viceroy said:

"I would ask you a question as from one friend to another."

"I will answer it as from one friend to another and as from a host to his guest."

The Viceroy chuckled.

"A gentle reminder that we're here on sufferance. No, don't translate that, please. Ask him what he would say if the Government decided to build a railway through the Khyber."

The old Malik listened and his eyes flickered for an instant.

"Tell him," continued the Viceroy, "that a railway would bring peace and contentment, and that the Government desires its people to live in peace."

"We, too, we Pathans desire peace. But peace can be bought at too high a price. A railway would destroy independence."

"Tell him that a railway would end famine in the Khyber and bring Peshawar bazaar prices to Loargi."

The old man shuffled his feet.

"Our young men," he said tactfully, "do not always buy food in Peshawar at bazaar prices," and a rumble

of laughter greeted his jesting allusion to armed raiders in Peshawar city.

"Well, Malik Sahib, what is the answer to my question?"

Malik Mohomed Zaman Khan drew himself up to his full height.

"If the Government desires to build a railway in our lands, let them send an army first to talk the matter over with us. Not only with us but with others over there," and he pointed towards the horizon while an approving growl from his followers backed his words.

For a moment they faced each other. Then the Viceroy said:

"But you have not answered my question. I asked it as from one friend to another."

"Then I will reply as from one friend to another. It is forbidden."

"Wah! Forbidden," echoed the others.

. . . . . .

That evening in Peshawar, the Viceroy, his day's work finished, sat in his chair ruminating over a pipe.

"I wonder," he mused. "Impregnable and only two Army Corps needed." Then he smiled. "Well, perhaps not in my time. Impossible and forbidden, but, all the same, inevitable!"

. . . . . .

And so, as the years went by, those two potent words, impossible and forbidden, blocked the great adventure. Other routes were tried, and one, the Loi Shilman railway, was actually started, but stopped as part of a settlement of outstanding differences with Russia. If only a railway through the Khyber were not impossible, cried the soldiers. If only tribal hostility to the project could be overcome, cried the civilians. Until in the fullness of time came the Great War, the downfall of Russia, the war with Afghanistan, the military occupation of the Khyber and finally the genius of an engineer who in

one brief season destroyed the myth of impossibility, and demonstrated by a masterly survey that there was a chink in Nature's armour, and that a broad-gauge train could just be got to climb to the summit of the Pass and down again. Impregnable India owes something to Lieut.-Colonel G. R. Hearn, R.E.,[1] who directed the Survey, to the Government that backed his project and to the engineers who afterwards translated his vision of genius into hard fact during five years of adventure.

[1] Now Colonel Sir Gordon Hearn.

CHAPTER II

THE ADVENTURE BEGINS

IN November 1920 I arrived in Peshawar, where I had been posted as an Executive Engineer in the Railway Department of the Government of India, for service on the Khyber Railway Construction. The survey for the railway had been completed while I was in England, and the news of my appointment to the Khyber had stirred my imagination. Everyone has heard of the Khyber Pass, and volumes have been written about it, and the hordes which have passed through it to the conquest of India. And now the course of history was to be reversed and the order had gone forth for the Khyber itself to be conquered from India. So I travelled up-country from Bombay with growing excitement and not a little trepidation. I had a wife and children, and a natural dislike to being shot at from behind a rock. The War had destroyed any romantic ideas about that sort of thing.

I arrived in Peshawar on a cold winter's morning and went to get rooms at the hotel close to the station. Two large notices on the verandah were not encouraging. One read, " In case of Burglary ring up No. 743." The other, " In case of Raid ring up No. 492."

It appeared on enquiry that local thieves were active and also that the tribesmen were restive and frequently raided the native City or the British Cantonment in which the hotel stood.

After a few days my wife and daughter aged five joined me, and they settled down in comfortable rooms. We did not set up a house because I found I was posted

to Landi Kotal at the summit of the Khyber Pass, where women were not allowed to live.

Things did not look too promising, and a visit to the Headquarters of the Construction, which was then being organised, deepened my concern. Those were very early days, and I found I was one of the first to join. The office was in charge of W. R. Horn, a senior Executive Engineer, and the best of good fellows. He remained for some time as Personal Assistant to the Chief Engineer, and later retired on a well-earned pension. He was an old friend, and we had a heart-to-heart talk on things in general, in the middle of a cloud of evil-smelling tobacco-smoke emitted by Horn. No one knows where he got his cheroots, but they stank most vilely, and he was never without one in his mouth.

" Hearn has finished the survey," said Horn, " and on paper it looks all right. But the line has been laid down on paper only, and the Lord knows if it's really practicable. You have the upper half of the railway to build, and here are some of the plans of No. 2 Division, that's yours."

I looked at the blue prints on which the contour lines appeared like irregular spiders' webs.

" The thick white line," Horn continued, " is Hearn's centre line of the railway. You'll notice most of the curves are seven degrees. The gauge is, of course, the full broad gauge, so you'll be able to run a through train without change from Landi Kotal to Bombay when the line is finished," he added, as he almost disappeared in a sulphurous cloud.

" Gawd ! " I said, still poring over the plans.

" The geological formation is about as bad as it can be: mostly shale, very unstable and broken. Some of the line is, however, in limestone country, and that will, of course, be a rest cure."

" No doubt," I murmured.

" The tribes are very restive and hostile. You'd better go and see the Political Agent, who is very discouraging about the prospects of starting work. The tribesmen are

a wild crowd, and apparently they've sworn they'll capture and torture any railway officers who dare to start work in their territory." And he described with unprintable clarity the nature of the promised torments. A moment later he emerged from a mephitic fog to conclude: "—and they stand callously round and watch you writhe."

No comment appeared to be called for.

"The climate is not too bad," I was glad to hear. "Below freezing in winter and about one hundred and twenty degrees in the shade in summer, only, of course, there is no shade. There is no real monsoon, but now and again in July or August a terrific storm blows up and the floods are tremendous. Still, people keep very fit, though sand-fly fever is bad in the summer."

This was positively cheering.

"Hearn is at present in England buying plant and machinery. There is lots of tunnelling, as I've no doubt you've already spotted from the plans, and a good deal of plant will be required, though how on earth you're going to work it in that country I can't imagine."

Nor could I.

"I don't know where the labour is to come from. Every Indian is terrified of the name of the Khyber, and the tribesmen themselves won't do a hand's turn of work. However, I've only just arrived here and I don't really understand the situation yet. The Political Agent will be able to tell you all about that."

There seemed to be a good deal to be learnt and pondered over. I said I thought I would take a bundle of plans along, see the Political Agent and then come back for another talk.

"That's the idea, and don't stay out late at night. It isn't safe," said Horn as he vanished finally from view in the acrid fumes of a new cheroot.

Not safe in Peshawar itself, and I was to go out into the Khyber and build a railway! This was evidently going to be a real job of work.

With a fat roll of plans under my arm I returned to the hotel and spread them out on the floor. I should explain that there was already a railway as far as Jamrud, some ten miles beyond Peshawar and not far from the entrance to the dread Khyber. We were to extend this railway right up to the summit at Landi Kotal and down again the other side to the Afghan frontier. The whole length to be constructed was divided into two Divisions, and I was allotted the 2nd Division, which was the more distant half. Later on my Division was gradually increased in length until I finally had charge of the whole construction works, but I did not know that was going to happen when I had my talk with Horn. At present I had only to consider the special problems of my Division.

However, I examined the plans for the whole railway with tremendous interest. I had built railways elsewhere, but never had I tackled anything like this. The line rose from the mouth of the Pass up a steep gradient and by means of a heroic zigzag to a place called Shahgai. The line curved to and fro and at one place actually crossed above itself in its serpentine progress. I began to feel an admiration for the boldness of the scheme, and wished Hearn was there to expound the reasons for certain peculiarities. After Shahgai the steepness of the gradient eased off a bit and there was a stretch of level. Thereafter it rose steadily to the summit at Landi Kotal, where I was to go and live. From Landi Kotal the line dropped sharply through a series of tunnels, and once more effected a great zigzag to Landi Khana and the frontier of Afghanistan.

This bald description of the main features of the railway conveys nothing of the bristling mass of difficulties which I visualised. But I could not visualise them properly yet because I had not even seen the Khyber. A few main points, however, emerged from my preliminary study of the plans. The line was about thirty miles long and contained thirty-four tunnels. The tunnels were not very long. The longest was about one-

third of a mile, but the aggregate length of all the tunnels was three miles. Furthermore, nearly all the tunnels were on a steep gradient and round a sharp curve, so that they were spirals. It was evident that very accurate location in unpleasantly rugged and broken country would be required.

I pushed the plans aside and had a good think about it all. I tried to concentrate on the engineering problems, but the memory of Horn's words about the tribesmen was a disturbing thought.

How could we possibly proceed with implacable tribesmen armed to the teeth barring the way? I thought I had better go and see the Political Agent and get to understand the situation a bit better. So I rang up the Political Agent of the Khyber.

"Yes," said his voice at the end of the telephone, "come and see me now and stay to lunch. We can have a good talk."

A short drive and I found myself shaking hands with my host, and a very charming host too. I began from now to learn the ways of the Frontier.

"I know just nothing about anything," I said. "Can you tell me all about it in words of one syllable?"

I liked him, and I think he liked me, so we began to talk, or rather, he did, lucidly and shrewdly.

He explained that there was a belt of Tribal Territory between Afghanistan and the North-West Frontier Province of India. This Tribal Territory is not part of the British Empire, but lies wholly outside it. But a certain amount of control and a good deal of influence is brought to bear on the tribes through the Political Agent of the Khyber. The whole of the Khyber Pass lies in Tribal Territory.

"So you see," explained my host, "the whole of your railway lies in No Man's Land, where there is no law and order other than tribal custom. It's true that since the Afghan War there has been a brigade of troops quartered in the Khyber, but they don't interfere with the ordinary life of the tribesmen, and you mustn't

expect military escorts for working parties. That would simply mean a Frontier war, and we must avoid that. The troops don't come under my jurisdiction, but I have, of course, a good deal to do in adjusting any matters in dispute between them and the Tribes."

"Who are the Tribes?" I asked.

"Call them Afridis or Pathans except at the far end of the Pass, where they are Shinwaris. You'll be living in Shinwari territory at Landi Kotal. The Shinwaris are weaker than their Pathan neighbours, and consequently more inclined to be friendly with us. They are all undoubtedly Semitic in origin, but no one seems to be able to say who they are or where they come from."

"The lost Ten Tribes?" I ventured.

The Political Agent laughed.

"They turn up everywhere, don't they? I had a pamphlet sent me the other day proving that the Scotch were the lost Ten Tribes."

And so our talk ranged over this fascinating country with its bloodstained history. He set me at my ease as to the alleged terrors of the Khyber.

"Of course," he said, "it's no country for weaklings, and people do get murdered and come to a sticky end. But people get run over in London in large numbers, and I don't suppose the risk is much greater in one place than in the other. Statistics show that bed is the most dangerous place in the world. More people die in their beds than anywhere else. But, seriously, so long as you don't do silly things, you needn't worry."

I enquired what silly things were.

"Well, don't stay out after dusk to begin with. This is an absolute rule. Then don't wander far from the road without an escort. That reminds me, I will tell my people in the Pass to let you have an escort whenever you want one."

"But I thought you said the troops couldn't be expected to supply escorts."

"Nor will they. I'll arrange tribal escort. They'll

be responsible, and you'll be all right. You see, if anything happened to you we should come down on the Tribe."

Old Testament law! Let the offending Tribe be punished! I was beginning to learn things.

"What about language?" I asked. "I speak Hindustani, of course."

"They all talk Pushtu, which is like nothing on earth, but you'll soon pick it up. Lots of them talk Hindustani, so you won't find any difficulty in making yourself understood. By the way, they all use familiar turns of speech in speaking to you such as no down-country Indian would. You mustn't mind that. The Pathan simply and naturally assumes equality with you without any trace of bounce or familiarity. We all like it because the Pathan is really a very fine fellow."

And he entertained me throughout lunch with many tales of Frontier adventure. Through all his talk ran the thread of his obvious liking for the life and the men he dealt with. Later, as the days went by and I saw more of the wonderful men who administer Frontier affairs, I found everywhere this same cheerfulness and liking for the life.

"All the same," he said, "it wears you down. You simply must get away on leave at times. Whether it's the climate or the underlying strain under which we all live, a man cracks up suddenly if he goes on too long. It's no place for weaklings."

Wise words, the truth of which I was to learn. I was already conscious of the strange feeling of strain in the air. A curious feeling as if something might happen at any minute. As if something was just going to happen. I never lost this feeling, and I think most people who have lived and served on the Frontier will understand. I have heard even visitors and tourists speak of it. I hardly know how to describe it. It is as though all Nature were watching and waiting for something. It is not only the long slow regard of the tribesmen, but the very hills themselves that possess this mysterious

quality. However, at present I was merely a green newcomer with orders to start building a railway. Technically that presented no great difficulty, but there must of course be labour, both skilled and unskilled, otherwise one was helpless. I spoke of this to the Political Agent.

"Yes, I can help you there," he said, "we must devise some means of using tribal labour. But I don't know if it will be sufficient for you. How many men do you want?"

I thought about twenty thousand.

"H'm, I doubt if there is anything like that number available. And I don't think you can possibly import unskilled labour. If the tribes objected they'd raid your labour camps, kill a few men, and next morning you'd find your coolies missing. Even if you could induce down-country coolies to come here—— No, the solution lies in inducing the tribesmen to work, though how we can do this in their present state of unrest and hostility to the whole project, I don't know."

I enquired about skilled labour, masons, carpenters, bricklayers and the like.

"The tribesmen are absolutely no use at any skilled trade. They don't practise any except in a very rudimentary fashion. But they are sensible blokes. If they can be got to agree to the idea of a railway, they won't object to your importing skilled workers, and I'm sure I could arrange for protection."

And so we parted. Afterwards, of course, I saw a great deal of the Political Agent, and leant very heavily upon him for help. It was a matter for great personal regret when he was promoted to the Kabul Legation, but, of course, every one rejoiced at his advancement. There were a good many holders of the very important post of the Political Agent to the Khyber in my time, and I found them all most helpful and extremely able men. I fear I must have been a sore trial to them at times. A plain, blunt engineer with a single objective must have been rather intractable sometimes.

I returned to the hotel for another good long think. Here was a strange problem, I thought. Tribal Territory was a phrase which now took on a more definite and rather alarming meaning. I understood now that Tribal Territory was a sort of buffer state between British India and Afghanistan. The buffer was some thirty miles thick in the neighbourhood of the Khyber. But could this disorderly region occupied by fierce mountaineers, jealous of their independence, be called a State? Obviously not, for all the tales I heard were of this tribe and that at enmity with each other, and seamed internally with blood feuds. I could understand vaguely that the Political Agent exercised some influence from our side on these lawless men, but then could not influence also be exerted from the Afghan side? I began to understand something of the witches' cauldron of intrigue which was merrily bubbling in this buffer state. And it was into the middle of this that I was expected to plunge and start building a railway!

Back to Horn again.

"People seem fearfully muddled between Hearn, Chief Engineer, who has not yet arrived, and Horn, his personal assistant, who is already here. What are you going to do about it?"

Looming faintly through the haze, Horn couldn't suggest anything.

"To make matters worse, I'm W. R. and he's G. R. People must remember that Hearn with five letters to his name is more important than Horn with only four," he puffed at me.

"I want a car, please. I see Hearn's buying a lot of motor transport, but that won't be here for six months, I suppose. Meanwhile, I want to explore the Pass and start getting my Divisional Staff together."

"That's all right," said Horn. "I've arranged with the Army people here to let us have motor transport on demand. I'll fix it up for you."

"I'll have a look at Hearn's centre line," I said.

"I don't think you'll find it. The tribesmen obliter-

ated all survey marks as soon as the survey parties finished. Still, I wish you luck."

Always this talk of difficulties with the tribesmen !

So next day I started out in a battered war-time Ford for my first view of the Khyber. One thing and another had delayed me, and I had no time for more than a run of a few miles up the Pass and back—" Don't be out after dusk. That's an absolute rule."

Peshawar Cantonment in which the English population lives is quite distinct from Peshawar City. The City is a picturesque Oriental town surrounded by high walls, pierced at a few places by massive gates which are closed at night. Its inhabitants are a hotch-potch of the villainy of all Asia, and it is probably the wickedest city on earth. When things are quiet it can be visited in daylight, but there are many occasions on which it is closed on account of some turmoil and devilment within. The Cantonment lies entirely outside and separate from the City, and it would be difficult to imagine a greater contrast than that between the two. This English settlement is well watered, and the bungalows all have large gardens round them. The roads, too, are wide with strips of garden along both sides. Trees are abundant, and there is electric light and a good water supply everywhere. There are troops there and a fair number of civilians, as Peshawar is the capital of the North-West Frontier Province. There is no wall round the Cantonment as in the case of the native City, but it is surrounded by a barbed wire entanglement, which is fairly effective in keeping out raiders.

It was from this pleasant place that I set out full of curiosity to see what the famous Khyber Pass looked like.

The road, after passing through the barbed wire entanglement, made for the hills in a straight line over a stony plain. The air was crystal clear, and the hills stood out in a bold rampart some ten miles away. Now and again other cars passed us, and some of these were native-owned lorries fitted up to carry passengers. For

already the idea of motor-bus services up the Khyber Pass had caught on, and they were driving a roaring trade. It all looked very peaceful in the bright winter sunshine. Here and there a stony patch of soil was being cultivated. Then I noticed that every one was armed, usually with a rifle, and the feeling of peacefulness vanished.

Now the hills began to look much bigger as we approached them. Range became visible behind range. No comfortable grass-covered downs there, but barren, spiky, cruel ranges, looking as if they were only half created. Fantastic shapes caught the eye and there was no restful ease anywhere. The road began to undulate gently and then more steeply, and I had the fancy that the hills were the waves of a great storm which caused a ground-swell in the plains nearby. An abrupt opening in the face of the range became visible.

The driver pointed, "The Khyber, Sahib."

So this was where the railway was to penetrate the hills. Through the V-shaped opening a mile or so away could be seen a tumble of ridges with a blockhouse perched on top. I was to become familiar with this feature of the Khyber. Everywhere a tumble of rocky ridges and a blockhouse standing up, watching, waiting.

I chatted with the driver, a Sikh. He was not bothered with imagination, and laughed when I asked if he liked the Khyber.

"In the Army one place is like another. A man goes where the Sirkar orders."

And he addressed himself to the immediate problem of keeping the battered Ford going.

So we clattered echoing through the gap, the very jaws of the Pass, and I immediately noticed a curious illusion wrought by the clarity of the air. This clearness needs to be seen to be believed. There is absolutely no impression of distance due to haze, because there is no haze. The result is that the finer points of perspective are missing, and each range looks almost as if it were a painted piece of scenery. This illusion is heightened by

the rapid movement of the car. The relative positions of the ridges are of course constantly changing as the car travels and the appearance is that of invisible scene-shifters on a gigantic stage moving their painted scenery backward and forward.

This had the oddest effect. The road would appear to be barred in front and to be nearing a cul-de-sac. At the last moment the scene-shifter would slide the barrier to one side and we passed by. Similarly, if you looked back, a ridge slid silently across and barred the way. If you didn't look you knew the way was being barred all the same.

The highest peaks and ranges, having no background but the blue sky, did not join in this curious shifting and movement of the lower ridges. They just stood up motionless. Perhaps it was this that produced that uncomfortable sensation that they were watching, waiting. This was evidently no ordinary country.

A strong wind was blowing in the Pass. I tried to unroll some of the plans and identify the centre line of the railway, but it was hopeless. The Pass rose steeply, and I could see the road zig-zagging ahead, and it was obvious that no railway could go straight up but must perforce diverge widely to one side or another. "Development" we engineers call that sort of thing with our professional love of jargon, but it simply means zig-zagging on a large scale with easier curves than are possible on a road. I looked left and right from where we had stopped in the vain attempt to identify some landmark in this irregular tangle of ridges and valleys and shrugged my shoulders. "Don't go far from the road without an escort" came into my mind. The sun was sloping towards the west and "Don't stay out after dusk" was an absolute rule. The driver, too, was looking uneasily round and evidently making up his mind to suggest departure. So we drove back to Peshawar.

I was a bit thoughtful on the way back. I wanted to see with my own eyes, on the ground, the actual route of the railway as predicted by Hearn on his survey

sheets. A line drawn on paper was all very well, but it was a bit theoretical, and the actual line must be studied in relation to the actual topography. The problem of mere access alone was obviously going to be a serious one, and roads, paths, water supply and perhaps hoists or cable ways would clearly be necessary. Besides, I was a bit sceptical about Hearn's line, and thought that considerable deviation from it might be necessary. I did not know then with what uncanny ability it had been laid down, and how the faults and upheavals in the strata had themselves been used with unerring skill to enable the railway to scale the heights I had just seen.

The first step was therefore clear. I must get the centre line actually marked on the ground. A white-washed line, a line of stones roughly placed, a shallow trench—any or all of these would do. A survey party could rapidly pick up the line, and we must get some tribesmen to work actually marking it on the ground. Then we should be able to visualise matters a bit better.

Besides, I wanted to set a mark on those hills. I did not like the way they slid to and fro and got behind one. There is something comfortably solid and matter-of-fact about a railway, and even such a little thing as marking the centre line would show those hills that we meant business. After all, this feeling about those hills was all nonsense—or wasn't it, and were they faintly hostile ? All nonsense, of course, and Nature was just indifferent. She would play the game according to her rules, conceding no advantage and overlooking no fault. That was what an engineer had to expect. But was Nature in this strange country just ordinary Nature, or what ? A vague uneasiness came over me, the need for watchfulness. That was it ! If those hills could watch and wait, so could I.

This would never do. I felt a need for old Horn and his vile cheroots and comforting talk about argillaceous shale, schistose rock, quartzite, igneous intrusions, re-

sidual clay and other lovely words. They made me feel that we were putting those hills in their place. After all, a ridge made of argillaceous shale is just a ridge made of stuff which looks like very badly-made slate. Very badly made indeed—one might almost say only half created.

"Bosh," said Horn, "it hasn't been properly compressed, otherwise it *would* be slate, that's all. But it's rotten stuff to work in. One thing about it is that it's bone dry. Wet shale is the worst material an engineer can possibly encounter. You can see by looking at the hills that you won't meet with much water."

Horn agreed that it was desirable to locate Hearn's line on the ground, but he said we must get the Political Agent's permission first. It seemed that Horn had agreed very properly not to start any works without his agreement. Horn was not sanguine, however.

"We can't do much till Hearn arrives," he said, "and that won't be for some months. The Political Agent probably won't agree to any sort of a start being made, and anyway the tribesmen will obliterate your demarkation as fast as you make it."

"But," I expostulated, "our orders are to get on with the job. There's a lot can be done before Hearn and the plant arrives. I suppose funds have been allotted?"

"Oh, yes, plenty of funds, and if you can get a move on, so much the better."

. . . . . .

Everywhere this opposition to getting a move on! This was evidently going to be a man's job. The engineering difficulties looked formidable enough, but after all heaps of mountain railways had been constructed, and there was no need to make a song and dance about that. Engineering is just organised common sense with no mystery or marvel about it. If a way has to be found from A to B, and there is a rocky ridge in between, an engineer must go over, under, through

or round it, and that is all there is to it. But the Tribes —ah ! that's a new problem. The situation began to clarify. It all turned on the temper of the Tribes. Could they be got to work ? If they couldn't, well, that would be awkward. If they could, well, things would be easier then. Just an ordinary mountain railway to be built, and anyway the shale was dry. (How the hills must have chuckled when they heard us say that !) So my thoughts ranged over the problems.

And then, of course, the obvious thing to do emerged. I should have to work with the Tribes anyway, so the sooner I got to know them the better. No good sitting still and waiting for somebody else to provide me with gangs of nice, orderly tribesmen who would do exactly what they were told. The key to the situation was the attitude of the Tribes. And it would remain the key to the situation throughout the work. No good getting the work half done and then having a rumpus with the Tribes. But what manner of men were they ? Suppose they simply flatly refused to have anything to do with the railway ? Or, dreadful thought, suppose I went a bit too far and fell into the hands of some hostile tribe. And suppose they were really such fiends as they were reported to be and tortured me. The idea chilled my blood, and I shook my head dolefully in perplexed impatience. Still, it was obvious that I must get to know these redoubtable folk, and see whether they were really so intractable. Besides, the only way of starting a job is to start it. This simple truth is so easily obscured. I resolved to go and see someone of importance among the tribesmen, and with this resolve my mood of impatience subsided. Friendly relations between the tribesmen and the railway staff—that was to be the clue to the puzzle.

CHAPTER III

SPYING OUT THE LAND

I BEGAN to feel less like a new boy in the course of the next week or two. Further visits to the Khyber improved my knowledge of the land. I began to grow familiar with the twists and turns of the road, and with the outstanding landmarks of the Khyber. The demarkation of the centre line of the railway was started, and helped to define my knowledge of the topography. The line was, of course, never very far from the road, but quite a short journey among those jagged ridges and *nullahs* was enough to pass from reasonable security on the road to considerable insecurity in some desolate valley. However, I was well escorted on such expeditions by tribesmen, and the feeling of danger soon wore off.

The war with Afghanistan was not long over, and the military occupation of the Khyber was still in force. The troops were, however, concentrated at a few points, and there were only a few of them. They were doubtless a salutary reminder to the tribesmen of the power of the British Raj, but they did not interfere in the ordinary life of the local inhabitants. At the end of the Great War I thought I had finished with the Army, but here I seemed to be getting back into an atmosphere of chits, rations, working-parties, convoys and the like, from which I instinctively revolted. Was I not now a civilian, and no longer a temporary soldier ? I made up my mind that the first work on the Khyber Railway should be a monument to peace whatever the Government of India Railway Construction Code might say.

The Khyber has often been described, and I suppose

most people picture it as a more or less straight valley running through the hills. This is quite the wrong idea. There is first of all an easy stretch of flat stony plain between Peshawar and the entry to the Pass. About a couple of miles before reaching the entry stands Jamrud, a mud-walled fort surrounded by hutments for troops and all the dismal paraphernalia of a military camp.

Looking from Jamrud toward the hills, there is a forbidding-looking rampart of barren mountains some two miles distant. The effect is very fine, but very threatening. There is no sign of habitation anywhere on the hills which stand stark and grim under the brilliant winter sunshine. They are yellowish brown in colour, and they are sparsely dotted here and there with little scrubby bushes clinging precariously to life. The road passes through Jamrud and then the car begins to labour uphill, for the road undulates and presently runs through a steep valley into the hills, which close in at once on all sides. This valley is short and steep, and the road almost at once begins to rise in an endless series of curves and loops to Shahgai ridge ; then it follows an easier stretch, along the ridge more or less, to Ali Masjid, where the way seems to be completely barred by a massive range. But the road has now left shale country and reached blue limestone. Limestone is soluble in water in a few million years, so in limestone country there are always cracks, fissures, caverns, and, if there is a big enough stream, a gorge. So here at Ali Masjid is a magnificent gorge, though the stream is now nearly dry except once or twice a year during a storm. Perhaps there was once a different climate, and these bare, forbidding hills stood clothed in green woods and pastures under a generous rainfall. I doubt it, but anyway the gorge is there and the Sappers have made excellent roads through it along which the battered Ford clattered cheerfully. This narrow rift in the hills was evidently going to be a difficult problem, and with the contour lines on Hearn's plan crowding together, it was difficult

to spot his intentions at first sight. I noted, however, his wise decision to keep the line high up because this gorge would clearly be a death-trap in a high flood. The stream which flows through the gorge has its source near Landi Kotal at the summit of the Pass and, after emerging from the gorge, the road follows the main valley of the stream which begins to open out till it is half a mile wide or more in places. Reference to the plans showed that in this valley we were rising up a gradient of 1 in 50 on an average. A " two per cent gradient " we call that, meaning two feet rise in every hundred feet travelled, which is the same thing as 1 in 50. Cultivated fields came into view, and among them Afridi villages. Here and there inhabitants were to be seen, all armed with rifles.

The word " village " in this connection is a misnomer. The villages were undoubtedly the dwelling-places of little communities, but in fact they were simply forts. Each village is built on the same pattern—a high square mud wall without window or loophole, except sometimes embrasures along the top. At one corner there is a mud tower having a primitive gallery running round it, with a loopholed place on top for a rifleman. The appearance of the tower is that of a crazily-built lighthouse. The colour of the whole is yellow ochre with horizontal streaks in it, produced by the method of building up the mud in rough courses. Entry is through a strong metal-studded doorway tunnelling through the wall. I daresay it sounds odd to speak of mud walls, and that this may give an impression that the forts are ramshackle shanties. But this is not so because the sun-dried clay, which the builders use, is baked hard by the sun. They do not make bricks, but build up the walls by dumping one bolus of clay after another into position. The walls are built up very quickly in this manner, and in a few days the dry air and the sun have combined to weld the whole into a solid and substantial mass.

On my first visit I looked with considerable interest

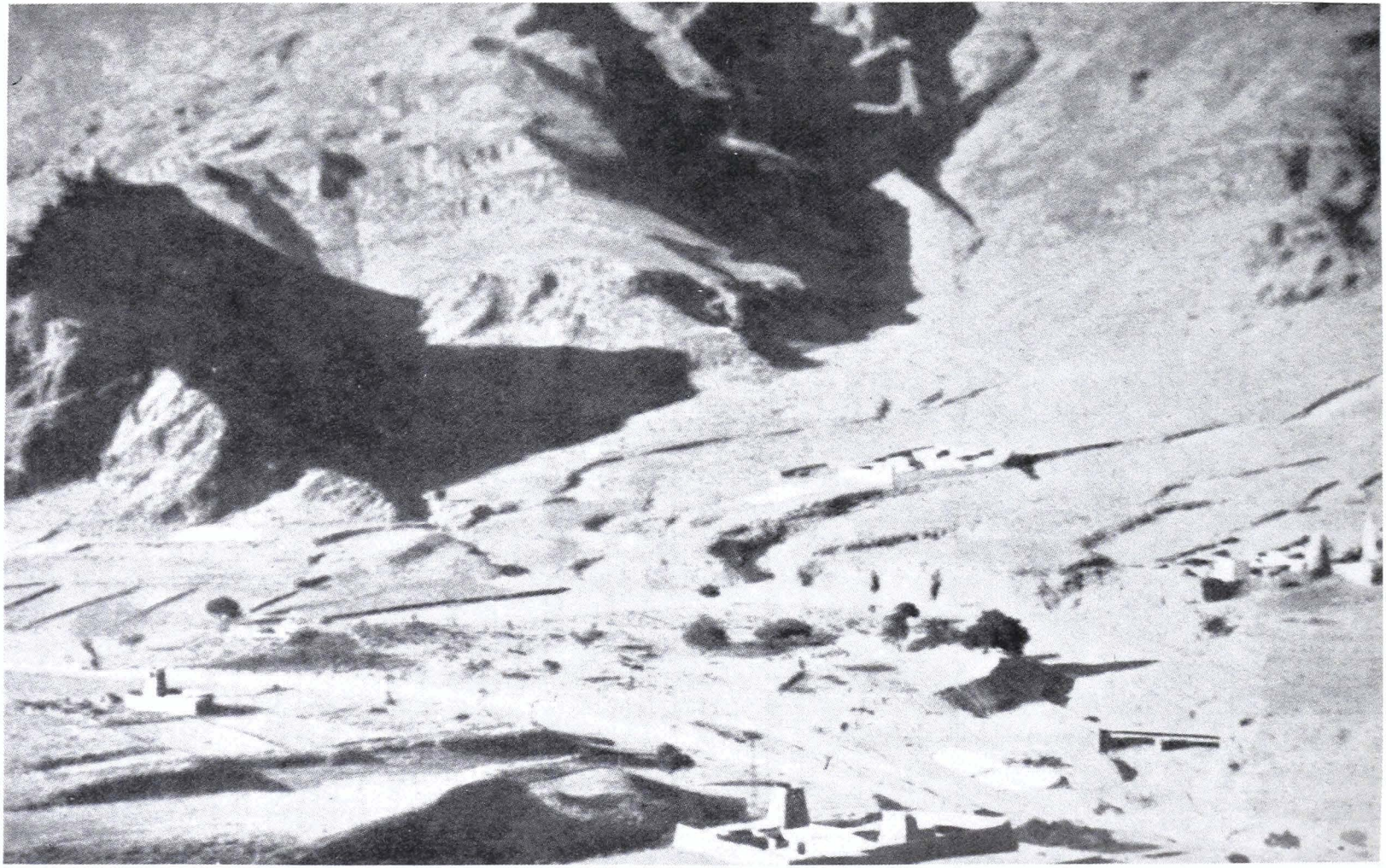
and no little curiosity at these strange structures. So far on the road from Jamrud up to Shahgai and through the Ali Masjid gorge there had been little or no sign of inhabitants. A solitary blockhouse here and there merely served to accentuate the desolate loneliness of the land. But here at last were the dwellings of the dreaded tribesmen, and the sinister appearance of their little villages, with blank, windowless walls, seemed to confirm all I had heard about their savage character. The tribesmen here belonged to a section of the Zakka Khel called the Sultan Khel. "Khel" means clan, and I had learnt that the Zakka Khel were a powerful and influential clan, and were largely responsible for the opposition to the construction of the railway. It seemed desirable to get to know the Zakka Khel.

About half an hour's run further brings the road to Landi Kotal. This is no longer in Zakka Khel but in Shinwari territory. The Shinwaris were supposed to be friendly. I wondered whether it would be better to tackle the Shinwaris first or to go straight for the tougher Zakka Khel. Landi Kotal is the summit of the Khyber Pass, and a place of some importance. There is a large fort and a serai, where the caravan halts for the night. A group of Shinwari villages contains perhaps a thousand inhabitants and makes Loargi, as they call it, almost a populous neighbourhood.

From Landi Kotal the road begins to fall sharply down a narrow rift, and it winds to and fro round many convolutions to Michni Kandao. Here there is a stupendous view as the country now falls away sharply. An immense stretch of Afghanistan is visible, and range upon range of mountains can be seen culminating in a mighty chain of snow-covered peaks. The Kabul river lies far below, winding over a broad plain for many miles.

From here the road twists steeply down to Landi Khana, a thousand feet lower, and the metalled road ends there. The Pass continues onward with only a caravan track to the Frontier of Afghanistan some two

THE ENTRANCE TO THE KHYBER PASS



AFRIDI VILLAGES IN THE MAIN KHYBER VALLEY

miles from Landi Khana, whence the outward-bound traveller passes beyond the sphere of British influence into Asia. A solitary blockhouse perched on a rocky ridge and a short, barbed-wire fence marked the boundary.

Thus the Khyber Pass has four stages. First, the steep rise from Jamrud to Shahgai, then a fairly level stretch along the Shahgai ridge and through the Ali Masjid gorge. Next the long but easy ascent of the main Khyber valley to the summit at Landi Kotal, followed by the steep drop from Landi Kotal to Landi Khana and the Afghan Frontier.

At Landi Kotal there is a Brigade of troops. The Brigadier had his headquarters in the fort, and I made a formal call. The Brigadier was kindly and helpful. A headquarters of a Railway Division at Landi Kotal ? That meant a lot of civilians living inside the barbed-wire perimeter, and they would have to conform to his orders when in camp. Over lunch in his mess we had a useful talk. The Brigade Major thought an area might be allotted to me at such and such a place. The Staff Captain came and showed it to me. We parted with salutations of mutual esteem.

I looked over my future home with some curiosity. The fort looked all right, but the camp was frankly hideous. I don't know why armies and ugliness go together. If the Army chooses it can show the world the way to splendid pageantry, but if the Sappers are instructed to put up a camp or cantonment or a barracks, a ghastly conglomeration of shanties will arise. They will proudly assert that the structures are put up for pure utility. But there is no conflict between utility and beauty. Every real engineer knows that.

In the midst of the distractions of a military camp it was difficult to assess the value of one's surroundings. There were the everlasting hills, barren and forbidding, and a ring of blockhouses on commanding points surrounding the camp. I was told the camp was often sniped at night, and that even now hawk-eyed tribesmen

were concealed somewhere on those ridges watching, waiting for nightfall. I had a useful talk with the Staff Captain, who was an old friend.

" It's not really a bad spot," he said, " though it looks pretty awful at first sight. It might be worse."

This was very English, I thought. When the Englishman turns up in the next world and gazes round at the fiery landscape, he will shrug his shoulders and say it might be worse.

" There isn't much doing in the evenings, and we are too small a community to form a club. Still, we are a cheery lot, and I expect you'll shake down all right."

I enquired about food.

" Everything comes up from Peshawar except eggs, which the Shinwaris sell to us. We had better arrange for you and your people to draw rations on payment for the present. The food is pretty awful sometimes, but we get all the usual comforts of civilisation such as bread, milk and potatoes. The meat is a bit tough. But things will improve, as we've had quite a number of applications from Indian shopkeepers to open a bazaar here."

" How about games ? "

" The troops, of course, get hockey and soccer, and I hope you'll have a civilian team to knock spots out of us. There are a few very bad tennis courts, but there's a good one inside the fort, and I expect the Brigadier will invite you to play there sometimes. We *have* played cricket too, on a strip of matting on the parade ground, but it's a murderous game as the ground is stony and fast balls sometimes get up a bit."

The Staff Captain chuckled reminiscently.

" The Tribes couldn't make out what we were doing during our last match. I suppose they thought we were up to some new devilment, for all of a sudden some snipers opened fire, and you should have seen the two teams take cover. They had to leg it like hell across the parade ground under a running fire. Every one was in fits. By the way, are you keen on shooting ? "

"Not very."

"That's just as well. There's absolutely nothing in these hills except chikor, and precious few of them. They run along the ground like rabbits before getting up as a rule. Unless you take a small army of beaters, it's jolly hard work, and not much fun."

"I suppose the tribesmen make it difficult to arrange for a shoot."

"Well, it's just as well to have pickets out unless you can arrange with the Political Agent for the tribe to be responsible."

"It doesn't sound worth it."

"No, I don't think it is. I suppose you'll be seeing a lot of the local gentry?"

"I expect so. What are they like?"

"Oh, I don't know," he replied vaguely. "Never see anything of them except at a distance. Pretty poisonous blighters, I should think. Well, you'd better be off if you're going to reach Peshawar before dark. See you later. Let me know if I can do anything when you come and live here. Cheerio."

After the visit to Landi Kotal, things began to take shape. A young Sapper officer who had been working under Hearn on the Survey was attached to me, and some Indian subordinates were also immediately available. They set to work to erect huts and officers' quarters at Landi Kotal, and an attractive little settlement with a garden and a recreation room arose. Remembering my vow to erect a monument to peace as a first work, we put a good old-fashioned English dovecot standing on one leg in the middle of the garden.

No relaxation in the tribal attitude being apparent, I decided that the time had come to get into touch with them direct, as it seemed useless to go on waiting for something to turn up. I did not know much about them yet, but I had heard a good deal and tried to sort out useful facts from a mass of information and gossip. A certain Sher Ali Khan of the formidable Zakka Khel was mentioned as a stout old ruffian, who had served in the

Indian Army, spoke Hindustani well, and might not be found unreasonable. I decided therefore to take my courage in both hands and pay him a visit. So the battered Ford was requisitioned again and we clattered up the Pass through Jamrud, Shahgai and Ali Masjid to a group of Zakka Khel villages not far from the road. On enquiry from a Pathan, Sher Ali Khan's village was pointed out. A few other Pathans joined us and seemed friendly enough, though obviously curious to know who I was. Was I a Political Officer? No. In the Army? No, though I had been an officer in the War. In what regiment? Royal Engineers. Oh, then perhaps I was a Military Works Officer? No. Conversing in this manner we reached Sher Ali's village, some twenty or thirty rough-looking Pathans now accompanying us. I wondered if I had done something silly. A sudden misgiving assailed me, and I looked at the cruel and ruthless faces of my informal escort. I had put myself in their hands and was going to a lonely village with them. Was this a bold move or merely a foolhardy action? My horror of being tortured revived. I looked again at my companions. They seemed quite friendly, but what was that Horn had said? They stand round and watch you writhe. I could well believe it.

"This way, sahib, this is Sher Ali Khan's village."

It was, of course, just like the rest. The bare mud walls stood up to a height of some twenty feet, unpierced by any window. The gate was shut and barred, and there was no sign of life save in the tower, where there was an armed sentry. After a short delay the door was unbarred and I said I wished to see Sher Ali Khan, giving him his former rank in the Indian Army of Subehdar. A short, squarely-built man, elderly, but full of vigour, came forward and shook hands. I handed him my revolver in token of being his guest and of placing myself under his protection. He took it with a grin and handed it to someone and I entered. The door was shut and barred.

Sher Ali Khan fussed hospitably round. A string bed

called a *charpoy* was brought out and cushions and rugs were put on it. We sat on a verandah facing inwards to a courtyard out of which various doors opened and quite a crowd collected in the courtyard. The verandah was raised a little above the yard, and it felt as if I and the Subehdar and a few others were on the platform at a public meeting. We chatted politely, discovered mutual acquaintances in Indian Army officers, discussed the crop prospects, the difficulty of getting good shooting, and all the while the crowd waited patiently, watching us with the long slow regard of the tribesman. They were all armed.

Sher Ali Khan displayed the same polite curiosity as to my identity as had my guide outside. Bayley Sahib ? He did not remember anyone of that name. Had my father served in India ? No, but my son was going into the Army, and perhaps he would come to India. He nodded. It was good to have sons. Had I any other children ? Yes, a daughter. Ah, that was not so good. So the polite cross-examination proceeded till at last he asked with a laugh what service he could render—in other words, who was I, and why had I come to see him ? An approving murmur ran round the assembly. They, too, wanted to know.

I drew a breath. Now or never.

" Well, Subehdar Sahib, I am a railway officer, and I have come to the Khyber to build a railway through it as ordered by the Sirkar."

A dead silence.

Then, frowning and with all his amiability gone, Sher Ali Khan said:

" What folly is this ? A railway through *our* lands ! "

There was a menacing growl from the crowd. I sat impassively on my *charpoy*. I was learning my first lesson in dealing with tribesmen. I knew somehow that if I showed the least sign of weakness or irresolution the whole pack would be on me. It was just common sense, so I sat quietly and waited.

Presently Sher Ali said, " Sahib, you are my guest

and I thought also my friend, but this talk of a railway is no talk of a friend, but of an enemy."

"Of a friend, I think, Subehdar Sahib."

He stood up angry and shouting.

"Whether it is the talk of a friend or an enemy matters nothing. It is forbidden."

And they all sprang up, brandishing rifles and shouting, "Forbidden! Forbidden!"

Things didn't look at all nice. I sat still and looked as grim as I could. The shouting began to die down, and I managed to say to my host:

"Shall we have a talk about the advantages of a railway to you all?"

The Pathan loves a debate just as much as an Anglo-Saxon. As I seemed unmoved and ready to talk, Sher Ali shouted to his men to be quiet, and after much grumbling and with an occasional recrudescence of noise in which the word "Forbidden" was repeated again and again, the tumult died down and I was asked to repeat my remark.

"There are no advantages," was the angry reply.

"Oh, yes, there are. Lots of them."

"For instance?"

I talked about ease of communication, cheapening of foodstuffs and all the rest. The Pathan is no fool. Sher Ali translated my words into Pushtu. They listened, and I daresay agreed in theory. But the threat to their independence overruled everything else and the babel arose again. I could not yet follow the rough Pushtu properly, but the general sentiment of the assembly was obvious.

Some imp of mischief prompted me. Or my guardian angel perhaps whispered a word to the imp.

"There is one great advantage which I have not yet mentioned," I said.

"We have heard enough of these advantages. With railway trains rushing in and out of our villages, we shall be destroyed."

"But, Subehdar Sahib, this will be no ordinary rail-

way. The gradient will be steep and the trains will travel slowly. They will be carrying rich merchandise and will pass close to your doors. The Sultan Khel are notorious robbers and raiders. Think of the opportunities for looting the trains," and I grinned at them.

My host stared at me in astonishment for a moment. Then he lay back and laughed. He translated into Pushtu and wiped his eyes. The tribesmen broke into a roar. "Build the railway and loot the trains," I heard repeated on all sides.

The feeble joke the imp had suggested seemed to be having an effect out of all proportion to its merits. Sher Ali Khan was talking rapidly in Pushtu and a genial jabber arose, quite different from the menacing growls I had been hearing.

Refreshments appeared, cakes, hard-boiled eggs, fruit and delicious tea of an unknown fragrance made in a samovar and served in Russian china bowls. I found my host chatting to me amicably with others joining in. The change in atmosphere was astonishing.

Presently I said I must go and my host said he would send some of his men to escort me to the road. At the door he handed back my revolver, and gave me the graceful Pushtu form of farewell, then, "Build the railway quickly, Sahib, so that we may loot the trains," followed by a shout of laughter; and I departed amid every gesture of goodwill.

I pondered all these things deeply. A further lesson had been learnt, that these hairy men were human beings with a boyish sense of humour. Later I learnt how the Pathan loves a joke and, if it has a rough Rabelaisian flavour, so much the better. I wasn't so stupid, however, as to imagine that my first encounter with the tribesmen was going to solve the whole tribal difficulty, but it did have an effect. They often told me afterwards of the impression that visit had made, and my little joke about looting the trains became a sort of catchword throughout the work, which never failed to cause a chuckle.

Things now looked rather more promising and the time had obviously come to act on the instructions I had received to go and live at Landi Kotal as soon as possible. My hut wasn't quite ready, but tents would do for a few days. So one day I bade farewell to wife and daughter, whom I should only see in future at occasional week-ends, and moved to Landi Kotal. This is surely one of the most desolate places on earth, with hardly a sign of vegetation except juniper bushes and camel thorn dotted here and there on the hill-sides. Surrounded by barren rocky ridges, freezing cold in winter, and terribly hot in summer, I suppose all of us ought to have been miserable. But we weren't, and I shall always count my years there as among the happiest in my life.

The climate was very hard but healthy, except for sand-fly fever, which was a pest during the hot weather. I think its cause and cure have now been discovered, but when I was there it raged unchecked, and any new arrivals sooner or later were victims to it. The sand-fly is a tiny yellow fly which can get through the mesh of a mosquito net, and his sting is like the prick of a needle. He is just as active by day as by night, and he lurks everywhere. From April to September your skin is worried and inflamed by the little brute. The fever for which he is blamed has no particular symptoms beyond a high temperature, racking headache, and pains in all your bones, and it rapidly subsides. But the after-debility is cruel, and for ten days or more you walk about feeling like a warmed-up corpse.

Nearly every day a high wind blows from Afghanistan to India. This is no ordinary wind blowing in good hearty gusts, but a solid stream of air pouring through the Pass like water over a weir. There seems to be a permanent difference of pressure between India and the rest of Asia, so that the air tears through the valleys. On very many days it is impossible to do any work with surveying instruments owing to the blast of air, which shakes them so as to make observations impossible. Indeed, on the worst days it is practically impossible to

move at all owing to the hail of sharp razor-like little chips of shale carried along by the blast of air. I have seen some twenty lorries and cars sheltering behind a bluff and unable to proceed for this reason. In the cold season from November to March this wind freezes the marrow in your bones, while from April to October, when the air is red-hot, it desiccates the body and induces a thirst which has to be experienced to be believed. At nightfall the wind drops and the air is so still that a burning match does not flicker.

Landi Kotal is 3500 feet above sea level, which is not, however, high enough to confer upon it the rank of a hill station. Twice that height is needed before the fierce tropical heat of summer is tempered to become acceptable to Europeans. Still, 3500 feet is a considerable height, and there was hard frost every night in winter, and at times quite heavy falls of snow. This, however, rapidly melted in the daytime, and the Khyber Pass is never blocked except for a very short time by snow.

I began to see why the Khyber Pass was such an important link between India and the rest of Asia. On all sides India is isolated by the sea, by deserts or by mountain ranges. These mountains are, of course, capable of being traversed by goat-tracks and mountain-paths in great numbers, but in only one place, the Khyber, is the barrier pierced by a short, easy route which is not snowed up in winter. The Pass is only some thirty miles long from the plains of Afghanistan to the Peshawar vale. It rises only 3500 feet above sea-level, and, most important of all in an arid country, there is a copious supply of water about every ten miles. This last feature is indeed astounding, and Nature has maliciously provided that, just where a great invading army would need water most, there do copious streams gush from the desiccated hill-sides, only, however, to be sucked up and swallowed by the parched ground within a few hundred yards. This copious supply of water makes it possible for the Pass to be used not only by invading armies but

by the peaceful trader. Twice a week, on Tuesdays and Fridays, the Pass is picketed, and the great caravan five miles long crawls from Landi Kotal to Jamrud in a long day's march.

This strange phenomenon of water in a waterless and almost rainless region has made history in the past. And now it was going to make the construction of the Khyber Railway possible. For without water for his hosts of workmen to drink, and without water to mix with his mortar, the engineer would be helpless. But these curious springs of water made me a little uneasy. If water broke surface in an apparently dried-up country in one place might there not be unsuspected water percolating unseen in other places—in many other places ? I mistrusted those eternal hills with their quiet watch upon the man who was going to try and thrust a railway upon them. What would happen when we started in earnest with pick, drill and dynamite to attack them ? Had this peculiar affair of the water something to do with one of the surprises to be sprung on us ? For of one thing I was sure, and that was that the Khyber was not going to be conquered without many quite unexpected things happening. I had much to ponder over and wonder about. Well, it was no good worrying about the unforeseeable. What could and should be foreseen could be provided against, and as for the rest, the only way of finding out what weapons Nature was going to use against us was—to find out by going ahead and keeping a watchful eye for danger signs.

Meanwhile I was settling down at Landi Kotal, getting together and organising the staff and accumulating stores. This was all routine work and presented no great difficulty. Proper housing for the staff was erected in the area allotted to us by the Brigadier, and arrangements had to be made for food, water, and sanitation, in the light of modern science. But although engaged on such a very modern project as the construction of a railway, it often seemed to me as if we were slipping back into the Middle Ages. Here was I with all my

people clustering together under the walls of Landi Kotal Fort for safety and protection, precisely as the fat burgesses huddled together outside the baron's castle, and for the same reasons. Every now and then the Brigadier would exact payment for rent and whatnot under threat of expulsion from the fortified area to the outer darkness where hairy tribesmen, and perhaps other grisly terrors, lurked by night. I sometimes wondered if the Brigadier, charming though he was, would one day slip back a few centuries and resort to pulling out my teeth until I paid up. For he maintained that the Khyber Railway commanded millions, whereas the Controller of Military Accounts, etc. etc. etc.—the rest of the sentence being quite unprintable. Undoubtedly all this was very medieval, but it was tempered by modernity, for presently we had electric light and fans, water supply, telephones and even a crazy cinema.

The nights in the Pass were singularly beautiful in winter. I was perhaps a bit thoughtful on my first night. Hitherto I had always scurried back in the rickety Ford well before sunset, in fact, it was necessary to leave Landi Kotal at about three o'clock, so as to be sure of being safely in Peshawar by nightfall. But now for the first time I watched the sun go down behind Lakar Sar, while long indigo shadows crept across the hills and valleys. Twilight did not last very long and presently it was quite dark. The wind died down and a deep silence settled down on the fort and the surrounding camp. The stars were brilliant, and Vega shone cheerfully nearly overhead. Every one turned in early, as it was very cold and there was not much to do in the evenings. I was living in a tent for a few days till my hut was ready, and I thought bed would be the most comfortable and the warmest place. The silence was wonderful and immensely soothing. Everything seemed very peaceful.

Then, crack—pop ! That unpleasant sound when a rifle is fired towards you. Again that unpleasant sound,

and a nasty metallic clang against a steel telegraph post outside. My young Sapper came in with a lantern.

"All right, sir?" he asked.

"Yes, thanks. But I hate this sort of thing. Does it happen every night?"

"Oh, no, not every night. You'll soon get used to it."

"Are we showing a light anywhere? He seems to be firing at us."

The Sapper chuckled.

"That's what every one in camp is thinking. Still, I'll go and have a look from the outside."

Presently he returned and said he didn't think a light was showing anywhere and he departed, wishing me good night. The risk from sniping is very slight, but I disliked it as much as many people dislike thunderstorms, in which the risk is about the same. By this time the troops in the trenches round the perimeter had spotted something, and a Véry light went up. Then a machine-gun began to stutter, but after a few minutes the firing died down and peace reigned once more. After a bit, crack—pop! One couldn't help admiring his cheek. However, the sniper didn't get it all his own way. There was in existence a levy of tribesmen known as *khassadars,* that is, thieves to catch a thief, though that isn't the official meaning of the word. I was to learn a lot about them later. Sometimes after a sniper had enjoyed himself for a bit, we would hear a good deal of distant firing, which was due to *khassadars* going out after him, and this is what happened on my first night in the Khyber. So at last I was able to settle down and go to sleep. There were no casualties, but the canvas walls of the tent seemed distressingly thin, and I looked forward to spending nights comfortably inside a hut with bullet-proof walls before long.

Once I had gone to live at Landi Kotal things began to get a move on. I began to mix with the tribesmen in a way that was impossible during short visits to the Khyber from Peshawar nearly thirty miles away. I got

to know the tribal boundaries and fraternised with their Maliks. Malik means Chief or Headman, and each tribe had an official Malik recognised as such by the Political Agent. The Malik of the Shinwaris was Khan Bahadur Mir Akbar Khan, a decent old boy, who took to dropping in on me in my hut. I had two arm-chairs in my hut, one on each side of a large fireplace, and very cosy and snug it was. Mir Akbar would often come and sit with me and smoke cigarettes while we yarned away. I very soon found myself recasting all my ideas of these terrible tribesmen. Murderers and thieves, yes, but also cultured men of the world. Mir Akbar owned two cars, read Reuter telegrams and could discuss Oriental politics intelligently and shrewdly. He was unfortunately murdered later by a jealous rival, and I think the English lost a good friend in him.

One of the most curious things about these tribes was their small size and the relatively small area they occupied. Standing at Landi Kotal, you could look round the landscape and see the habitations of half a dozen different tribes. Over there lay the Mulagoris, and farther to the left Shilmanis, both weak and almost extinct, while beyond the Kabul river valley was Mohmand territory. In the immediate neighbourhood were Shinwaris, while a short distance down the Pass was Zakka Khel land with two sub-sections—the Sultan Khel and the Nikki Khel, at loggerheads with each other. Then came the Malik Din Khel, who occupied the Ali Masjid gorge. Between them and Jamrud were the large and important Kuki Khel under Malik Mohomed Zaman Khan, an aged and foxy old gentleman with a shrewd business head. He was the doyen of the Maliks, and whenever they combined to give an entertainment or to receive a distinguished guest, such as the Chief Commissioner or the Viceroy, he was the acknowledged leader.

But there was not much combining among them as a rule, and they were usually on uneasy terms of armed peace with each other, whilst seamed internally with

blood feuds. It was in this lack of any real coherence that I saw the opportunity of getting work started on the railway. I was rapidly getting to know the tribesmen and to realise their natural shrewdness and intelligence. Hitherto I had been obsessed by the apparent absurdity of getting a lot of murderous savages to do such highly skilled work as railway building. I had been told they would massacre any imported labour. Well, it was true enough with important reservations. Firstly, the Tribes were not murderous savages at all, but fine upstanding men of intelligence. Secondly, they readily acknowledged that they had little or no skill in blacksmiths', masons' or brick-moulders' work and the like, but the Maliks told me they wouldn't object to my importing such men. Finally, the tribesmen were fully alive to the possibility of profitable contracts on railway works, and I saw that if they could be induced to start on the unskilled portions of the work, a great step forward would have been taken.

To cut a long story short, I saw the possibility of getting a few friendly Shinwari tribesmen to act as "contractors." These contractors would be allotted a definite work, and be paid by piece-work. For example, in piling up an embankment or digging a cutting they would be paid so much per thousand cubic feet. They could employ what labour they liked and would have to provide for their own protection against enemies, for it was clear that the first to start work would have to fight for it against those who were implacably opposed to a railway.

Khan Bahadur Mir Akbar Khan was doubtful. He stroked his beard and would come and see me later. The Political Agent consented if I could get some Shinwaris to agree, and I began to talk about rates of pay to the Shinwaris. There was a good deal of talk, but I found that Mir Akbar had a hated rival, Baz Mir, who also called himself Malik, and who wouldn't mind starting work whatever Mir Akbar said, so long as the contract was profitable. Ghazukai, an unspeakable old

ruffian one couldn't help liking, came in too. Mir Akbar sat on the fence, as he was genuinely afraid of involving his tribe in trouble with the Zakka Khel, who were becoming almost threatening in their talks with me. Baz Mir, Ghazukai and a dozen other scallywags had long discussions about the rates, and at last after weeks of haggling, Baz Mir and his crowd signed their contracts and work on the Khyber Railway was ready to start.

I had an odd little ceremony for turning the first sod on this great work. There was indeed no sod anywhere on the bare stony piece of ground selected, and we had to take the first shovelful of shingle as its equivalent. Baz Mir had his men out and picketed the surrounding heights, for there were strong rumours of a hostile demonstration, if not an attack in force. We didn't like to draw too much attention to what we were doing, and there was only a little group of us present. Almost furtively, we slunk unobtrusively to where a scared subordinate had marked out the earthwork. Baz Mir greeted us with a nervous grin. With little ceremony and with a muttered wish for good luck from the tribesmen, the first shovelful of earth was duly deposited. We departed as hastily and as furtively as we had come. This was in January 1921.

So the great adventure was fairly started. There were enough troubles in store for us ahead, as we well knew, but from that first start of the work we never looked back. Every conceivable difficulty assailed us in one form or another, but work was never wholly stopped, and we were able to press ever onward to completion.

That night there was rather more sniping than usual, and a sharp earthquake shook the camp. But next morning the work went on.

CHAPTER IV

PICKAXE, DRILL AND DYNAMITE

NOW we were off at last. Difficulties began to disappear in the way difficulties have when they are tackled. The Shinwaris as a whole came and clamoured for contracts. There was some danger that I should in ignorance give profitable contracts to men who were of no particular importance in the tribe, or who were out of favour for some reason. The Political Agent therefore undertook to nominate suitable men for contracts arranged by me on a piece-work basis. In order to help him I classified contracts into three categories, according to their probable value. So far I was only tackling easy works such as embankments, cuttings, quarries and roads, and no great difficulty arose in spite of the wild and woolly gentry's complete ignorance of everything connected with railway building.

For example, if it was desired to start work on the embankment in Work No. 1060, I assessed its value and asked the Political Agent to nominate a contractor. After a few days, an unspeakable ruffian with two attendant murderers, all three armed to the teeth, would turn up with a letter from the Political Agent and announce himself as the contractor for the work. After many grumbles at the insufficiency of the rates, he would sign his contract, if he could write. If he could not write, as was usually the case, he would take a signet ring from his finger and seal the contract with this. It was a curious fact that most of the tribes wore signet rings, generally made of silver, which were often of great antiquity. These rings usually had some device on them, embody-

ing the name of some ancestor written in Persian characters, and once they had used a ring to seal a document which had been explained to them, they would honour the compact so made. As none of the contractors could read or write English, this signing of contracts had no great value in itself, especially as the Khyber lies outside the British Empire, so that no laws existed, nor were there Courts to enforce them if they had existed. Thus the signing of this mysterious document became a sort of ceremonial or mystical rite, which should be binding on both parties as between gentlemen. The tribesmen trusted me to see that they got their dues, and I trusted them to get on with the job once they had signed. This arrangement worked exceedingly well. It is true that the contractors were murderous ruffians and thieves, that they were up to all manner of tricks, that they would not scruple to shoot you in the back if they took a violent dislike to you, that they stole explosives to use in their private vendettas, and that they were fertile in excuses for their own faults. But, after all, that does not mean that they were greatly different from contractors in any other part of the world.

The Zakka Khel were still holding out, so there was nothing doing in the main valley between Landi Kotal and Ali Masjid. In the Ali Masjid gorge, however, the Malik Din Khel were not unwilling, though inclined to wobble, and many is the argument that I had with Malik Latif Khan, the chieftain of the Malik Din Khel, either in his village or sitting on the hill-side. He was clever, and said he would start work if the rates were better. He gave way in the end when the satisfactory profits being made by the Shinwaris became known. Of course, no one would admit having made a profit. Lamentations at the crushing losses incurred were piteous whenever bills were paid.

The area beyond the Ali Masjid gorge down to Jamrud did not at this time come into my Division. In this area the Kuki Khel were troublesome, and it was unfortunate that there was a series of rapid changes in the

office of Executive Engineer, so that no one really had a chance of getting to know the tribe. It was not till Major (now Colonel) E. P. Anderson, D.S.O., R.E., took charge that matters greatly improved, but by that time relations were somewhat strained with the Kuki Khel, and Anderson had an extremely difficult time, as I was able to realise when his area was added to mine on his well-earned promotion to a much senior post.

However, we were well away, and presently there arose such a banging and thumping and clanging along the Pass as the Khyber had not heard before. The utter disregard for human life by the contractors was alarming. Passing cars were peppered with lumps of rock rolled down the hill-sides or blown up in blasting, and any attempts to introduce rules and regulations for their own and every one else's safety were merely treated as another of the Sahib's excellent jests. The officers of the regiment in camp at Ali Masjid are not likely to forget the rock which came through the roof of their mess-tent. Of course, I was inundated with protests from every one. To the soldiers I would reply that I didn't see what they had to complain about, as it was well known that the hardy soldier enjoyed being fired at, so that a few added terrors in the Khyber could but increase his enjoyment of life. To any civilian complaints I would forward a copy of my Rules and Regulations, and say that the alleged breach of these would be enquired into.

About this time the Political Agent took to calling me a devil, but did it with a disarming twinkle in his eye. He said I was going much too fast and running the tribesmen off their feet, but he said this also with a grin. And he did all he could to help me. He had to leave the Khyber soon afterwards to take up his new post at the Kabul Legation, and he was succeeded by an equally experienced and able officer, who was a very good friend to me.

One of our supposed difficulties was expected to be the supply of explosives for blasting. Very large quan-

tities were required, both of dynamite for rock and of gunpowder for the softer shale. The supply of dynamite was not difficult, as it is of course quite safe to handle. It was purchased from a well-known firm and arrived neatly packed in cases at railhead. Its bulk was small, and it was easily and swiftly transported and distributed to local magazines under proper precautions. It was not pure dynamite but a safer form called gelignite, which stood the extremes of climate very well. Gunpowder was a different matter. It is nasty, dangerous stuff, and very bulky, and I did not at first quite see how to get it. Every one said that the convoys of gunpowder would be looted in the Pass, or would be blown up or what not. However, one day a curious-looking person came to see me and said he was a gunpowder maker in Peshawar, and what about a contract for supplying the Khyber Railway ? Enquiry elicited the surprising fact that the manufacture of gunpowder had gone on in Peshawar for centuries, for supply to the tribesmen for their own nefarious purposes. The gentleman had a sample bag with him which an obliging friend dumped alarmingly on the floor of my office.

So we went and popped off a blast, and it wasn't too bad. So far so good, but what about transporting bags of powder up the Pass ? My friend said he would arrange that, and he did. I never dared to inspect either the powder factory or the means of transport. The powder used to arrive punctually from Peshawar in a *tonga,* i.e. the local cab, rather like a governess cart. I never heard of it blowing up or being looted, and as I only paid on delivery every one was satisfied. So that little difficulty disappeared.

I am afraid, however, that there were some thefts of explosives. There was, of course, a strict system of accounting for all the explosives used, but the tribes were expert thieves and this raw material of murder was an irresistible attraction to them. With an Indian subordinate staff it was impossible to prevent petty peculation. At one time exaggerated rumours of the

amount of explosives being accumulated in tribal hands were current, and the Political Agent took alarm. But the relation between the weight of dynamite used and the tons of rock dislodged showed that no spectacular disappearance of this destructive agent could have taken place. It was said that the tribes made up the sticks of dynamite into hand-grenades for use in their tribal warfare and in private feuds.

Earthwork and rock excavations were thus well started, but it became necessary to think of other things. Hearn's line had by now been picked up by the survey parties and marked on the ground. All my scepticism about its correctness vanished, and I could only marvel at the genius of the man who had selected this line so quickly. His own account of his methods can be read in the Paper he presented to the Institution of Civil Engineers, and it is a classic. Little local deviations from his line, of course, became necessary when it was definitely located on the ground, but I do not think any deviation was to the extent of more than a few yards anywhere.

Now that the location of the line was completed it became possible to examine on the spot the nature of the bridges and tunnels. I knew Hearn had his own ideas about these, and as he was expected to arrive from England shortly, I decided to await his arrival before putting these in hand. There was plenty to be done in exploring for the materials of construction.

Horn came up from Peshawar to have a talk about this important matter.

"I'm arranging for Portland cement," he said. "There is a new cement factory being erected by an English company near Rawalpindi, and, if its product is up to British standard specification, we shall use it in large quantities. Then, of course, we shall have to bring from outside all permanent way materials as soon as we are ready for them. But that won't be for a year or two yet."

I nodded.

"For the rest we must live on the land as the cost of importing any but essentials will be prohibitive."

"You mean the cost of taking materials from the present railhead at Jamrud up the Pass by road?"

"Yes," he said. "Hearn is bringing a fleet of motor transport which, as far as I can see, will have its work cut out transporting bare essentials. And the cost will be about one rupee per ton-mile up and down this awful road. It's rather an alarming prospect, if we are to keep the cost of building the railway within reasonable bounds."

He asked me what were the prospects of obtaining building materials locally.

"Not too bad," I said, "as far as I can see at present. Let's begin with what is simply not there and will have to be imported. Timber, for example, is non-existent in the Khyber. We shall have to get that from Nowshera."

Horn agreed. We both knew that there was a considerable deodar timber industry there. Not that there are any deodar trees anywhere near. But the timber firms have agents in the far Himalayan forests who cut down trees and hurl the logs into remote mountain streams. These float down, and after many days they are hooked out of the Kabul river at Nowshera by expert boatmen and swimmers. One of the queer trades of the world.

"Sand," I went on, "seems also to be non-existent."

"That's bad."

"Very bad, but there is a good natural gravel in pockets in the main Khyber *nullah,* which will make first-class concrete without sand, as it contains sufficient fine particles. I've tried some samples, and a mixture of four to one gives splendid results."

"Good."

"Yes, it's a stroke of luck, and we must exploit it by using concrete and reinforced concrete as far as possible."

"Well," said Horn, "that's not so bad so far. What about brick and stone?"

"Brick is doubtful," I replied. "There is a large deposit of brick clay near Landi Kotal, and I think we must use the bricks, if they are at all serviceable. I could start a brick kiln, but that would mean bringing up coal by road from railhead at Jamrud. It would be an expensive business, but it is, I think, quite practicable."

We discussed this project at some length, and the brick kiln was eventually started. It was a tricky business to run such an expert affair as brick manufacture in the Pass, but the result fully justified our modest expectations.

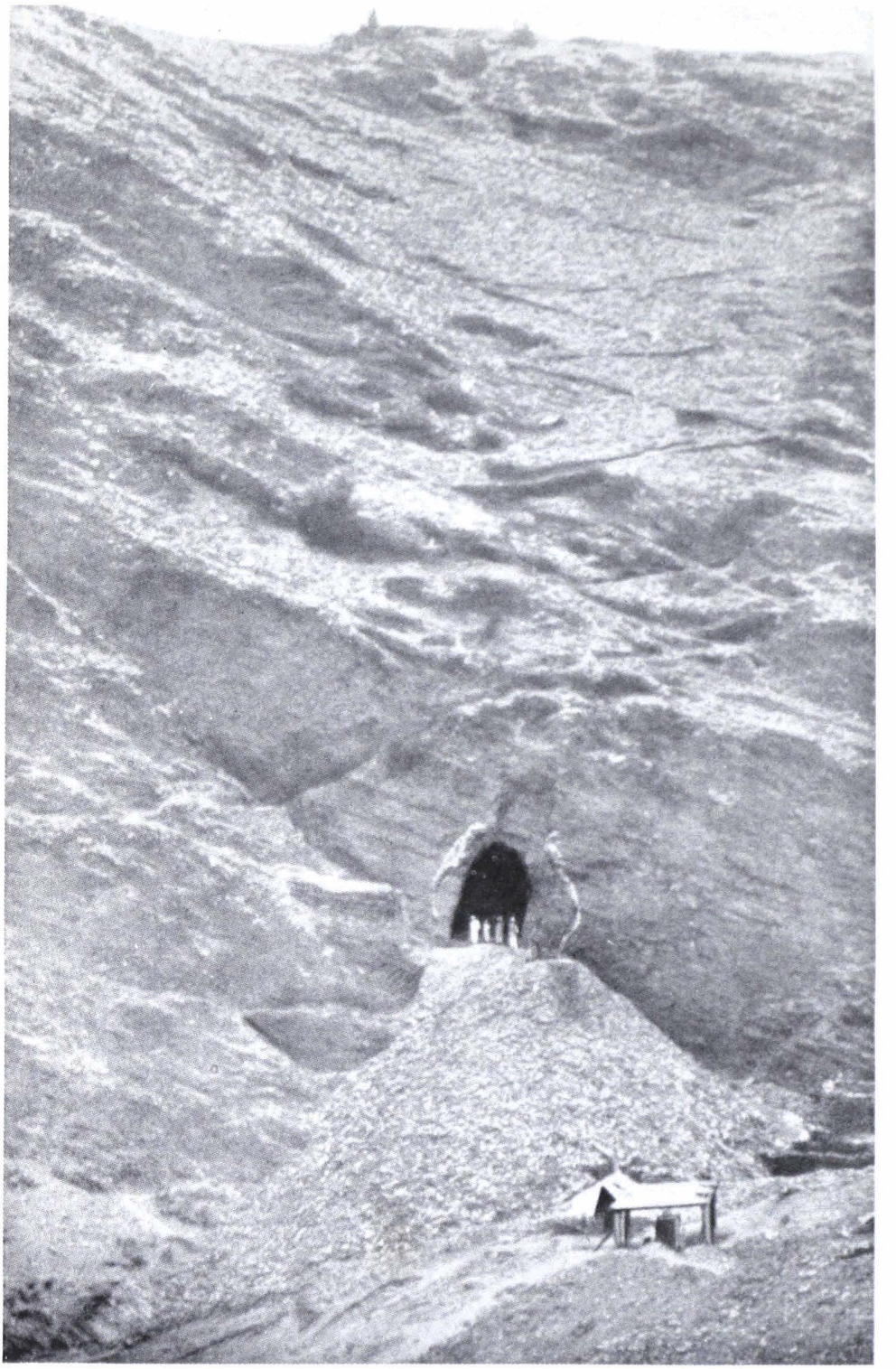
"In regard to stone," I said, "I don't feel very hopeful. It sounds absurd with mountains surrounding us to say that stone is not available. But the shale is, of course, useless, and the limestone is so fissured and cracked that any stone falls to pieces as soon as an attempt is made to dress it. There may be some good quarries discovered in time, but we haven't spotted them yet. It looks as if we shall have to build with either brick or concrete. The broken stone will of course make excellent ballast for the track."

"Can you get good lime by burning the limestone?" asked Horn.

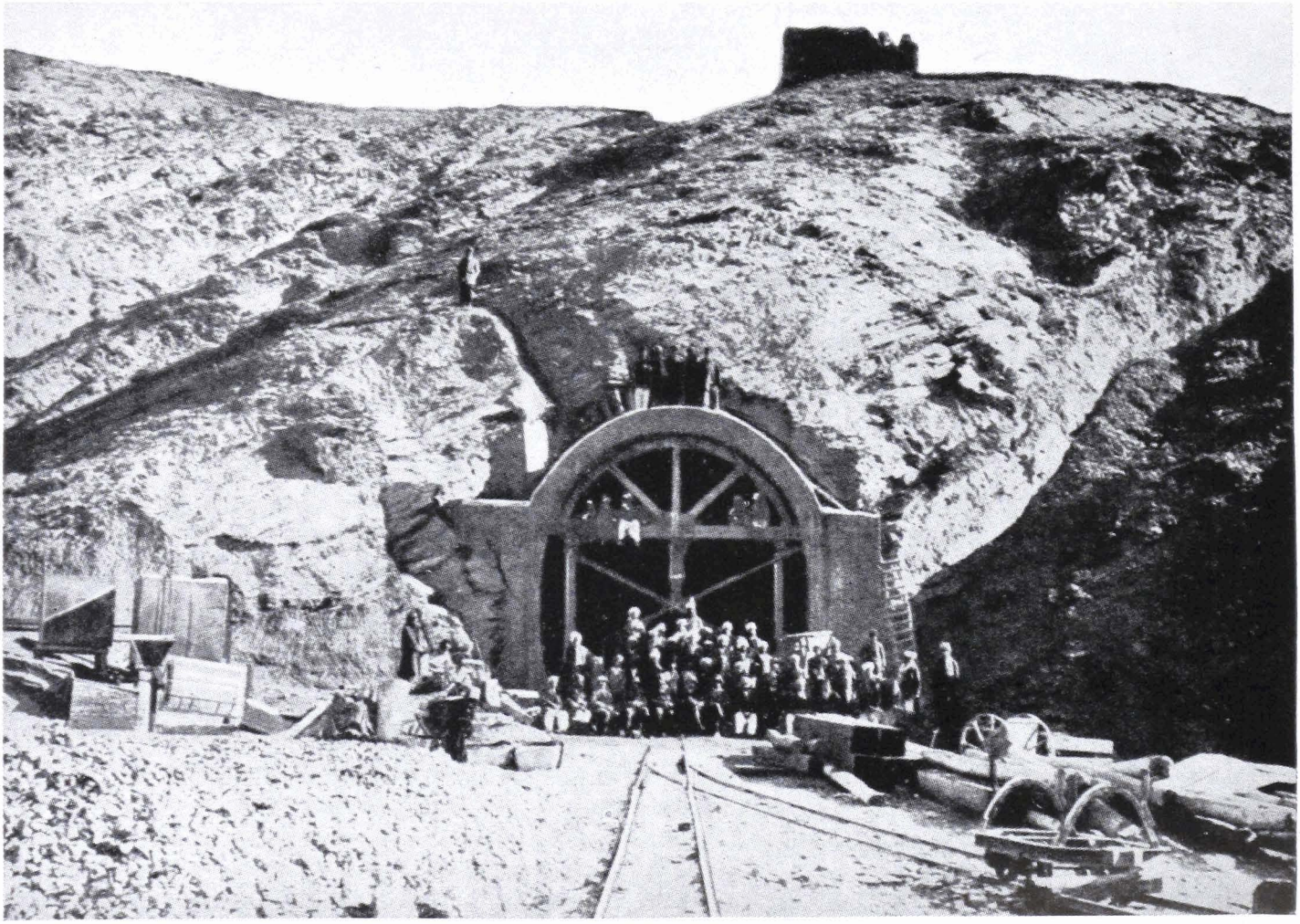
"Yes, but we shall have to transport the coal required by road. The lime will need mixing with fine brick-dust, and will then be quite serviceable as a mortar."

Altogether we were well pleased with the prospects of getting supplies locally for most of our requirements. Horn departed promising to make arrangements for getting coal for brick and lime burning.

Battle was thus thoroughly joined, and the expression was no mere picturesque phrase. The tribes were still very much divided among themselves, into two parties —for and against the railway. There were always the ancient blood-feuds in existence, and a whole crop of new feuds arose owing to jealousy in regard to the dis-



START OF TUNNEL WORKS NEAR AFGHAN FRONTIER
Note the zigzag path up to the contractor's defence post.



THE AUTHOR AND SOME OF HIS STAFF CELEBRATING THE START OF THE TUNNEL

Note the contractor's defence post on the skyline.

tribution of profitable contracts. A good many contractors were murdered by people who wanted their jobs, and the defence of railway works became a pressing problem.

The contractors represented that they had to picket the surrounding heights during the day to prevent sniping. At night they had to collect all their implements and tools in one spot and prevent their enemies from raiding them. Thus, they said with justice, it was essential to have a tower, or *burji,* as they called it, to protect their works. I agreed, and decided to pay the cost of erecting these *burjis.* So a chain of fortified posts grew up along the line of the railway. These posts were at first manned by each contractor's men, and occasionally they were the scene of bloody combat, where two adjoining contractors disliked each other. But later the whole arrangement became systematised under the guidance of the Political Agent, and the defensive pickets were manned by *khassadars.*

This highly irregular force was paid for by the Railway, and consisted of riflemen who provided their own arms and ammunition in return for regular monthly pay. They watched the contractors and also each other, and were responsible through their respective tribes for maintaining order as far as possible. The arrangement worked extremely well, and the *khassadars* grew in number until the Railway was at one time maintaining a force of five hundred and seventy riflemen.

The scarcity of labour was at first troublesome. The Pathans were no lovers of hard work, and suggestions for importing labour were unpopular. However, the unexpected happened. There were hard times in Kashmir, or somewhere about there, in the winter, and curious creatures called Kashmiris began to appear in the Khyber. I do not know whether they really came from Kashmir, but more abjectly miserable specimens of humanity I have rarely seen. Their clothes were rags, and they were very unclean ; if a Pathan spoke

angrily or threw a stone at one, he simply burst into tears. The rumour of work had spread and they came in response to it, trickling by ones and twos over nameless passes and goat tracks from the interior of Asia. The Pathans accepted their presence, as they were obviously so abject as not to be worth murdering, and they became railway workers. In the spring they melted away.

This influx of labour presented a new problem, as it was impossible both for sanitary and for humanitarian reasons to leave these wretched creatures to exist as best they could. Labour camps with proper housing, water supply, sanitation and a medical service had to be created. And, as usual, defence was the major consideration, so that the labour camps had to be properly sited and surrounded by pickets and *burjis* with due regard to the defensive qualities of the position. There were eventually no less than thirteen of these labour settlements.

Hearn had now arrived and we were getting to know and understand each other. I expect I was rather a trying subordinate at times, with my direct methods of attacking our many problems, and the sparks occasionally flew between us. But I found in time that I had a real man to deal with and I grew to feel both respect and affection for him. He was unconventional in many ways, but he had real genius, and his solutions for our curious problems proved to be right. He remained as Engineer-in-Chief till we were through the difficult early period, and then left on promotion.

I had by now acquired three Assistant Engineers, one the young Sapper I have already mentioned, then, a little later on, Hall, who was to prove such a tower of strength, and also a capable Indian Mohammedan officer. The young Sapper was very young, and he was recalled to England at an early stage of the work, to complete his training.

The whole organisation was thus taking shape, and I found myself not only an engineer, but many other things. I was the recipient of unfailing kindness from

both the military and political authorities, and I did my best to meet their views, subject to the one major consideration of getting on with the job. I was getting to know the tribal ways, and on several occasions I was honoured by being asked to help in matters rather outside my job. Secret service is not in my line, but the Frontier was at that time simmering with intrigue from across the Border, and it was impossible to keep clear of such matters. Needless to say, any help I could give was gladly rendered, and these affairs helped to cement the happy relations which existed with every one.

Under these circumstances it could hardly be expected that conventional methods should always apply in dealing with such difficulties as arose. It was a hard country, and one had to be hard sometimes. I found the Pathan's boyish sense of fun, however, a useful means of getting over a difficulty. For instance, one morning while going my rounds I came across the familiar spectacle of a crowd of angry tribesmen all talking and gesticulating at once and brandishing rifles, while a scared subordinate ran to my car and explained the trouble. It seemed that the toe of the embankment was going to obliterate some insignificant looking caves or holes in the hill-side used by somebody for sheltering his goats. The somebody had come out with his partisans to object, but the contractor didn't want his work interfered with, and they proposed to fight the matter out. Others thought that the railway should be diverted elsewhere, as a simple solution of the matter. So here was the Sahib confronted with the usual kettle of fish. First this matter must be properly debated, so we all sat down on the hill-side. The goat man stated his views, and then he and the contractor joined in demanding that the railway must be diverted, and they pointed vaguely round the hills.

"But," I said, "a train is not like a polo pony which can turn on a rupee ; it must turn slowly, like the Sheik Sahib, round an easy curve, and this talk of diverting the railway is nonsense."

This raised a chuckle, for the Sheik Sahib was a well-known character of immense girth.

"That may be as the Sahib says, but goats must have shelter in winter, or they would die, and a poor man would be ruined."

"Easier to dig new caves than to divert the railway," I said.

"That may be, but who would dig the new caves, and anyway goats don't like new caves, and won't go into them."

And so we talked round and round, with an occasional joke by some jester, till I suggested having a shooting match at a mark to decide the matter. If I won, the railway would go on, and the goat man must manage as best he could. If I lost, the railway would go on just the same, but the contractor must dig new caves for which he would be paid. This was a proposal after their own hearts. The goat man was doubtful, but after a little he allowed himself to be persuaded. Arrangements were soon made, and the Pathans ran off about four hundred yards to set up a mark—a whitewashed slab of shale. I was offered the choice of several weapons, and chose a fairly new British Service rifle, stolen from some cantonment, I suppose. Best of three shots with a greybeard to act as judge. The goat man fired first and missed. I then fired and hit the shale slab fair and square, though I'm not a very good shot. Every one was in high good humour by this time, and they wouldn't have minded if I'd won the contest. The goat man was being chaffed, but a sporting silence reigned while he got his next shot off, a beauty. To make a long story short, my next two shots were misses, and the greybeard had no difficulty in naming the goat man the winner. So he got his new caves and, calm being restored, the work proceeded.

It was not always so easy, however, to settle a dispute out of hand, and sometimes such impossible claims were made that there was nothing for it but stubborn resistance. Sometimes it became necessary to bar a tribesman

altogether from railway work, and this was rather a serious matter because eventually there was great competition for profitable works and great jealousy about it. But one had to be ruthless sometimes in dealing with those who looked like interfering with the progress of the work. In this way I made enemies and had to be watchful.

This matter of the personal risk involved could not be disregarded, and it would have been very silly to have done so. There were horrible stories, quite true ones, of what might be expected, if I was captured and taken to some desolate spot. I looked upon the idea of being tortured with horror, but it had to be faced. Sometimes I would think when going along the road—perhaps round that corner they are waiting for me. How should I face it ? Very badly, I think. These were unpleasant thoughts, and they were suppressed as far as possible. But they were there all the same and formed part of the strain under which we all lived in those times.

But I was not without friends as well as enemies. One afternoon I had gone out alone, rather foolishly, without an escort, to the site of a bridge near Landi Kotal, to ruminate over the problems connected with it. I am rather fond of this mode of rumination on the spot, without being able to give clear reasons for it. Others I know prefer to get all the available data, set these out on plans and diagrams and then do their pondering in the comfort of an office. I have no quarrel with them on this account, but personally I prefer to collect all the data and then go and sit quietly, for hours maybe, on the site of the proposed work, turning over the matter in my mind and getting close to Nature, as it were. I have often found that if I did this, the right solution to some knotty point would emerge by a sort of instinct, whereas if I used mathematics and logical reasoning too coldly I might do something silly. However, on this afternoon I was ruminating on the hill-side and not noticing the passage of time. The site of the bridge was below me, and the nature of the foundations in rotten

shale, with both dip and strike badly tilted, needed a good deal of consideration. Presently there came plodding up the path an old Shinwari with his rifle slung over his back. He passed near me, and I gave him the customary salutation, "May you never be tired," to which he replied, "May you never be poor," and went on his way. Presently he stopped, hesitated, and called out to ask me what I was doing. Then he said, "Don't be late to-night," and I made some chaffing reply, though realising with a start that it was already late, and that the sun was disappearing behind the hills. The old Shinwari came plodding back and stopped in front of me.

"Sahib," he said impressively, "don't stay out late to-night," emphasising the last word with an urgent gesture. "Go back to Landi Kotal—now, at once."

Of course, he was right. I was doing exactly what I had many times been warned against. I sprang up and hurried back without any untoward incident. When I entered my hut there was an envelope marked "Urgent" from the Political Agent. In it was a letter telling me that information had been received of a gang of raiders in the neighbourhood, who had vowed to capture a railway officer, and so would I please be particularly careful not to go out without an escort, anywhere, for the next few days, until the *khassadars* had dispersed the gang. Well, well, such information would be common knowledge among the tribes, and my unknown friend had undoubtedly given me a useful warning.

In the course of the next few days after this incident several Shinwaris and Pathans came to see me and scolded me for my habit of wandering off to sit on the hill-side for hours at a time.

"Meditation is doubtless good," said they, "but some places are better for meditation than others."

They explained that it wasn't entirely me they were thinking of.

"You see, Sahib, if anything happened to you on our lands, we should get into trouble."

I listened humbly and took their very sound advice.

One Pathan whom I knew rather better than the rest gave me some very shrewd counsel. He was Abdul Gafur Khan, and he had served in the Indian Army, and also fought against us in the Zakka Khel campaign some years ago. He was a most likeable man, and we often had a long crack in front of the fire.

"I notice, Sahib, that you always carry a revolver. Now, if you will excuse my saying so, that is a mistake. Better leave it behind. We like you and do not wish to murder you, but if we did we could do it any day with a rifle."

And he chuckled amiably.

"Your revolver would be useless as a defence, so why take it. But indeed, Sahib, there is a further and better reason. You may have heard that among the Zakka Khel there are certain bad characters."

I said I had heard rumours of such trifling matters as blood-feuds, raiding, murders and theft, but they were doubtless false.

"Oh, no," said Abdul Gafur, "not false at all, quite true. But I was referring to really bad characters and outlaws. Now those men would think nothing of committing murder in order to get your revolver. They would probably not know who you were until you were dead, and it would be no use then expressing regret. So you see, Sahib, your revolver is even a danger to you, and I suggest you give up carrying one. When you are going along the line each contractor will escort you over his length, and the hills will be picketed by him anyway, so you have nothing to worry about."

This seemed such sound sense that I took his advice, and thenceforward went about everywhere among these lawless people quite unarmed, and so did all my staff. It was a great relief, as a revolver is an awful nuisance. It looks very fine strapped round the waist of a cinema hero, but it gets horribly in the way and bangs and bumps most uncomfortably when you are climbing up and down steep rocky ridges.

I was only fired at once and, as luck would have it, that was when the Chief Engineer, Colonel Hearn, was with me. We had got out of the car to discuss some point concerning a retaining wall, when a bullet hit the hillside close by with a bang. There is no romantic nonsense about this sort of thing, and we simply bolted as hard as we could for the car, pursued by two or three more shots, tumbled into it and vanished as rapidly as possible round the corner. The firing must have come from a very long way off, as I don't remember hearing the rifle crack. It was probably someone loosing off at long range at two Sahibs on the road out of sheer devilment.

It was decided now to make a start on the tunnels in earnest. There were a lot of them, but none of them was very long. Tunnelling with totally inexperienced labour was going to be a troublesome job. Hearn said he was going to bring in an expert English firm of contractors for the tunnels outside my jurisdiction between Jamrud and Ali Masjid, but that this probably would rouse tribal opposition. This prophecy proved true, and it was a very long time before an arrangement was made with the tribes for those particular tunnels.

Meanwhile I tackled the tunnels on my Division with tribal contractors. I managed to get hold of a European foreman named Peters from the Kolar goldfields to supervise the timbering in the tunnels. Heaven knows what was his nationality or what his real name was. He didn't speak any language known to any of us, but had a few words of English. He was very expert at his work, absolutely sober and quite fearless, and would occasionally weep because I was so kind to him, and he was so far from his home in some vague Balkan region. He explained that so many boundaries had been altered since the War that he did not know in what country his unpronounceable village was situated. At times he was perturbed by letters in an unknown tongue which said that some enemy was stealing his lands, and he would demand that the Consul should intervene. But neither he nor I knew which Consul to approach.

Communication with him was always difficult, and it had to be largely supplemented by signs. Peters would listen with an amiable smile to my words of wisdom and instruction and then of a sudden the light of understanding would come into his eyes, his glasses would sparkle and he would cry, "Yes, yes." Then he would go off and do something quite different. He taught us a lot about tunnelling, and the tribesmen with their usual common sense saw the use of him and looked after him. But of all the things he taught us, I think I found his cry of "Yes, yes" the most useful. Many is the time since then, when I have been receiving unpalatable instructions, that I have imitated his bland and amiable "Yes, yes" of complete misapprehension and then gone and done something quite different.

CHAPTER V

BATTLE, MURDER AND SUDDEN DEATH

THE end of the Great War left the Frontier in a disturbed condition, accentuated by the Afghan War which succeeded it. Every one was tired of war except the tribes, to whom it is the ordinary normal state of affairs. It was natural that under these conditions the Frontier was restive. There was a lot of anti-British propaganda, first, during the War, by the Germans and afterwards by Bolsheviks.

The German efforts were characteristically clumsy, and the shrewd tribesmen saw through them. There were, of course, the usual prophecies of the imminent downfall of the British Raj, but the tribes have heard this so often from Hindu agitators, whom they despise, that they did not pay much attention. Then the German agents were stupid enough to circulate pictures of the Kaiser dressed as a musical comedy Oriental, coupled with the news that he had embraced Mohammedanism and was coming to lead the Faithful to victory over the Infidel. I was once shown a tattered specimen of this masterpiece of cunning, and my Afridi friend's jesting comments were very apt.

However, all this sort of thing was having its effect on the more unruly members of the tribes, and an uncomfortable number of outrages on the Khyber road were happening. There were certain places such as Jehangir Kulla in the jaws of the Pass, and Windy Corner near Ali Masjid, which had a bad reputation. There was too often the same tale of a sudden volley into a passing car at short range, and the looting of everything from the unfortunate travellers.

It was amazing what escapes people had sometimes. Soon after I arrived in Peshawar there was a raid in the Jehangir Kulla. This was a gloomy place where there was a small spring which was supposed to have medicinal value. The legend was that the Mogul Emperor, Jehangir, used to go there to drink the waters. There were in this neighbourhood several paths and bolt-holes in the direction of the Bazar Valley and Tirah, which were entirely outside British influence, so that this place of ill omen was highly favourable to armed raiders who wanted to escape quickly to No Man's Land. The car, which was attacked, was shot up at point-blank range by a volley which smashed the wind-screen and riddled the car and its occupants. But by some miracle the driver was only slightly wounded, and he was able to accelerate and get away safely. The other passengers were killed. I had a look at the car, and it was incredible from the position of the bullet holes that the driver could have escaped.

The occurrence of outrages like this, resulting in the death of some acquaintance or friend, made me very thoughtful at times. There would be periods of relative quiescence, and then some horrible murder would shake us out of our fancied security.

The tribesmen's acts of hostility had nothing personal about them. But at times religious fanaticism would blaze up and some zealot could not restrain himself from making sure of paradise by murdering an infidel. There was also the disquieting tribal habit of calling attention to a real or fancied grievance by committing some outrage. This strange mental twist is of course not confined to Afridis, but crops up in every part of the world. The political maniac who throws a bomb is blood-brother to the hairy tribesman. The latter was, however, quite matter-of-fact about such an outrage. The tribe concerned would express great sorrow for the victim, and consider it sufficient excuse to say that they wished to call attention to some grievance.

In spite of these outrages it was astonishing how little

ill-feeling there was between the English and the Pathans. Indeed, it is not too much to say that there was a strong liking for each other. Superficial differences there were, but, between two adventurous races, deep called to deep. I venture even to assert that there was a greater enmity between the different sections of the tribes than there ever was between the English and the Pathans.

This inter-tribal enmity was unquenched by years of feud, and it was a constant source of trouble on the railway works. It would have been intolerable if anyone wishing to see me had had to approach cautiously for fear of meeting some enemy. So my office was by common consent a sort of Tom Tiddler's ground where tribesmen at feud with each other were able to meet without flying at each other's throats; but although perfect courtesy would be observed on such occasions, the expression in their eyes left little to the imagination.

One terrible example of tribal hatred came rather close to me. I have already mentioned Malik Latif Khan, chief of the Malik Din tribe. I never liked the man, so, of course, he never liked me. However, he got a square deal like the rest, and our official relations were correct. He entertained me to tea once or twice in his village, and although I was rather afraid of poison and ate and drank as little as custom and courtesy would permit, all went well between us on the surface.

The Malik Din tribe is a large and powerful one, whose lands stretched from the Khyber for a great distance towards the Bazar Valley. Actually, however, only a very small part of the Khyber Pass, namely, the Ali Masjid gorge, was in their territory. There was no cultivated land in the rocky gorge itself, and consequently it was quite uninhabited. But just at the upper end of the gorge there were two villages and a few stony fields. One village was a biggish one in which Malik Latif Khan lived, and the other about half a mile away was inhabited by a fellow-tribesman, Sultan Khan, with whom Latif Khan had a blood feud.

Sultan Khan and his people were getting the worst of the duel, and they were being reduced in numbers to the danger point of periodic assassinations. They hardly dared show themselves outside their village, which was, as usual, a fort such as I have already described, but they were not absolutely *kilabund,* i.e. completely shut up and besieged. One day Sultan Khan came running down to my car as I was passing and asked if I could do anything, enlist the sympathy of the Political Agent, or speak to Latif Khan. I tried speaking to Latif Khan, but the flash of his eyes and the quiver of the nostrils in his thin, cruel nose showed me how hopeless that was. Matters were like this when Sultan Khan put a white stone outside his gate. This is the same thing as a white flag, and it indicates a desire to parley. If the enemy responds with another white stone, as in this case he did, there is a cautious approach from both sides and a debate ensues.

I do not know what was the original cause of the feud, but it is usually either about women or land. However that may be, in the absence of Malik Latif Khan in Peshawar on some business, which took him away for a few days, the white stones were put out. With infinite precaution against treachery and ambush, parties from the two villages approached each other until they were within shouting distance, and a parley ensued. Sultan Khan said that he was tired of the feud and that he would be ready to pay blood money. This was an accepted method of rendering satisfaction for murder and a timely payment of blood money often averted the beginning of a feud, especially if the victim was only a woman. It was unusual to try and end a long-standing feud by payment of blood money, but Sultan Khan's proposal was to this effect, and he suggested a tea-party to which, rather incautiously, some of Latif Khan's friends and relations went. No one will ever know actually what happened, because there were in the end no survivors, but the news soon was shouted that all Latif Khan's men had been murdered at the tea-party.

It is easy to imagine what had happened. Latif Khan's men would probably surrender their weapons on entering Sultan Khan's village, and presently all would be seated in the courtyard eating and drinking preparatory to a debate on the question of blood money. It is quite possible that Sultan Khan really meant to try and end the feud, but some unlucky chance word may have brought up the ancient grudge, and tempers would rise, till murder broke out and the wretched men were shot down—guests shot down by their hosts. This was a terrible crime which shocked even the wild Frontier men, and Latif Khan's vengeance was immediate.

Malik Latif Khan, so he told me afterwards, was sitting in Peshawar Bazaar with some friends when the news was brought to him. He immediately gathered together some twenty or so of his followers, and they hired sufficient taxis to carry them. By this time it was dusk, but they set out immediately on the long run to Ali Masjid. I can well imagine that journey, the terrified drivers with rifle barrels jabbing their backs, compelled to take the open road at night, and the armed ruffians in each car sitting silent with black hatred and murder in their hearts. At Jamrud they paused to carry out a bold raid on the railway magazine because they wanted dynamite, detonators and fuse. The raid was quite successful, and they succeeded in eluding the notice of the *khassadars* in our *burji*. Malik Latif Khan broke off his narrative to apologise for the theft.

"I hope you don't mind, Sahib, I will pay for it if you wish."

"It is no matter, Malik Sahib."

Then they started again after taking the cars round a detour across the stony plain so as to avoid the examining-post at Jamrud. On past Bagiari and Shahgai with the powers of darkness sliding the ridges to and fro to let murder pass. Down the long hill from Shahgai ridge, round Windy Corner, past the little green shrine and into the gorge, and there they stopped. Bombs had to be made quickly from the dynamite. Work on

the railway had taught them how to do this, and expert hands quickly made up the sticks of explosive into deadly hand-grenades, ready primed with fuse and detonator.

The avenging party was then about a mile from Sultan Khan's village, and they advanced stealthily on foot as only tribesmen can. Sultan Khan must have been on the alert, but his pickets were quickly driven in, and he decided to defend the village. He reckoned, however, without Latif Khan's bombs, and presently a rain of these descended on him. Under cover of the confusion caused by the bombs, dynamite was placed under his gate, and it was blown in. But there was no need to carry the assault further. The explosions had set fire to the village, and soon the gorge was illuminated by a red glare.

" When we saw this, Sahib, we knew that it was only necessary to wait. We took up positions all round his village among the rocks, and waited, watching. Presently the fire and smoke were too much for human endurance, and a boy came running out, crying for mercy. We shot him down. One by one they would try and dash for safety, and one by one we shot them down."

" Women and children too, Malik Sahib ? "

" Even so."

There were no survivors and Malik Latif Khan's vengeance was complete. This was the tale he told me next morning sitting on the hill-side a stone's throw from the smoking village. I had heard rumours of some sort of rumpus near Ali Masjid, and had started first thing to see what was up, because work had made a good start in the Ali Masjid gorge, and I didn't want any interruptions.

I shivered a little at the gruesome tale, but Sultan Khan and his people were not working on the railway, whereas Latif Khan was. I went silently back to my car.

" Will you tell the Political Agent, Sahib, that I am sorry some of my people fired across the road, which is a fault. I am ready to pay a fine."

I never liked the man.

On another occasion I got news of a scrap having taken place, and of the work being stopped in a cutting in the desolate Medanak valley. This valley was quite uninhabited and hours of work were short, because no one would start to get there till full daylight, and again every one left work long before sunset, so as to be safe home before dusk. When I got there, with an escort, I found that every one had fled, but one or two Pathans appeared from nowhere and told me, with roars of laughter, what had taken place. Several people had been killed, but that did not diminish their enjoyment of the joke. After all, a man must die some time, and he can only die once.

This is what had happened. While they were all digging away at the cutting, a fall of loose earth had uncovered a tattered sack containing silver rupees of the reign of Jehangir. I saw one and it was as fresh as the day it was minted, although some three hundred years old. However, the tribesmen were not greatly interested in the artistic quality or the antiquarian value of this find. The sudden appearance of the shining heaps of coin was the signal for a free-for-all fight, in which every one joined, and in which every kind of weapon from a pickaxe to a rifle was used. In a few moments substantial bundles of treasure had been grabbed and their lucky holders were making off, defended by their friends and pursued by infuriated and disappointed enemies. This was considered to be a great joke, but I was very annoyed at work being stopped, and as soon as I could get hold of the absconders I rated them soundly. They expostulated vigorously, and said that finding bags of rupees was much better than working hard for my starvation rates, and so we had a tremendous row. I said the railway must go on, and if they didn't get back to work I'd have them barred for good and all. I also said I wanted one of the rupees as a keepsake, and I still have it. And so with many grumbles they went back, and the work went on.

Murderous affair though this had been there was of course a grimly humorous twist about it. But sometimes there was only dreary misery and personal grief about some wretched and useless happening. Such was the murder of two officers of the Seaforth Highlanders at Landi Kotal. A battalion of this splendid regiment was at the time stationed there, and I had many excellent friends among the officers, and perhaps knew Major Anderson better than the others. He was the best of companions, and always cheerful in spite of the fact that he had been badly knocked about in the War, and still suffered a good deal of pain. Another officer, Major Orr, had just arrived in Landi Kotal on return from leave.

One winter evening Hall and I had just finished dinner, and we were looking forward to a comfortable evening by the fire. Things had been quiet for some time, and sniping had practically ceased. Hall was called out by his servant, who said a man had a message. There was nothing unusual about this, and I went over to my hut, but Hall followed quickly, and said there was a rumour that a Sahib had been shot. Nothing very definite—someone had got it from someone else who had heard it from a Shinwari earlier in the evening just before dark. The C.O. of the garrison was living quite close, so I slipped across to his mess and found that he had also heard the rumour, and had gone to his office, where I found him. Enquiries were being made by the Staff if any officers were missing. Khyber Railway Staff all right ? Yes, we were all there.

" Punjabis ? Hullo ! Hullo ! Have you——? Who is missing ? Oh, you think they are at the Club. Please let me know at once. 1st Gurkhas ? All accounted for ? Thank you. Seaforth Highlanders on the line, sir. Will you speak, please. They think—that you, Colonel ? Anderson and Orr ? I'll have enquiries made everywhere. Seen going out for a stroll together ? About five o'clock. You don't know the direction. Thanks. Punjabis ? Are Majors Anderson and Orr with you ?

No ? Are all your officers accounted for ? Thanks. Anderson and Orr . . . Find them, please . . . Yes, Anderson and Orr . . . Not at the Club ? . . . Try all the pickets . . . Yes, Anderson and Orr are the only ones missing so far. Every one else accounted for . . . Find Anderson and Orr . . . Have you tried everywhere ? . . . Sorry, sir, I must report Anderson and Orr missing. They are believed to have gone out for a walk and they've not come back through any of the gates . . . Anderson and Orr are missing . . . Anderson and Orr . . . Yes, Anderson and Orr . . . Anderson and Orr."

Would they never stop reiterating those two names ? Anderson is my friend. They are turning out the Flying Column.

" Bad business, I'm afraid," said the C.O.

We were standing shivering in the dark, our orderlies holding lanterns. The Flying Column was assembling with silent rapidity at the rendezvous. A company of little stocky Gurkhas eager for a scrap, a company of Punjabi Mohammedans and a company of Highlanders, silent with suppressed fury.

" If there is anything the Khyber Railway can do," I said.

" Thanks, no."

" Motor transport ? "

" By Jove, yes. Can you lend us one of your fast Fiat lorries, the ones with pneumatic tyres. The poor fellows may be only wounded."

" It's here. I sent to have one ready as soon as I heard. There's an English driver, my foreman, Smyth, who has insisted on going."

" Good."

" Sir ! Can I go too ? "

" What's that, Hall ? "

" Can I go with the lorry ? "

" No. This is a soldier's job. We're just civilians."

" Hell ! "

" Sorry, old boy."

The Flying Column melted away into the darkness. Nothing to do but wait.

Hours afterwards, footsteps outside. Smyth Sahib has come. Come in Smyth . . . Thank you, Smyth. Very good of you to go. Thank you. Good night.

. . . . . .

I heard the miserable story afterwards. As the column moved along the Mulagori road in the darkness towards Haidari Kandao, they heard shouts from about a hundred yards to one flank. It was some Shinwaris calling out that two Sahibs had been shot and would be found on the road at Haidari Kandao about a mile and half away. They would not come and guide the column for fear of the troops exacting vengeance. There would be no resistance to the troops. The two officers were found as described, quite dead, murdered at close range by rifle fire. Their useless revolvers were in their hands. They had evidently gone out for a walk in the evening, just as so many of us did when things were quiet. The Mulagori road was not the Khyber road, but a disused track which had been made during some past war. It was a desolate and lonely road, and had not the comparative security of the Khyber road. The murderers were believed to be some bad characters from across the Afghan border, which was only a few miles away.

Next morning the two bodies were to be sent to Peshawar for a military funeral. I was glad to hear that. There was a cemetery at Landi Kotal, a desolate little square with a growing number of honourable graves. But it would be better in Peshawar, where there are trees and flowers.

How were the coffins to be taken to Peshawar ? In an A.S.C. lorry as far as the outskirts of Peshawar, where it would be met by a proper *cortège* with a gun-carriage.

Leaving here at eleven o'clock ? Well, Anderson, I'll come and say good-bye.

They say the only lorry available is the lorry which

brought the meat ration up yesterday. The coffins will go back in it. The meat lorry ! Good God ! !

Half-past nine ! We can just do it.

" Smyth, bring your pneumatic-tyred lorry over at once to the workshop. Here, Punditji, go to the bazaar and tell a cloth-seller to bring all his supplies of best white cloth. He will be paid for what we use. Ah ! Here you are, *mistri*. Now, the lorry is to be made thus and thus. You understand ? Very good talk. Send for the gardener."

For we had a little garden with a few flowers growing round the dove-cot. Anderson used to like that spot.

" See, *mali*, you can tie two sticks like this, one across the other. Then take plenty of flowers, all of them, and tie them on the sticks."

My people responded splendidly. In one hour the lorry had been transformed. It was a poor imitation, but it was decent and clean. The flowers made a brave show.

Now a note to the C.O. offering the use of the lorry.

" You'd better take it along with you, Smyth. Very kind of you to go."

Everyone is very kind.

And so the Khyber Railway had the very great honour of taking the two officers on the first stage of their last journey.

Good-bye, Anderson.

A miserable business. And now to work again. The railway must go on.

. . . . . .

At times the hard atmosphere of hatred and murder seemed almost unbearable. The relentless cruelty of the Pathans to their enemies was unbelievable. I heard tales of feuds lasting for generations until one party was exterminated or driven away. They had a name for one who flies from a blood-feud, a name of contempt. I knew one

such man, Hasrat Ali, who lived apart from his fellows in a little walled fort. He was never spoken of save in terms of loathing and contempt, and he must have had a miserable existence.

There were certain rules established by custom in regard to these blood-feuds. For instance, the road was free to all and no murders or fighting must take place on the road. Furthermore, no firing across the road was permitted. I tried to get it established that the line of railway should also be immune from murder and the idea had some support, but it never really caught on. Villages situated near to the road often had a communication-trench dug from the gate to the road so that the inhabitants had complete security in going about their lawful business. These rules were, of course, rooted in common sense. It would be intolerable if peaceful travellers were involved in some local tribal rumpus so that caravans would cease to use the Khyber. It would be too much to say that the rules were never broken, but on the whole they were fairly strictly observed.

Robbery was often the only motive for some terrible murder, and I often expostulated with my friends for the utter lack of proportion between the value of the loot and of the lives taken. They admitted it was very shocking, but there were some forms of loot whose attraction overrode all feelings of compunction. Such a one was a rifle. There is little a tribesman would not do to gain possession of a British Service rifle. The tales that were told of rifle thieving were incredible. Regiments serving on the Frontier were up to all their tricks, but on very rare occasions some clever thief would get away with one.

The Gurkha lines adjoined the Railway camp where we lived. The little men were housed in long huts, in which they slept in two rows down each side of the hut. One night a Pathan thief, naked and oiled from head to foot, succeeded in getting into the Gurkha lines and entered a hut unobserved. He hoped to snatch a rifle

and get away in the confusion. However, something alarmed the little men, and they awoke to the knowledge that there was a rifle thief among them somewhere in the dark. It must have been a terrible game of blind man's buff for the Pathan, but he actually succeeded in getting away, though he did not get a rifle. I heard the pursuit go raging off into the distance, and then, to my horror, it doubled back so that presently the Railway camp was full of the shouts of running men, revolver shots and all sorts of alarming noises. I put my head under the bedclothes and hoped for the best, but suddenly armed soldiery burst into my hut, and a young officer asked me to turn out my men and search our camp. We did so, but the thief got away.

The affair, however, thoroughly excited the little Gurkhas, who of course could give as good as they got, and it had rather a ridiculous sequel. I had a Peshawari Pathan orderly, that is, a man who was a Pathan but was of a tamer variety, being a town-bred man, from the City of Peshawar. I sent him across one day to the C.O. of the Gurkha regiment with an invitation to dinner. I thought no more about it, but was a little puzzled at getting no reply as he lived only a hundred yards away. Later, I was sitting by the fire reading when I heard the tramp of a number of Army boots outside and the voice of my orderly calling for help. I went out and found him in the hands of several Gurkhas, who had literally chained him up and padlocked him as though he were some ferocious animal. It seemed that they had spotted him as a Pathan in their lines, and had fallen upon him forthwith. He was lucky not to have his head chopped off with a *kukri*.

The raiders would sometimes be very bold and attack a small body of troops in broad daylight if they thought there was a prospect of looting rifles. It was fatal for troops, carrying out the daily relief of pickets, to go by the same route at the same time every day. The tribesmen would spot this and patiently evolve some bold and clever plan for ambushing the party. One such plan was

carried out by causing a mule to stampede on a narrow zig-zag path at exactly the required place and time. In the subsequent confusion, the unfortunate relief party was rushed and several lives and rifles were lost.

As I grew to know the tribesmen better and better, I was occasionally embarrassed by being introduced to some bold raider, who would tell me quite unashamedly about his exploits. He did so in much the same way as a schoolboy would describe how he had scored the winning try, and would often display considerable bashfulness. I used to rate them soundly, and they agreed that this bloodshed was a very bad thing.

"But what can we do, Sahib? It is our women who egg us on. No woman will look at a man until he has killed his enemy. And we cannot kill our enemies without weapons. Besides, we are poor men, and a British rifle is worth one thousand rupees. And further, Sahib, if a man has a good rifle he will want to use it. It is the same with nations."

A shrewd hit, but I hastened to assure them that the memsahibs did not urge us to kill.

"We know that, and it is a great wonder to us. Also, we see that, though the English may quarrel with each other in time of peace, they become like one man when attacked. That also is a great wonder."

It came about one day that I met the ruffian who made a speciality of raiding Peshawar Cantonment and robbing the hotel. This made me sit up and take notice, for my wife and daughter were then living in the hotel.

"Look here, my friend," I said, "my memsahib is now at the hotel in room No. 25. If anything happens to her, take care!"

"Very good, Sahib, I will remember. Nothing shall happen to room No. 25."

"If it does, your throat will be cut within a week!"

He laughed, threw back his head and passed the edge of his hand across his throat.

"So be it. But have no fear."

These lawless men were, of course, magnificent shots

with a rifle. Ammunition was scarce and difficult to come by, as it could not be openly purchased by tribesmen. It was obtained by theft, and also perhaps from gun-runners in the far-off Persian Gulf, whence it would come by caravan. Thus every shot had to tell. They seemed to be natural marksmen, for opportunities to practise were almost non-existent owing to the scarcity of ammunition. Yet they gave me some exhibitions of marksmanship which were very striking. They were also excellent shots with revolver or automatic pistol. It was a pretty sight to see some old ruffian, with a fist like a leg of mutton, bring his weapon down and hit the mark with unerring accuracy every time.

There was one village in Zakka Khel territory, close to Sultan Khel Railway Station, where the inhabitants were completely *kilabund,* that is, besieged and unable to come out at all. It was ringed round by enemies who waited, watching day and night, month after month, until starvation and thirst should drive them out. It always gave me an uncomfortable feeling to pass by this village, as I often did on my normal rounds of inspection. I could not help thinking of the poor wretches inside, hanging on day after day, perhaps hoping against hope that something would happen to release them. For nearly a year the siege continued. Then one day I found the village with its door hanging wide and an air of desolation about it. My companions grunted and shrugged their shoulders. It was his affair, not theirs. He was *kilabund* and had tried to come out. He had been shot down at once. Yes, they were all dead. And they proceeded to talk about something else.

This utter indifference to human life and suffering was simply appalling. The whole land seemed to be tainted with it. From the hard, clear skyline to the bare, stony fields it seemed to breathe hostility and murder. There was something wrong about it which I cannot define. Even in little things there was danger. The barren shale ridges were difficult to walk on owing to the sharp, razor-like edges sticking out of the ground; if

you slipped and cut yourself on them, some poison inflamed the wound. There were times when the feeling of danger seemed to oppress me physically and mentally almost beyond endurance. I spoke of this to my friends but they only laughed at me; regiments only stayed in the Khyber for a short time, and there were special leave regulations even during that short time, so why should they bother. I spoke of my feelings to my Pathan friends and they did not laugh, but looked at me with their long, slow regard. Some of them told me things.

. . . . . .

Soon after the murder of the Seaforth officers, Smyth fell sick and went into hospital. Everything possible was done for him, but in a few days he was dead. I was terribly upset, not only by the loss of a highly-valued member of my staff, but also by the problem of how to give Smyth a decent end. I am afraid we were a godless lot, as the War seemed to have given religion a setback. But Smyth was a good Catholic, and something had to be done about it. Burials in India have to take place within a few hours of death, for obvious reasons, so something had to be done quickly. The good Father who paid flying visits to his flock was not there. The only padre in the place was the Seaforth Highlanders' chaplain, and he was not a Roman Catholic. In the midst of my perplexity the telephone-bell rang.

"Adjutant, Seaforths, speaking. Very sorry to hear about Smyth. What did he do in the War? Corporal in a Mechanical Transport unit? Good. What religion? Thanks. Will you please leave all funeral arrangements to us? Yes, please, all arrangements. You see, he must be given a military funeral as befitting his rank. I'll let you know times. No, you needn't do anything at all."

So at the appointed time we of the Khyber Railway went to the grey little cemetery at Landi Kotal. Presently came the dull thump of the drums and the music

of the Funeral March. It was the Seaforth Highlanders, band and escort in full dress, approaching at a slow march with splendid dignity. It was a good end ; there is none better than a military funeral. The Scottish padre with admirable common sense performed the last ceremony in a manner which honoured both him and the devout Catholic he was burying. The last volleys were fired and then the escort moved off, still with perfect dignity, to a quick march, and I was left alone. Well, good-bye, Smyth. That is how a Scottish Regiment says thank you for what you did for them. I think we are both grateful, eh ?

I was deeply moved by this, and that is why I stand up and take my hat off when the Seaforth Highlanders are mentioned.

Back in our little settlement, Hall set himself to cheer me up.

" We do live, don't we ? " he grinned.

" I hate funerals. They always make me cry, and that gives me a headache."

" Anyway, the work goes on."

" Yes," I said, " the work goes on."

CHAPTER VI

GETTING ON WITH THE JOB

THE plant purchased by Hearn arrived in the course of the next few months. Normally, when constructing a railway, it is often possible to push railhead out over easy country and mitigate transport troubles. But in the Khyber that was impossible. There was no easy country, and it would mean several years of hard slogging to get the "formation" ready for laying the track. "Formation" is a bit of jargon meaning the smooth surface of the ground on embankments, in cuttings and in tunnels, on which the track is laid. Rail level in our case would eventually be about eighteen inches above formation. Thus the arrival of a large fleet of motor transport was invaluable.

There are two roads through the Khyber Pass, one for the caravan and slow-moving traffic, and one for motors. These are not exactly side by side, but they are never far from each other. There was normally a good deal of coming and going on the roads to which was now to be added the Khyber Railway fleet. We had both petrol and steam vehicles. The steamers stood the exacting work of rattling and banging up and down the Pass much better than the petrol-driven lorries. They would calmly take a scandalous overload on occasions up the hills far better than the others. The roads were maintained in excellent order by the Sappers, but here and there the railway and road alignment needed a certain amount of give and take, and some extensive road diversions were necessary.

In addition to alterations to the main Khyber roads, we had to make a lot of roads and paths of our own in

order to gain access to many parts of the line. It was desirable to make it possible for motor lorries to traverse these roads, but this would occasionally involve very heavy work out of all proportion to the advantage to be gained. In such cases the new road would be taken into the hills as far as possible. Materials would then be unloaded and taken to their destination along bridle paths by donkeys.

In spite of all the improvements in modern service, we grew to depend more and more on donkeys for transport over the hills. They were tiny little beasts, not much larger than calves, and they carried two roughly-made panniers, balancing each other, one on each side. These hardy little animals would patter along in a large flock or herd driven by one man, and although the load carried by each was small, the aggregate load of the herd was considerable. For fodder they seemed to be able to exist on anything, in much the same way as a camel, and this primitive form of transport was extremely cheap. I had no expectation that donkeys would be forthcoming in such numbers, but as the work progressed and the news penetrated this part of Asia, more and more of the little beasts appeared until there were thousands pattering about the work on their little hooves. The Pathans used them in great numbers for piling up high embankments. Their panniers would be filled with a few shovelfuls of earth, and then they would go pit-a-pat up a steep path to the top of the bank, where a man would empty the panniers and send the donkey trotting back. They were patient little beasts, and they seemed to be well treated; one peculiarity was, however, that their nostrils were slit when they were young so that they could not bray. At least, that was the story, and it was said to be done so as to prevent donkeys betraying the presence of travellers camped for the night to any robber bands in their neighbourhood. They were hardy little animals, and an accident in which I was involved, which might have been very unpleasant, illustrated this point. I was being driven along the road in a lorry by an Indian

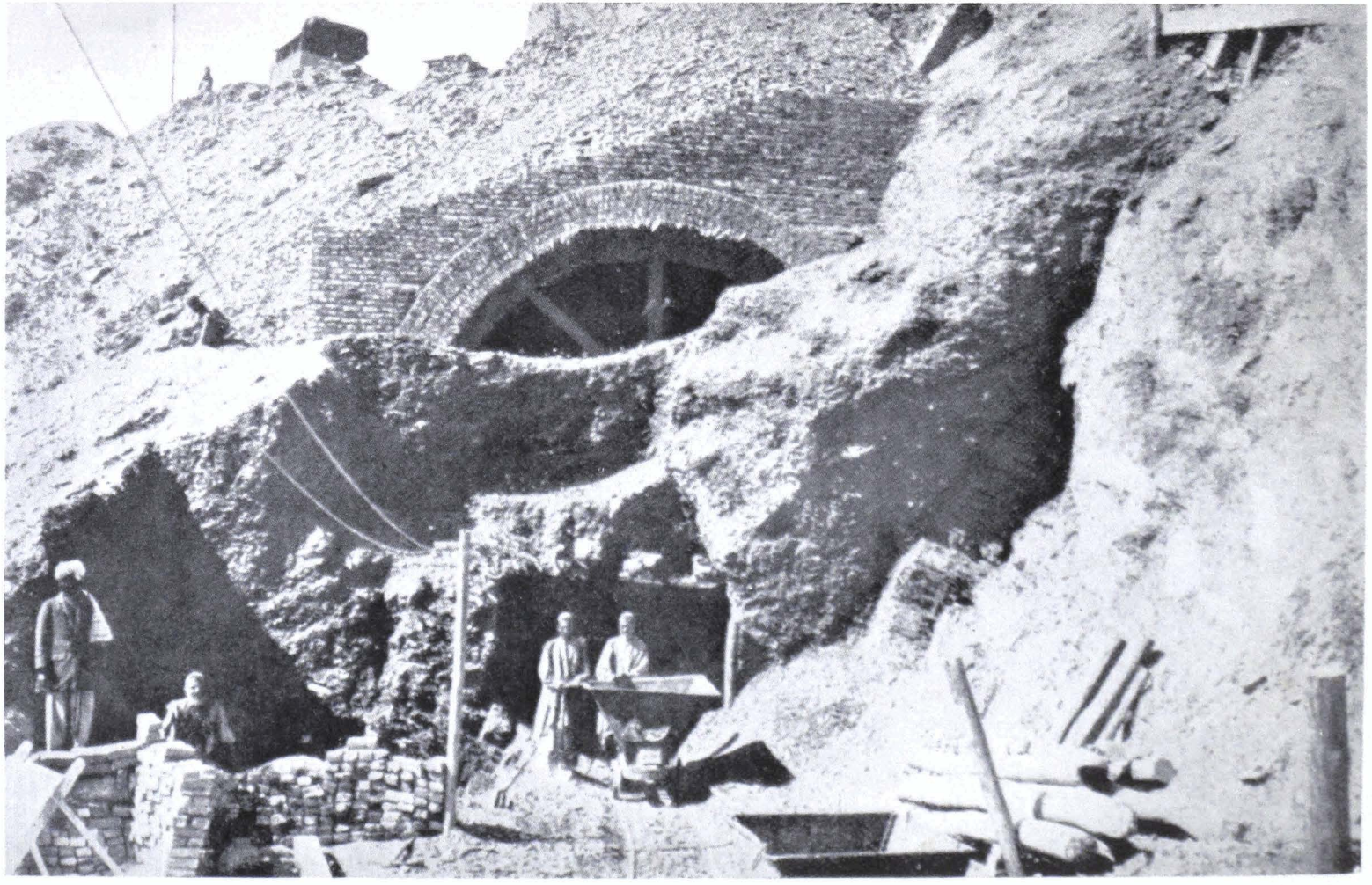
driver and, on one of the few straight stretches of road in the Khyber, we saw ahead the familiar sight of a herd of donkeys being driven along the road by a man who was himself seated astride on one of the donkeys. The lorry rapidly overtook them, and I expected the driver to hoot or to stop when, to my horror, he drove straight into the donkeys, and the lorry came to a stop on a heap of what I thought must be dead donkeys. The lorry driver had apparently dropped asleep, for he woke up with a shout of alarm. The front wheels of the lorry were actually off the ground owing to the poor little beasts underneath. Fortunately there came along a number of tribesmen, and they came running up to help us. The lorry was a light one and, by getting round it and all heaving together, we lifted the lorry clear. The dead donkeys immediately came to life, got up as if nothing had happened and joined their fellows, apparently none the worse.

Then we had to arrange for a supply of water along the line. This meant the provision of many miles of water pipes. There was a big spring of water in the Ali Masjid gorge, and another smaller spring a mile from Landi Kotal, whence water was pumped to all parts of the railway. This service was much appreciated by the tribesmen, and arrangements were made here and there to give a supply of water at places near their villages. Permanent piping that would remain for the service of the railway after it was opened was placed underground. Temporary pipe-lines were, however, laid on the surface, and one effect of this was that in the summer they delivered water so hot from the sun's rays that it was impossible to bear your hand in it.

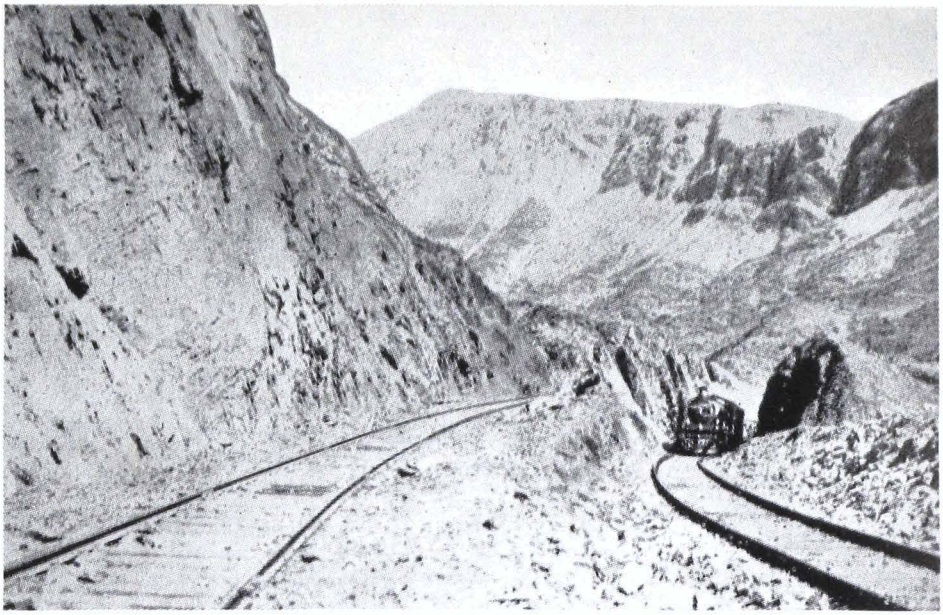
But the most welcome plant was the rock-drilling apparatus. The tunnels could now be attacked in earnest, and batteries of petrol-driven air-compressors and drills began to appear in all sorts of unlikely places on the hill-sides. There were thirty-four tunnels on the railway altogether, and their aggregate length was three miles. They were nearly all on sharp curves and on

steep gradients, so that they were really spirals. They were attacked from both ends, and if possible from adits and shafts also. This meant some tricky bits of instrument work to ensure that the two ends of the spiral met in the middle. In no case, however, were we more than a fraction of an inch out either in line or level. There were many days on which instrument work was impossible for climatic reasons. I have spoken of the Khyber wind which roared through the Pass, and this wind so buffeted and shook the theodolite that accurate observations were often out of the question. A theodolite is simply a telescope mounted in such a way that the horizontal and vertical angles through which it is turned can be very accurately measured. If it is desired to obtain the angular distance between two points, they are simply observed through the telescope in succession, and the angle through which the telescope is turned from one to the other is the desired angle. This is an easy matter under normal circumstances, but with a blast of air shaking both the instrument and the observer himself, observations become impossible. Then again in the hot weather it was impossible to observe accurately owing to mirage, and to streams of heated air flowing over the rocks. These were apparent to the naked eye, and were much magnified in the field of vision of the telescope of a theodolite. Under such conditions the point under observation appeared to be indulging in a grotesque dance or to be waving to and fro in a manner which baffled accurate determination. Thus very tricky bits of triangulation had to be checked and counter-checked many times before confidence could be felt in the result.

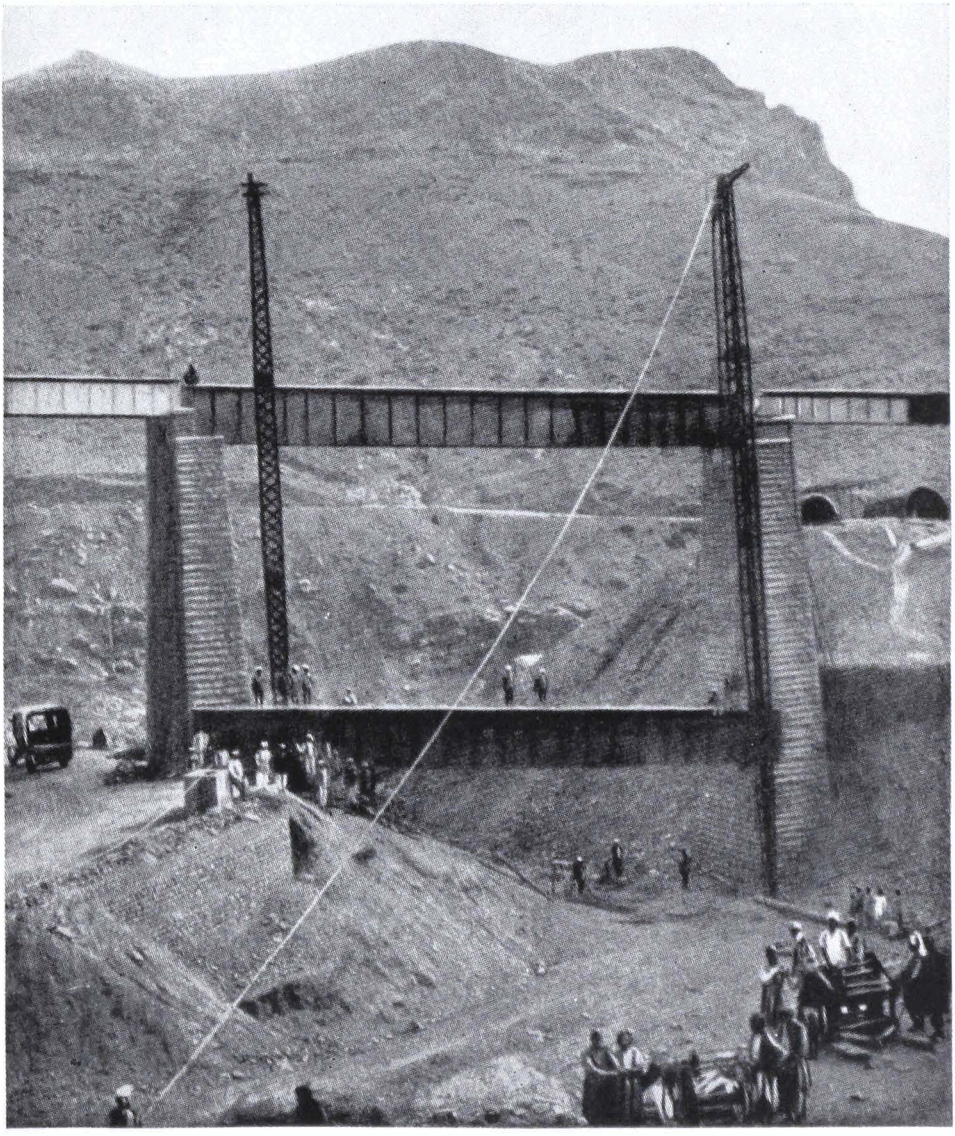
A good many of my friends took an intelligent interest in the railway work. One of them was the Roman Catholic padre, who used to turn up and visit outlying members of his flock now and again. His parish was vast and seemed to cover most of the Frontier Province. In our Railway Settlement at Landi Kotal I had built a hut for any visitors or inspecting officers on tour, and



TRIBESMEN AT WORK ON A TUNNEL NEAR LANDI KOTAL



NEAR MEDANEK REVERSING STATION



HOISTING A HEAVY GIRDER NEAR MICHNI KANDAO

the padre was always welcome to use it. The presence of a cultured and well-read visitor was a great pleasure, and we had many an argument, seated cosily in our arm-chairs over the fire with the chessmen pushed to one side after a game, and a bottle and glasses shining pleasantly in the firelight. We grew quite heated sometimes over some theological or philosophical debate, but we had a useful formula for ending these. I would say, "To hell with the Pope," and he would reply, "Damn the Archbishop of Canterbury," whereupon the fogs of ecclesiastical controversy would be blown away by a gust of healthy laughter. I used to confide a lot of my bothers and troubles to him, and he would give sage advice. He once told me how mystified he was by several of the railway works he could see going on from the road, so I said I would show him round.

"But it's all nonsense about there being any mystery. Engineering is the easiest profession, and it's just plain common sense."

So next morning we started off.

"I won't bother you," I said, "about banks and cuttings. That's only a matter of piling up one and digging out the other."

"But how do your scallywags know how high to pile up, or dig down, or where to do it? The banks and cuttings look so beautifully neat and tidy with their easy curves and uniform gradients, that there must be precise directions to get this result."

"That is only simple arithmetic. You see, we first make an accurate survey along the centre-line, and then make an equally accurate picture of the results to scale on paper. A longitudinal section we call it. Here you are," and I unrolled a blue-print, "here is a bit of it. These vertical lines are drawn every hundred feet along the section. On the ground they are represented by wooden pegs with a tin-tack driven in on top. These figures are the heights above sea-level of each tin-tack."

"But," said the Padre, "do you mean that you have

worked out the height above sea-level at every hundred feet all over these ridges and hills ? "

" Of course, why not ? And at more frequent intervals in very broken country. No mystery here, you see, but just patient hard slogging. Now, this line sloping slightly downwards on the longitudinal section is the formation level of the railway, that is to say, the earthwork level, on which the track will be laid, at each hundred feet. Here are the heights above sea-level calculated by a simple sum in proportion. The gradient is three per cent down, so you'll notice the formation level at each hundred-foot peg is three feet less than the last one."

" Well, that's clear."

" All right. So the height to pile up or to dig down at each peg is simply the difference between ground-level and formation-level at that peg. If this is done correctly the final result must be the smooth surface you admire."

" It sounds simple enough. But I shall have forgotten by to-morrow how it is done. And, anyway, seeing that crowd of murderers and thieves shovelling away looks like nothing on earth. Who controls them and tells them where to dig ? They look quite uncontrolled."

" I've a competent staff of supervisors under highly competent assistant engineers. They wouldn't be here if they weren't competent. But they have a good many special difficulties to contend with owing to tribal peculiarities. There are still a number of the local gentry opposed to the railway, and they have a way of removing all survey marks made by my Staff. However, my lads are getting used to this, and have all sorts of ways of outwitting their enemies."

I told him how careful we had to be to avoid cemeteries. There were many places where the railway had to take an uneconomical location owing to the necessity for avoiding a burial-place or even a single grave of some holy man. These saints' graves are scattered here and there, usually marked by a bunch of little fluttering

flags. It would bring the tribes out like a swarm of angry bees to disturb a grave. I chuckled at the memory of one attempt to make difficulties over such a matter.

"We had just finished locating rather a difficult section. I had been over it, and had finally approved of it, and we were just about to start work when a deputation of Shinwaris came to see me. They said the line passed over a saint's grave which couldn't be disturbed, and the line would have to be diverted. I was puzzled by this, and said I would come and see the place next morning. So in the morning I went off and found a crowd of tribesmen there, and, sure enough, a saint's grave bang on the centre line. I was rather taken aback, because I had been over the line only a few days before, and I could swear that there had been no saint's grave then. I asked one of my Indian subordinates, who was looking a bit rattled, and he confirmed my suspicion that this was a trick to make difficulties. The Shinwaris were very polite, and said that they knew I wouldn't dream of disturbing the grave as the Sahibs were always careful not to offend anyone's religious feelings. I looked at them and felt almost certain that this was a plant, and I thought the Shinwaris were looking rather like a lot of schoolboys hoaxing their master. Almost certain! there was the rub. If I were wrong and desecrated a grave, there would be the devil to pay. These fanatics would not stop short of murder, and the tale of desecration would spread like wildfire and might bring about all sorts of trouble. I asked ironically if they were sure that a saint was buried there and not the bones of a sheep or a donkey which had died quite recently. They professed to be greatly shocked at the idea, but I thought I detected some insincerity in them, and I boldly strode forward and kicked aside the little heap forming the grave. Some bones fell out—undoubtedly sheep's bones! The tribesmen gasped and then broke into a roar of laughter, in which I joined. I chaffed them unmercifully for playing such a trick on me. I told them I knew

they were murderers and thieves, and now they had shown they were liars too. But this was only pulling their legs, and they took it in good part."

Thus we chatted as the car ran easily downhill, swinging round the curves of the road. This sideways swinging made many people sick, just as a vertical rise and fall on the sea causes seasickness. Some people were very susceptible, and when I took visitors up the Pass I used to warn them of this and tell them to say if they felt sick. A pause of a few moments by the roadside was usually enough to effect a cure and prevent the day's enjoyment from being completely spoilt. I was fortunately never bothered with road-sickness, but it was easy to understand and sympathise with its victims as the car swung one way and another in an endless series of hairpin curves.

"This is where you get out and walk, Padre. The path is a bit rough. You can see the tunnel portal up there. That little building is one of the contractor's picket posts, and he has another on top of that ridge, and another at the other portal. His enemies took to loosing off volleys into the tunnel mouth, so he has taken precautions, and so, indeed, have all the others. They've all got little fortified posts defending their works."

"Cheerful," said the Padre. "I can't make out why they don't murder you."

"Neither can I. This noisy engine we are just passing is an air-compressor supplying compressed air to the drills we shall see at the working face. We have to protect these compressors with a fortified post, otherwise the brass fittings and the magneto would be pinched at night. You can see the pipes conveying the compressed air running over the ridge there. The Pathan hasn't yet comprehended compressed air. Steam is familiar to him, so he calls compressed air 'ishteam,' and we conform to his views."

A little more plodding and we reached formation-level, in an approach cutting to a tunnel.

"Look out! There's a tip-wagon coming, and the

Pathan in charge is quite callous about killing or maiming anyone, so pedestrians must be very spry. No, it's not motor driven; it is running down the grade by gravity."

The truck rumbled by and discharged its contents down the hill-side after a perfunctory cry of warning from the man in charge. Several lumps of rock rolled alarmingly close to the road far below us.

"I'm always in hot water about that sort of thing. Fortunately most of our tunnels are in desolate spots far from the road. Now, take this lamp, and we'll go in. Mind your feet, and when we go into the heading mind your head."

"What do you mean by the heading?"

"Well, it's rather a long story. You see, we knew very little about the strata, and as the tunnels are not very long,—the longest is about one-third of a mile,—I decided to drive a heading seven feet wide and seven feet high bang through in every case in order to explore the strata."

"Why seven by seven? Excuse silly questions."

"Well, I don't quite know why. High enough for a man to walk and wide enough to take a tip-wagon. Anyway, seven by seven sounds nice, and we drive the heading at formation-level. Incidentally the heading also verified the line and level which had been calculated in the same way as I explained for banks and cuttings."

"Wait a minute, wait a minute. You drove a heading. How is it done?"

"Just in the same way as you see here at the working face."

The row made by the drills was terrific, but I managed to explain matters. It was simple enough. A large number of holes were being drilled into the rock face, and while we watched, the last holes were completed in readiness for a blast.

"Now they're inserting dynamite or, rather, gelignite cartridges in each hole, ready primed with detonator and fuse. Each hole is well tamped, that is, filled with

earth rammed tight. We'd better go outside now. You see, the situation is that the rock has been drilled in several places, and that there are live dynamite charges, safely tamped home, at anything from three to six feet deep inside the rock face. You can see the fuses hanging out here and there. When the dynamite goes off it will blow off the face of the rock, and then, after clearing away the debris, they will drill a fresh set of holes, and so on."

"Quite clear, but perhaps we'd better go."

"Yes. The blasting supervisor marks all the charges with a ring of white paint on the rock. That facilitates locating a misfire, if he hears a less number of explosions than there are charges."

"I think we'd better go."

"The supervisor is now ready to light the fuses. You see, he has put a lump of grease on the end of each fuse to make it light easily and quickly—no, by Jove, these Pathans are the limit—it's a lump of dynamite."

"What ? ? ? ! ! !"

"Dynamite burns like celluloid when lit, and the Pathans have discovered that. You see . . ."

But the Padre had disappeared.

Outside the tunnel mouth and behind a large projecting rock we waited for the explosion.

"Half a minute more. You'll feel the explosion in the rock you're sitting on before you hear the sound. The shock travels more quickly in the rock than in the air."

Bump-Bang ! A lump of rock whizzed out of the tunnel mouth.

"Good ! Fine !" said the Padre.

"Not really. A perfect blast will expend all its energy in just pushing the rock down. A spectacular blast with lumps of rock flying all over the place is a waste of energy. You get the best results by firing all the charges simultaneously by an electrical gadget, but it's a bit too much to expect these Pathans to work

dozens of those gadgets, so we give them the simpler contrivance of ordinary detonator and fuse."

We waited before returning into the tunnel so as to let the dust and fumes clear away. The blasts had been fired just before *roti-khana,* that is, meal time, and the tribesmen now collected together in little groups here and there on the crags for their midday meal of rough Pathan bread, while the sentries maintained their vigilant look-out from commanding points.

"I still don't see how you meet in the middle."

"But it's quite simple. The centre line of the railway, as it would appear on a map, is actually marked on the surface by a line of pegs with tin-tacks in them. The depth below any peg is obtained in exactly the same way as I explained for banks and cuttings."

"I've already forgotten how that was done, though it appeared clear at the time. But, anyway, you don't expect me to believe that your men actually made accurate measurements over that impossible hill," and he pointed to the pinnacles, precipices, and fissured crags above us.

"Certainly they did, and very accurately too."

"They must be expert Alpine climbers as well as surveyors."

"Of course."

"I think you said this is an easy profession."

"Just common sense. And a nice open-air job, too. Come on, let's go through the heading. By the way, you're the first Englishman, barring us railway blokes, to go through it. Mind your head."

"Too late. Anyway, it's an old topee. Glad I had it on."

Soon we were in darkness, lit only by our lanterns. There was an ominous drip of water and a musty, damp smell.

"Notice, Padre, the strata have completely changed since we left the portal, partly of course because we are going round a curve, and so the dip and strike seem to be changing."

"What are dip and strike?"

"The shale is in layers, as you see, like the pages of a book. Tilt the book up at an angle while keeping the back of the book horizontal, and that is the dip. Now lift up one side of the book so that the back is at an angle, and that is the strike."

"This easy profession of yours . . ."

"But what I meant about the strata changing is this frightful deterioration of the shale right inside the hill. Where they were blasting you saw that the rock was very hard and dry. It can stand being opened out to full tunnel size without any timbering. But look at this where we are now. This heading is only seven feet by seven, and it has to be heavily timbered. Mind your head."

"Too late, again."

"Sorry. The timbers were being crushed here, and we have had to put in extra frames, so the head room is less. Listen!"

We stopped, and there was silence except for our breathing. Silence? Not quite. Somewhere there was an indistinct murmur, so indistinct that it might be imagination. There was a faint hiss too, a very menacing noise. A handful of shale fell with a splash from the glistening wet side of the heading. A sudden groan and a crack from the straining timbers startled us.

"There is a tremendous pressure here," I said as I stabbed the uprights with my stick. "You can tell it by the sound. Wood usually responds with a cheerful, comfortable sound. This is hard and dead. We must get some supporting frames in here."

Crack!

"Shall we go on?" said the Padre.

"It's a cruel trick Nature has played on us. We all thought the shale hills would be bone-dry in this rainless land, but here inside these barren dry ridges is a wet, spongy mass of black porridge. See, you can dig it out with your fingers."

S-s-s-s-ss! Crack

"I try to explain that hissing noise as due to air being driven out of the strata by the water, but I don't know."

"This nice open-air job of yours is going to be the very devil when you come to enlarge the heading to full tunnel size. I can see that."

"The very devil. That's the word."

"Now I begin to understand why you talk about these hills as if they were definitely hostile."

"All nonsense, I suppose, but here we are hammering, digging and blasting away and rousing all the powers of darkness from their sleep."

S-s-s-s-ss !

"The damned place is alive ! What would happen if the timbers gave way ? "

"Oh, well, the heading goes right through, so we could get out one way or the other, unless we were trapped between two falls. The tunnel is on a curve, otherwise you'd see daylight in both directions."

"Daylight is what I want to see at present. Come on, let's get out."

So we tramped along the heading down the grade with a growing stream of water trickling round our feet. At the portal the Padre drew a deep breath.

"I don't approve of this confounded anthropomorphism of yours. All a mass of ignorant superstition. Medieval nonsense and clap-trap."

I grinned.

"We might talk it over to-night. I daresay, in a comfortable chair in my hut in front of the fire, I might agree with you."

"Can I see how one of the drills works ? "

"Of course. Come and work one yourself. We pay the men piece-work, so you might drill a hole and earn some pay for useful work for once."

The Pathans flocked round us, scenting a bit of fun. I explained that the Sahib was a padre, and he was immediately treated with great respect The English

are People of the Book, and padres are learned men to be honoured as such.

"Hold it this way. That's it. It will make a tremendous clatter. That's due to the pneumatic hammer, inside the casing, hitting the end of the drill. The other end is, of course, the cutting edge, as you see, sharpened to a blunt chisel point. There are two actions. The drill is struck by the hammer very rapidly and is also turned round slowly. So there is a chipping and grinding action at the bottom of the hole being drilled. There is a small hole down the centre of the drill, and a blast of compressed air is sent down this hole, so as to blow the chippings of rock out of the hole. You mustn't mind the racket and the dust. Now then."

The Padre held on, helped surreptitiously by a Pathan, who chuckled appreciatively at the sight of the holy man working a drill. This was a Good Thing, and would bring luck to the work.

"I think that'll do. Poof! I'm smothered in dust."

"You look all right except that your beard has turned grey. An improvement I think. Here is your pay, one anna six pies."

A rumble of laughter from the tribesmen.

"The Padre Sahib has been paid for his work just like us. Make him give a receipt, Sahib, or perhaps he will cheat you."

"The ignorant man cannot write," I said, "but be sure I will take his thumb-mark on a receipt."

We all chuckled and chaffingly bade farewell to each other.

"Before we start back, I want to show you another bit of Nature's devilment," I said, and we climbed slowly up the ridge, through which the tunnel was being made, to the little fort guarding it. There were three *khassadars* inside having their midday meal, and they offered us some tea. We were glad to sit down after the climb, and the tea was refreshing. Good Russian tea served piping hot in little bowls with plenty of sugar and no

milk. We managed to find a nook sheltered from the wind and facing the sun. The warm sunshine was pleasant after the damp chill inside the tunnel. A *khassadar* came and offered us some hard-boiled eggs with the tea. He had peeled them hospitably, and now handed them to us complete with his thumb-mark squarely planted thereon.

"That reminds me," said the Padre. "What did you mean when you told your scallywags you would get my thumb-mark on a receipt?"

"The shade of the late ingenious M. Bertillon must writhe in anguish, but he is the originator of the idea. The Government of India in its wisdom has decreed that, when a payee cannot write or affix a seal impression, his thumb-mark must be impressed on the receipt. This creates a great impression, and a man who has had his thumb plunged into the ink and pressed hard on to an official document, thinks that the Sirkar has acquired some mysterious hold over him. Some of the tribesmen object, and in such cases I jab my own thumb-mark on the receipt, and this seems to be quite satisfactory to the Government."

The Padre laughed.

"What a lawless ruffian you are. Just as bad as any tribesman!"

"Not really. You'd be surprised at the tremendous care taken to estimate the cost of all works and to keep costs within these estimates. The complete estimate for the Khyber Railway is a bound volume of several hundred pages, in which every work is costed in detail. Accounts are kept on the basis of these estimates, and our audit watch-dog barks loudly when a discrepancy arises. Still there are occasions when a little saving common sense has to be applied as in the case of the thumb-marks."

The Padre merely chuckled, and we sat in silence for some time, enjoying the genial sunshine and the sight of the rugged precipices rising tier on tier above us. However, time was passing, and we could not stay too

long, as there was always the need to be borne in mind of reaching Landi Kotal before dark.

"Before we go," I said, "I want you to come over here and look at that slope below us there."

"Well, what about it? It's just like all the other ridges in this god-forsaken country."

"Keep looking at it."

In a few minutes a lump of shale suddenly seemed to come to life. It leant forward unsteadily, and cracked into a thousand fragments which clattered down the slope towards the tunnel portal.

"That's odd," said the Padre.

"Very odd," I said, "but we've so banged, thumped and belaboured this hill, that it has started to move down, and have a look at what is going on."

Another piece of shale slipped and went clattering down.

"Good gracious, the whole hill is on the move. If you look intently enough, you can see a slight movement, and now and again a bigger lump falls down. It's a landslip."

"That's it," I said, "just a landslip. Now come over here."

We scrambled along a rough path above the landslip. The Padre stopped suddenly, and with good reason. Slashed across the hill-side was a series of newly-opened crevasses, some small and some big enough to engulf a man.

"How deep do they go?"

I shrugged my shoulders.

"There's no means of telling."

As we stood there, we heard the now familiar rattle of falling shale, and one of the cracks seemed to widen slightly. Looking down the steep slope of the ridge from where we stood, everything looked dreadfully unstable.

"The trouble is that there seems no end to this instability," I explained. "You might think that, once this landslip has gone as far as it can, it would stop and

the whole hill would settle down. But that is not the case. These cracks or crevasses make the adjoining strata unstable, and then they in turn start cracking and moving. This sort of thing will go on for years."

"How can you stop it?"

"You can't. An engineer can do a good deal, but if Nature really gets moving on a big scale, poor little puny man must just stand aside till she stops."

"But what will happen to the railway?"

"These movements are very slow. Once a railway has been built it's devilish hard to destroy it. You remember during the War how quickly a railway, which had been scientifically destroyed, could be restored. It's the same here. For years there'll be occasional slips, but they can be quickly restored, though it will be nasty work sometimes."

We returned to the *khassadar* post. This was at the summit of the ridge, and we could look down and see both portals of the tunnel. Further down the two roads curved in and out of the sides of a ravine, and at the bottom was the dry, stony bed of a *nullah*. The Khyber wind blew strongly, and an occasional cloud of dust on the roads spoilt the hard clearness of the air.

"You see, Padre, what puzzles me is this. Just notice what a steep ridge we are standing on. It is so steep that you can't climb straight up or down, but must zig-zag and scramble to get here."

"Well, why not?"

"But don't you see the mystery? You've seen the inside of the ridge. It's just a spongy, wet mass of black porridge, whatever geologists may call it. It is apparently incapable of standing up as a steep ridge. There's a hard outer skin to the ridge, and the rest is much. It's a marvel there is a ridge at all. You might expect the whole thing to squash down into a low mound at any moment."

"Let's be off."

"The ridge must be in a state of unstable equilibrium. And now we are blasting into it twice daily with dyna-

mite. You felt the shake yourself when the blast took place. How do you suppose an unstable ridge likes treatment like that ? "

" Well, I'm off."

We slid down to the road, where we met Peters. I spoke to him of the heavy pressure I had noticed in the heading, and ordered some more struts to be put in.

Peters listened attentively, nodding his head, as I pointed to the tunnel.

" Yes, yes," he cried, and hurried off in the opposite direction.

The Padre grunted as he got into the car for the return journey.

" I don't wonder my hair turned grey in that damned tunnel of yours. You may think it's due to the dust, but it was just ordinary fright."

As we bowled along, well muffled up in our coats against the freezing air, I told him of my ideas about this region.

" I'm no geologist, but I can see a good many signs that these hills are geologically recent, and are, I think, still rising. The hills getting higher, I mean. So that here and there instability will develop, and there'll be a landslip or an earthquake, or both. One causing the other or vice versa. Minor earthquakes are fairly common, as you know."

" I suppose that's what you mean when you speak of this region as only half created ? "

" I suppose so."

We were getting into more open country now, where the Pass widens in Zakka Khel territory to the main Khyber valley. All the drainage from the hill-sides is finally concentrated into the main Khyber *nullah,* which is, however, always dry except just after a storm. The water runs off the bare hills during a storm as though off a roof, and rushes down the tributary *nullahs* like water down a street gutter. Usually the storms were local, and the storm water reaching the main *nullah* was insufficient to affect it seriously. If ever Nature

roused herself to a major attack, and all the tributaries poured into the main *nullah,* the flood would be serious.

" These tributary *nullahs* are a bit troublesome. They start from well-defined cracks and gullies in the hill-sides, which become roaring torrents in a storm. From the point where a torrent reaches the loose detritus in the valley, the stream has, however, a tendency to wander. It will sometimes dash down one watercourse and at another time will completely change its course, and charge violently in a different direction. This makes the provision of the bridging required rather uncertain in places, so I have been trying to train some of these unruly watercourses into definite channels. In one case I thought I had been successful, but I have been defeated by tribal enmity."

" How do you mean ? "

" It was this way. You see that cleft in the precipice over there ? It brings down a great volume of water during a storm. This water took either one or other of two courses in an apparently haphazard way, so I built a small dam to bung up one of them. This was strongly approved by a tribesman who was going to build a new village, but couldn't find a suitable piece of ground. When the dam was built he went and put up his village —the usual little fort—on the waste ground which was now protected from flood by the dam. Everyone appeared to be satisfied, but unfortunately the builder of the village had enemies as usual. These enemies waited until a storm had actually burst on the hill-side above, and then they rushed a party of men to the dam and cut a narrow channel through it. The raging torrent did the rest, and the dam was swept away. The flood raced down the steep slope and washed the new village away."

" Was anyone drowned ? "

" No, I don't think so. The water would make short work of the mud walls of the village, but there would be time for the inhabitants to get away."

We were running along the main Khyber valley

while we talked. The road crossed and recrossed the main *nullah* by Irish bridges which were, of course, blocked during storms. Not so the railway, which must run in all weathers.

"I'm going to show you how we proposed to bridge this turbulent *nullah,*" I said.

"I was going to ask you to show me something nice and easy after those damned tunnels."

"I don't know about nice and easy. An engineer is always at war with Nature. Nature in these parts . . ."

"Oh, do shut up about Nature. You give me the creeps. I'm going to give you a good lecture to-night, whether you like it or not."

"Here we are. No climbing this time. The road, you see, is scarcely more than a few feet above *nullah* level. In fact, water slops over here in even a moderate flood."

"The water must be pretty deep before it gets over here."

"No, not very. It's an optical illusion. This is not an ordinary valley with a nice easy slope to it. The whole valley is tilted up at a fairly steep slope which your eye disregards. But you'd soon notice it if you started to bicycle up the road. Imagine yourself making a map of this valley on a drawing-board. Then tilt the board to represent the slope of the valley, or the gradient on the road, if you prefer. The *nullah* doesn't flow straight down but wanders from side to side, so of course the water is liable to slop over the down-hill bank wherever it is flowing across the drawing-board. Where we are standing is one of the places where it slops over."

"Well, what happens then ?"

"Nothing serious at present. The water flows away rapidly, making a mess everywhere and forming holes and gullies, but as this is waste land no harm is done. But things will be different when the railway embankment is built. The water that slops over might easily cause a washaway a little further down the valley."

"Yes. I see. So you either provide an easy getaway for this water or else compel it to keep to its bed."

"That's right. It's just common sense, as usual. The right thing to do is to make the *nullah* keep to its bed. Once water starts wandering down the steep slope of this valley it might lead to the *nullah* completely changing its course, and leaving the bridge high and dry, while it cuts a new course through the railway somewhere else. So that's the reason for those training works you can see going on. They are guide-banks to keep the *nullah* in its present course."

"I see."

"But that's not the only peculiarity of this infernal *nullah*. There has been no really big storm yet, but such floods as we have had show that, after the flood has subsided, the level of the bed may have changed enormously."

"Does it get raised or lowered?"

"Either may happen. The flood water comes charging down carrying an enormous amount of debris with it. It digs this debris out from some places and deposits it at others, quite an random. So, unless we do something about it, the bridge may either get buried deep in debris or, worse still, the flood may dig down and undermine the foundations."

"So the *nullah* is as unstable as the hills, and is likely to wander all over the place, up and down and sideways."

"Yes. Hearn has given a lot of consideration to this problem, and has, I think, produced an excellent solution to it. Of course, it would be simple enough to carry the railway at a high level, put in very deep foundations, and then just laugh at the vagaries of the *nullah*. But that would mean enormous approach works at a cost quite out of proportion to the size of the *nullah*. An engineer must observe reason in these matters, and keep the cost of his works within bounds. We engineers have a saying that any fool can be an engineer by spending enough money."

"What is the size of the bridge?"

"Quite small. Four spans of forty feet each."

"How do you settle the size?"

"It's one of Hearn's specialities. He is an expert on the drainage of catchment areas, and he has crystallised the experience of years into an ingenious formula, depending on the characteristics of the country, which we are using for all our waterways. The results will one day be tested when Nature attacks in force. So far there have only been moderate floods. If Hearn is right, he will have saved enormous sums which might otherwise have been spent on a reckless safety-first lot of bridges."

"I never realised there was such a lot in even a small bridge. I thought you just shoved it up."

We walked down to where the foundations were being concreted. For the four spans there were, of course, two abutments and three intermediate piers. Deep holes had been dug for these, and they were being filled with concrete up to ground level. When complete they would form massive blocks on which the superstructure would be built.

"Yes," said the Padre, "but what happens when the *nullah* tries to bury you, or undermine you, like you said?"

"Wait a minute. You see these two trenches dug right across the *nullah* from abutment to abutment and going down to the same depth as the main foundation blocks. These are going to be filled with concrete and reinforced with steel up to ground level. After that a massive slab of reinforced concrete will be put in and cover the whole of the floor of the bridge at ground level. Do you visualise that?"

"Yes."

"Now imagine a flood. The water comes roaring down carrying masses of debris. At the bridge it is forced by the guide-banks to keep in a narrow channel, and to flow through the spans provided for it. If it is trying to pile up debris and bury the bridge, the narrowing of the channel will increase the speed of flow and

counteract this tendency. For this reason the flood will always tend to dig down at the bridge. However, it will then meet the concrete floor and, if that withstands the assault, it will be unable to dig lower. The flood will then probably attack the downstream edge of the floor, and by pouring over it in a mighty rush dig down with a view to undermining the floor. But here it will be met by the downstream curtain wall formed when this trench is filled with concrete. The same thing will happen if the flood attacks the upstream edge of the floor. If all goes well the flood should shoot through the forty-foot openings and, when its fury has abated, the *nullah* bed should remain where it was without wandering or heaping up or scouring down."

"Very ingenious."

"It's a troublesome problem. A mountain torrent in a well-defined rocky bed is a simple matter to bridge. It's the instability and looseness of the soil in this valley which causes the trouble."

We climbed into our car and headed for home. The wind had died down somewhat, and it was not so cold now, although the sun was sloping to the west and long shadows were forming on the hills. The steely blue of the sky, the yellow ochre of the sunlit hills and the indigo of the shadows made an exquisite colour pattern. There are times when the Khyber is beautiful in spite of its barrenness. The Afridis have a legend that the hills were once covered with trees, and that the climate was different.

"They say that the armies which have marched and counter-marched through the Khyber cut down all the trees and ruined the climate. In far-off days they say it was a pleasant and populous land."

"I wonder."

"So do I. There *is* a connection between lack of trees and barrenness. It's a sort of vicious circle. Where the hill-sides are plentifully clothed with trees the rainfall is entangled in them and in their roots, and it soaks into the soil, flowing gently away in perennial streams

which irrigate the lowland fields. And so more trees grow, and the land flows with milk and honey, so to speak. But if the trees are destroyed, the water rushes violently down, scouring away the soil, uprooting the few trees that remain, and burying the lowlands deep in debris ; just like you see here. And it almost seems as if Nature finally completes the ruin by withholding rain from such accursed lands. The climate seems to change, so there may be some truth in those Afridi legends."

" I expect they tell you a lot about their history ? "

" Curiously enough they do not seem to know much about themselves. Their legends are much the same as the Old Testament history, but their heroes are differently selected from ours. For instance, Nimrod is a very great man to them. But they've told me no sort of connected history. They have vague memories of greatness, and they call themselves ' beni Israel,' that is, Sons of Israel."

We were pleasantly tired and glad when Landi Kotal came in sight. We passed through the gate in the barbed-wire entanglement which encircled the camp, and a short run brought us to the Khyber Railway enclosure. Tea and toast in comfortable arm-chairs in front of a roaring fire formed a pleasant end to our day.

CHAPTER VII

POWERS OF DARKNESS

THE longer I lived on the Frontier, the more I became convinced that there was something about this strange country that differentiated it from other lands. I am not thinking so much of its terrible history since the earliest recorded invasion by Alexander the Great, though I suppose such events leave a mark on places. Nor am I greatly impressed by the knowledge that countless men of all races and civilisations have died there, though that is an undeniable fact. It would be easy to imagine that the ghosts of these hardy warriors still haunt the places where they died their violent deaths. But I do not think many people really believe in this sort of thing, though historic places have undoubtedly an atmosphere of their own. There may have been such an atmosphere in the Khyber, but what I felt very strongly indeed was that there was something else, something definitely primitive and evil.

I did not like speaking of this to my English friends, as they only laughed at me. I have no doubt that did me a lot of good, for it does not do to let one's fancies have too free a run. But when you have the luck to be building a great work like the Khyber Railway, you cannot help building a great deal of yourself into the railway. There is a sort of inevitability that leads you on. Each step seems to follow so easily and naturally from the last that the work does not seem to present much difficulty once it is well started. But this very inevitability that drags a man on seems to be taking something out of him all the time. Shakespeare knew all about it, and put his feelings into words in the 107th Sonnet.

In the Khyber, this urge of things yet to come seemed so strong at times as to be almost overpowering. When any outrage or murder had been committed, a feeling of tension spread through the land in advance of the news. I do not think that the explanation of this is merely that the tribes have some means of spreading the news more quickly than we have. I have heard of such means in other lands, drum beating, smoke signals and the like. If there had been such a simple method of communicating news in the Khyber, it would have been patent to every one. But there were times when it was immediately obvious, when starting out on an inspection, that something had happened. The tension always present was then doubled and redoubled, and the tribesmen were clearly ill at ease. I would ask what was the matter, only to receive an uneasy reply that there had been a happening, they did not know what. The tribesmen tended on such occasions to gather in little groups, looking furtively round and muttering among themselves. I might be alone with a party of Pathans, who were certainly receiving no signals or messages, and yet the feeling of unease would deepen until some greybeard would venture that there was bad news from such and such a place, but still without any definite information. Later the dreadful tidings of murder and outrage would be received by telegram or telephone, and amply confirm the advance rumours among the tribes.

I suppose an engineer ought not to have ideas like this, and probably his employers would prefer him to be a dull, matter-of-fact sort of person, with a comfortable contempt for everything except hard facts. But an engineer comes so close to Nature, in all her moods, that I think he is the better man for letting his intuitions have a chance to make themselves heard.

I often spoke of my feelings to the Pathans and Shinwaris. They did not laugh, but nodded in complete comprehension. I was pleased to find that they did not mind discussing religious and philosophical matters with me, although they were devout Mohammedans

with a touch of fanaticism. For some reason they credited me with being a learned man, and they often expressed polite regret that I did not embrace Islam. When I said there was no chance of that, they said they were sorry I should have been born into such an erroneous faith as Christianity, but they supposed it couldn't be helped.

They looked on both Christians and Jews as people who had a religious faith, but had fallen into serious error. The rest of the world consisted of idolaters who were outside the pale. People of the Book, they called us in their graceful phrase. They looked upon Isa, that is Jesus, as a great man, and perhaps a Prophet, but smiled indulgently at the ridiculous idea that he was God. They soon gave up any idea of converting me, just as my padre friend did, and we got on finely.

Old Sher Ali Khan was a fairly frequent visitor, and I was always glad to hear my servant announce his arrival for a yarn. He was not working on the railway, so we were never distracted by shop matters. He had fought against us in several scraps and had also served in the Indian Army, so he was an interesting old boy. One day we were talking about religion, and he was telling me legendary matters about Ibrahim, Ishak and Yakub and other worthies whom we know under similar names in our Old Testament. There was a strong likeness between his legendary stories and ours, and I went and got my Bible and translated some of it to him. He was greatly interested, and salaamed courteously to the Bible when I produced it.

"Verily," he said, "God is one. But," he added, "Mohammed is his Prophet."

One thing led to another and we grew quite intimate over these matters, and the conversation somehow got on to the subject of devils and demons. I told him of my vague feelings of disquiet at times, and how I felt we were somehow disturbing the Khyber with our railway works. I said sometimes at night, outside my hut, I would stand and listen.

"It is at night, Malik Sahib, that the influence is so strong. The air is quite still when the Khyber wind dies down at dusk. The stars shine steadily in the cloudless sky, and the Silence is over everything. Maybe there are some noises in the camp, someone may be singing or there may be footsteps. But these human noises do not seem to break the Silence, but to lie on top of it. And the Silence is not really silent. There is a deep quiver or vibration somewhere, below all the natural sounds."

Sher Ali Khan puffed his cigarette for some time. Then he said:

"I see, Sahib, you are one who understands. There are many of the Sahibs, as there are with us too, who only think of sport and women, and laugh loudly at everything. It is good to laugh, but I am an old man, and I know there are many things which cannot be laughed at."

He sat smoking silently and looking into the fire.

"It is well that you do not go out at night. I do not like it, and it is better to be at home after dark. For it is true, Sahib, that there are demons in the Khyber. We all know it."

"Tell me, Malik Sahib."

"I have often heard them. Once I saw them, and I was very ill for a long time afterwards. I will tell you the story, Sahib, because you are not foolish but a wise man who has read many books. You have doubtless heard of a Churail?"

I nodded. A Churail is the wraith of a woman who has died in childbirth. She is condemned to wander the earth and, fantastically enough, her feet are turned back instead of forwards. She tempts a human being to follow her, and she entices him to a graveyard, where demons seize him and devour him. The unfortunate being is then lost both body and soul.

"I was returning late one evening to Jamrud, where I was spending some days on business. You know the place on the road well, Sahib, just below Shahgai Fort,

where the road begins to descend steeply towards the mouth of the Pass. The sun had set, but there was still a little daylight."

I could easily picture the scene. The last glow of sunset would be directly in front of him as he strode along the short straight stretch of the road before it started to zig-zag down. Behind him darkness would be visibly spreading from the east, and before long the last glimmer of the short twilight would be gone.

"I was a little anxious at being out so late, for Jamrud was still some three or four miles away, and I hurried along. I was greatly surprised to see a woman on the road in front of me, for you will of course understand, Sahib, no woman should be out alone at that time; so I called to her to follow behind me, and I would see her safely to Jamrud, if she lived there. She did not answer or give any sign, and in some annoyance I called out again. Once again she did not answer me, and I increased my pace so as to catch her up. She was heavily veiled, as was right and proper, and she was moving easily and swiftly along the road. Then, Sahib, my blood froze, for I heard an unusual sort of 'Clop, clop' from her feet, and I saw clearly in the fading twilight that her feet were turned the wrong way. It was a Churail! I tried to run away, but something prevented me. Then she turned and slowly raised her veil. Sahib, my hair bristles even now as I tell you of the terrible look she gave me. I cried aloud in my despair, but she laughed a little, such a horrible laugh, and said, 'You cannot lose me so easily. Follow.' She turned and continued to walk 'Clop, clop,' and I followed with feet like lead unable to tear myself away."

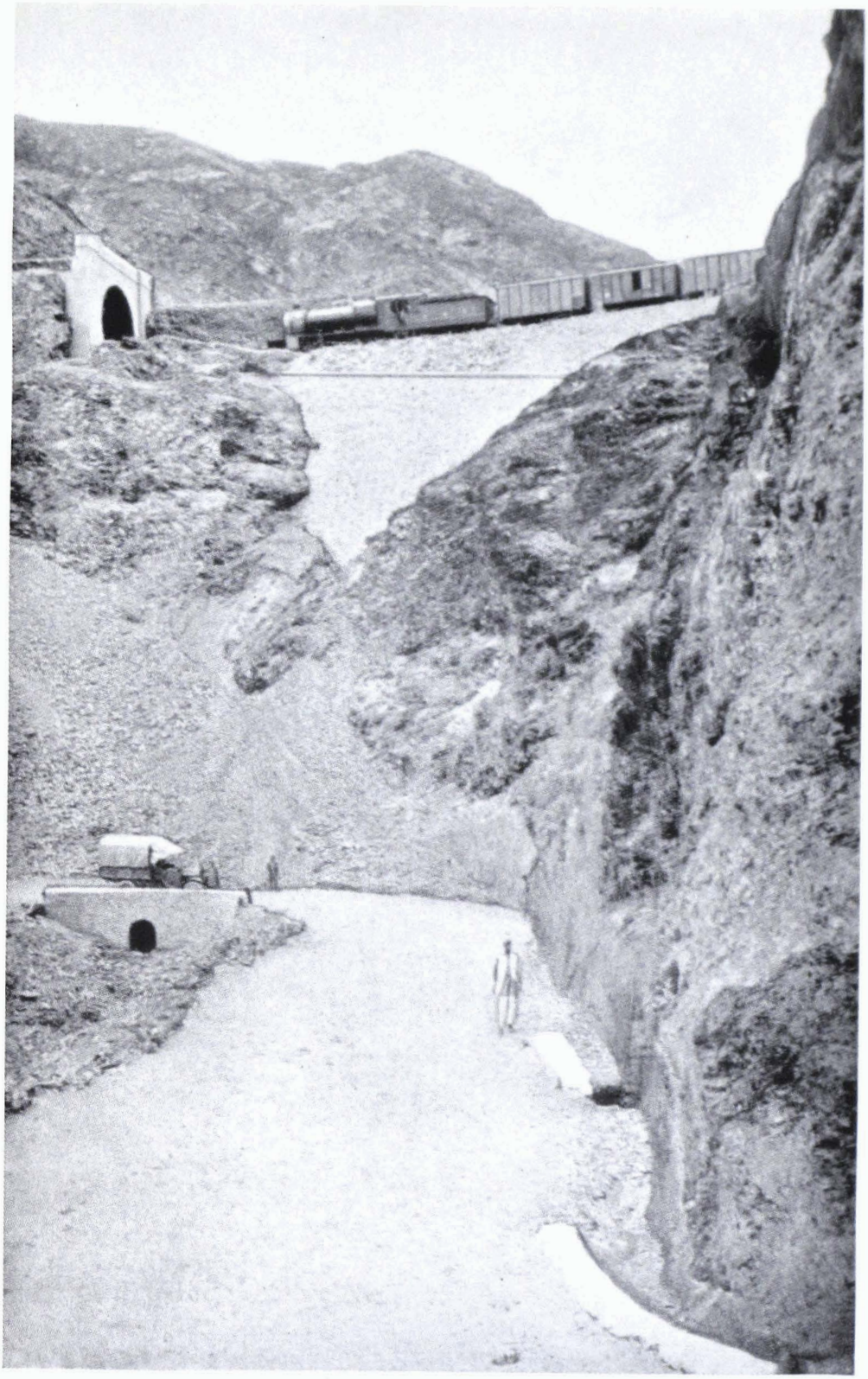
The old man paused. I waited in silence and presently he continued:

"You remember where there is a rough path, which is a short cut straight down the hill, avoiding all the twists and turns of the road made by Mackeson Sahib?"

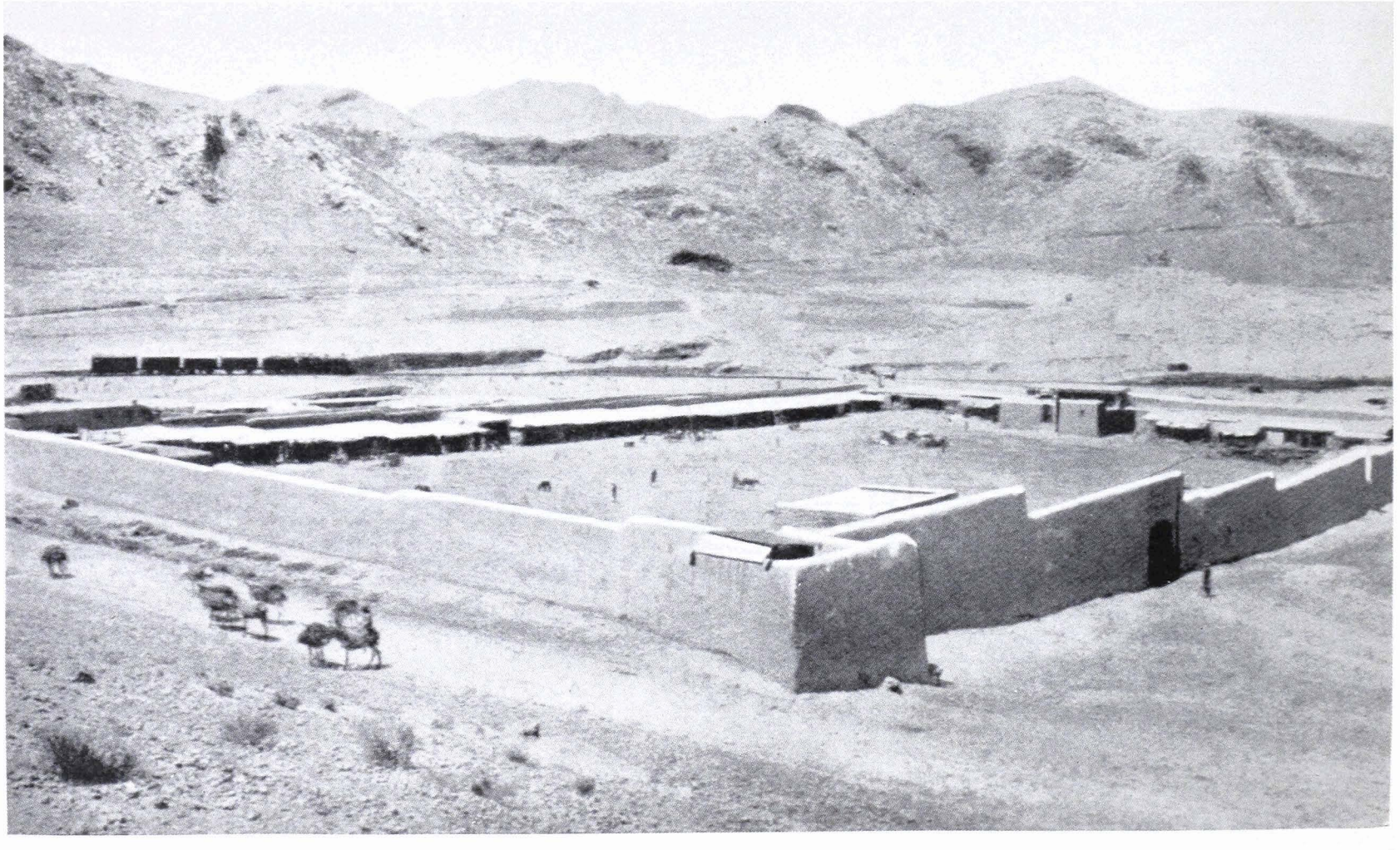
I nodded.

" I made up my mind that at this place I would make a desperate effort to escape the power of the Churail. So we went along the road, and now and again the Churail would turn and give me a terrible look and then laugh. When we reached the pathway, I gathered all my strength and, with a frantic effort, leapt over the wall and ran down the path. It was nearly dark by now, and I do not know how I escaped dashing myself to pieces. Many times I fell and, by the time I reached the bottom, I was bruised and bleeding. I still grasped my rifle, and with a sigh of relief I saw the road in front of me, where the path rejoined it. I must have run for a mile or more down the hill-side. I scrambled over the wall on the road and—there was the Churail waiting for me. She drew her veil aside and fixed me with her glare and said, 'You cannot lose me so easily. Follow.' Sahib, I cannot tell you of my terror. I could do nothing but follow, and so we travelled along the deserted road. I knew that just before reaching Jamrud there was a large graveyard on a mound, and it was there that she was leading me. In my despair I took my rifle and fired straight at her at only ten paces distance. She turned again and repeated, 'You cannot lose me so easily. Follow,' and she laughed louder this time. I gave myself up for lost, and presently there in front of us was the mound with the graveyard standing up against the last glow in the west. I could see the demons on the top of the mound waiting for us. They were clearly outlined, Sahib, against the sky, as tall as three men. I saw them clearly, and so did the Churail, for she gave a long, low call and the demons started to move towards us.

" In my agony I shrieked the name of the One and cried the names of my friends in Jamrud to save me. To my joy I was answered by human voices, and I remember no more. They were anxious about my being late and had come along the road to meet me, when they heard me shrieking their names, and they found me lying senseless in the road. I lay unconscious for a week,



OUT OF ONE TUNNEL AND INTO ANOTHER



THE CARAVAN SERAI AT LANDI KOTAL

and for a long time I was ill from the shock and the fright."

We sat silent in the comfortable warm firelight for some time.

"So you see, Sahib, it is not good to be out at night in the Khyber. I am not the only one who has seen the demons. We hear them, too, at night. There are very few wild animals here, and their cries are well known to every one. There are other very strange sounds."

"What sounds?"

"There are great black things which run fast, making a thud-thud with their feet, and breathe with a hoarse panting sound."

I sat up at this.

"Malik Sahib, you have told me a strange thing. Now, I will tell you what happened to me in India. It was in a Hindu State."

"In a land of unbelievers anything may happen."

"Oh, there were many good Indian Mohammedans, too, living there."

"There are no good Mohammedans in India, Sahib."

I chuckled at the hardy old fanatic.

"Well, I suppose they were all Rozakhors, and much too easy going for you."

"Sahib, unless a man observes the law laid down by the Prophet, the One will not help him in time of trouble."

We seemed to be getting on to a religious disputation, and I had no simple formula for dispelling these like I had with the Padre.

"Anyway, it was a Hindu State, and I was building a railway. I was living in a little bungalow with a veranda, and I had hung in each of the veranda arches a stout curtain made of reeds."

"I know, Sahib, what we call a *chik*."

"Yes. You will understand that when I was sitting reading in my veranda with a lamp beside me, I could see nothing outside the bungalow, whereas from the

outside I should be easily visible through the slits between the reeds forming the *chik*."

"I see."

"Now one afternoon I had been foolish enough to have a quarrel with a Hindu fakir. I found him squatting on the site of some bridge work with a lot of hocus-pocus in front of him made of beads and flowers and patterns in the sand. The contractor was a Hindu, and he looked bothered and uneasy about something. He asked me to persuade the fakir to go away, but when I pointed out it was his job, he said roundly he was afraid to tackle the man. Well, the work was clearly being interfered with, so I angrily told the fakir to be gone."

"Good."

"He only looked at me, and to my surprise said, in perfect English, that he would be gone by sundown. I was rather taken aback, but it always annoys me when I see my work being stopped."

Sher Ali laughed. "No need to tell me that, Sahib. We all have a saying that if a man stops work for five minutes, Bayley Sahib will appear round the corner and be angry."

"Anyway, one thing led to another, and then my pony shied at something and, before I could check it, all the fakir's hocus-pocus had been scattered. Every one looked scared out of their wits, and the fakir stood up and smiled at me, saying we should meet after sundown."

"That was not good, Sahib. Did you kill him?"

"No. It was not in the Khyber where a man is killed for a word. This was in India."

"It would have been better to have killed him. But I am interrupting. Please forgive me."

"I did not think very much more about the matter, being young and ignorant. I was a little ashamed of losing my temper, that was all. Then after dinner that evening, I was sitting on my veranda as I have described, reading a book."

"Was it the Bible Sherif or some other holy book? If so, you would have been safe."

"It was not, Malik Sahib. It was a frivolous book of wicked stories. I have said I was young and foolish."

The old man smiled indulgently. "I, too, have heard such tales told. It is good to laugh, but not when a Hindu pig is making a Sending. I can guess something of what you will tell me. But please go on, and forgive a garrulous old man."

"As I was sitting there, I heard coming from a long way off the sound of some creature galloping fast. It had soft pads and not hooves, by the sound of it. It came nearer, and I could hear its hoarse breathing. Then it came straight for me and sprang at me, so that the *chik* bulged inwards with the weight of its body. I heard it drop to the ground with a thud, and I sprang up in alarm. This had all happened in a few seconds, you understand. I ran into my bungalow for my rifle and went quickly outside."

"Ah! That was bad. Was there a moon?"

"Yes, it was full moon."

"Ah!"

"I searched around but could find no footprints of any large animal. I questioned the *chowkidar,* but he said he had heard nothing. So feeling puzzled I returned to my book."

"With your rifle by your side?"

"Yes."

"Sahib, you were in great danger!"

"Presently the same thing happened again. I heard the frantic charge of the beast coming, and I seized my rifle. This time the thing circled once round my little bungalow, uttering hoarse cries, and then sprang at me. At that moment I fired at a venture, because you understand I could not see anything outside the *chik.*"

"Full circle! It went full circle, and you are still alive to tell me the tale! What happened?"

"The shot roused my servants, who came running up. I told them what had happened, and they huddled

together and said they understood nothing. There were no tracks that I could see. No blood anywhere either, though that was not surprising, as I had fired almost at random at the bulging *chik*."

The old Pathan shook his head.

"I do not understand. It was undoubtedly a Sending, and it went full circle. Did you see the fakir again?"

"This is the strangest part of my story. While we were searching uneasily round the bungalow, there came from a long way off a long wailing cry. The servants broke and ran. My two ponies which were tethered under a tree squealed with fright, and, breaking their ropes, scattered across country. The cry came from the direction whence I had heard the beast come. I could not sleep that night. Next morning they came and told me that the fakir was dead."

"Good! Very good, and the unbelieving dog went straight to hell, where he can do you no more harm."

"I could not help feeling relieved, though in the bright morning sunshine my fears seemed a bit ridiculous."

"You had every reason for fear, Sahib. Truly you must be born fortunate." And he gave me a name meaning "one befriended by God."

"Well," I said, "it was perhaps a lucky chance for me that the fakir died that night."

"A chance? Oh, ay, indeed, Sahib, a lucky chance, as you say," he chuckled. "What sort of rifle was it?"

"A 500 Express."

"A powerful weapon, Sahib."

"What do you mean by that word, 'Sending'?"

"It simply means a thing sent," and I could get no more out of him. He seemed indisposed to talk any more about demons, and he changed the subject by telling me a humorous story about two men who were sitting outside their village, and were having a dispute as to whether a rifle, fired from a certain ridge, would carry as far as the gate of the village. To settle the dispute it was agreed that one of them should climb the ridge and

fire at the gate, while the other would remain and observe, if possible, the fall of the bullet. This was accordingly done, and the one who had fired plodded back to his village.

"Well," he cried to his friend, who was still sitting there, "where did the bullet fall?"

But his friend did not reply, for he was stone dead. The bullet had hit him in the forehead.

Sher Ali laughed till the tears ran down his cheeks.

"That was an unlucky shot, perhaps. Not what you might call a lucky chance, Sahib." And he stood up to go, chuckling happily.

"Peace be with you, friend of God."

"And on you peace."

I told all this to the Padre on his next visit, and he gave me a good scolding. At the same time I could not help thinking that he displayed a lively interest in the strange stories the Pathans told me. They were simple but intelligent men, and they told me of the things they had heard and seen, quite naturally and without embroidery. The Padre denounced me for my ignorant superstition till I read to him about the witch of Endor, which made him think a bit.

"That all happened centuries ago," he said.

"It doesn't make it less true."

"The age of miracles has gone."

"I'm not talking about miracles, nor are the Pathans," I said. "This god-forsaken country is still in the Old Testament age, that's all."

"Bosh," said the Padre.

And so we went on at each other until there was nothing for it but to exchange our formulæ for ending controversy.

I heard from old Khwazai about the ghostly caravan that can be seen during Ramzan. Khwazai was a Zakka, and as proud as Lucifer, and for a long time he would hardly speak to me, as I was a despised infidel. Then something or other happened to melt him, and we

became quite friendly. He observed the fast of Ramzan, or Roza, as they usually called it, with the utmost strictness. The fast lasts for one lunar month, between new moon and new moon, and during that time a man must not eat, drink or smoke between sunrise and sunset. If Roza occurs during the hot weather this was a considerable feat of endurance for a man who went about his business in the ordinary way, as most of them did. I should explain that the Mohammedan year is not the same length as ours, but about a fortnight shorter, with the result that their months fall a fortnight earlier every year. Thus Ramzan, or Roza, works its way backwards round the year as time goes on, so that it may fall in any of the four seasons. The tribesmen told me that on the whole they preferred it to fall in summer ; they found that starving in winter time rendered them very sensitive to cold.

The tribesmen observe the fast strictly, but two dispensations were possible. One was in case of war and the other was for those on a long journey. In both cases the Faithful were allowed to eat and drink without gluttony or excess. There was a great joke against one recognised libertine, who used to spend the whole of Ramzan driving a donkey from Landi Kotal to Peshawar and back again, so that he might claim the indulgence for a traveller. But ordinarily anyone who broke the fast was looked down upon as Rozakhor, that is, one who devours during Roza.

Old Khwazai used to thunder denunciations against all Rozakhors and consign them to everlasting perdition. He held the firm belief, which was shared by most of his fellows, that anyone who did not strictly observe the injunctions of the Prophet was in danger of hell-fire. In the case of Rozakhors this danger became a certainty, and hence arose the legend that the souls of the wretched fast-breakers were condemned to return to earth and make weary pilgrimages during Ramzan. Khwazai grew quite eloquent on the subject and combined his fervid denunciations with the most definite statements about

these ghostly pilgrims, and one day he told me the following extraordinary tale.

" Sahib, I will tell you of what I have seen and heard, though you are an infidel who will assuredly burn in hell unless you see the error of your faith. If I were a wise man I should offer you the Koran or the sword, and you would then be converted to Islam."

" The Koran or the rifle, you should say, you old villain."

Khwazai laughed.

" You will always joke even about serious things. But it is true, nowadays the Prophet would certainly say, ' The Koran or the rifle.' "

" Is your rifle loaded ? "

" It is not, Sahib," he grinned. " But I am afraid you will make a joke about what I shall tell you. This is no story of demons running at night, such as we all have heard and seen."

I hastened to assure him that I was very much interested, and had no thought of laughter. Khwazai nodded.

" You have read many books, and have understanding. Our Mullah says you are a learned man, and have even read books of Hindu idolaters on whom be curses. Though doubtless only to laugh at their foolish errors," he added politely.

We talked thus for a time and then I reminded Khwazai about his tale. So he lighted a fresh cigarette and began.

" It was during the month of Ramzan which, at that time, fell in the hot season. It is very hard to keep the fast then, for there are some fifteen hours between rising and setting of sun. Food is perhaps not too difficult, for we then rise from sleep during the dark and enjoy a good meal before dawn. But thirst is very bad, and by sundown a man's whole body is crying out for water. Then I am very fond of smoking, and I am denied that too during the hours when I need them most. After sundown we eat and drink heavily, and then sleep.

Thus, Sahib, during Ramzan, not only does a man go short of food and drink, but of sleep also.

"One evening I was returning home rather late, and was looking forward eagerly to quenching my hunger and thirst when, by ill-luck, I slipped and twisted my ankle. I tried to walk, but could not, as I was in great pain, and my ankle was badly swollen. I did not like to call for help as I might be found by some of my enemies, so I decided to stay where I was until morning, when I hoped my ankle might be less painful. I dragged myself to the shelter of a rock and made myself as comfortable as possible.

"You remember, Sahib, it was the hot season, so there was no hardship in staying out at night. But I was starving, and my injury seemed to increase my thirst. Now I must explain one matter. The road built by the Sahibs for their motor cars does not exactly follow the old caravan route. The place where I had fallen was some distance from the road, but it was exactly on the ancient track which has been there since the days of Ibrahim and Musa."

I nodded. These two names were identical with Abraham and Moses.

"It was indeed on this ancient track that I was travelling when I hurt my ankle. I lay there in some pain which, however, presently abated somewhat, so I fell into an uneasy sleep. The full moon rose high, and perhaps that is what woke me, for presently I was wide awake, and I was aware that my hair was bristling. But not with fright, Sahib, for I had no fear. But I felt that something very unusual was near to me. I thought it was perhaps some demons, which are always abroad at night, but this was no matter of fear to one who observes the precepts of the Prophet. I looked about me and there, Sahib, I saw a strange and wonderful sight. It has been seen by many of us, this pilgrimage of the Rozakhors. Quite silently they were passing along the old caravan road, and I saw them distinctly in the bright moonlight. Even as now, and as it always has

been, there were many people with camels and donkeys, but they made no sound. There was no lively chatter and laughter, but a sad, slow procession of weary, despairing spirits, expiating their sin while on earth. No word was spoken nor did their feet make any sound."

"Did they notice you?"

"No, Sahib, save one. He was a tall man, with a short beard, who walked with a dignified step, and carried a long staff. He was dressed differently from the others, who seemed to be dressed much as they are to-day. When the tall man came opposite to me, he stopped and turned towards me, and I saw that he carried a scroll in his left hand. He had a noble face, and his skin was fair like yours. The moonlight fell full upon him, and it seemed that he tried to speak to me, for he raised the scroll and opened his mouth, but no sound came. With a gesture of despair he turned and continued his slow walk with the caravan, and he passed out of my sight."

"This was a great wonder, my friend. Tell me, were the camels and donkeys laden?"

"Even so, just as they are nowadays."

"Is it possible they were simply some belated travellers?"

"So I thought at first. But you know as well as I do that there are no belated travellers in the Khyber. No, Sahib, they were spirits, and I saw them because I, too, was nearly a spirit because of my hunger and thirst and the fever of my wound. That is also the reason why the spirit of the wise man saw me. The others were ignorant men, having no understanding."

"Tell me more of this wise man. How was he dressed?"

Khwazai tried to explain, but I could not follow him, and I think he had no clear idea himself. There seemed to be a short tunic and a metal belt, which shone in the moonlight, with a sort of cloak or shawl thrown over his shoulders. One thing, however, had caught his eye and remained firmly in his memory, and that was the pattern of the border both of his cloak and of his tunic.

"Can you describe this pattern?"

We were sitting on a low wall by the side of the road. Khwazai took my walking-stick and traced a simple pattern in the dust of the road. I looked at it with amazement, for it was a simple form of the Greek key pattern. Khwazai saw my look of astonishment.

"What is it?" he said.

"It is a pattern much used by the ancient Greeks," I replied.

But this conveyed nothing to Khwazai. He had heard of Rome but not of Greece. I tried to explain, but when he heard that they were not of the Faith, he lost interest.

"But," I said, "this is a great mystery, for they lived a thousand years before the Prophet. How then could they be Rozakhors?"

Khwazai frowned. "There has always been the Faith," he growled.

"It is a great wonder, for it is known that the Greeks came to these lands led by Iskander."

Enlightenment came to my companion.

"Now I understand. Why did you not tell me that the Greeks were the people of Iskander? All the world has heard of him."

Iskander is Alexander the Great, who is still remembered in legends, and in place names in this part of Asia.

"So the pattern, which I saw in the wise man's dress, was used by the people of Iskander," Khwazai mused, and he went on to quote sonorous passages from the Koran which I could not follow.

This was indeed a strange tale. If it was true that at times a ghostly caravan could be seen, then it was due, not to the sins of modern fast-breakers, but to something much older and more primitive. But was it merely a hallucination in my friend's brain caused by his abnormal condition, due to fasting and by the fever of his wound? I could only speculate on this, but the incident of the key pattern was curious.

I was quite aware of the abnormal state in which the

end of Roza found the Pathans. Towards the end of the fast, their haggard, lined faces and unhealthy yellow complexions told of the strain upon them. Tempers grew short, and we always tried to avoid pressing the work on too quickly during this period. When the time came for the new moon which would proclaim the end of the fast, it was a very striking sight to see all the commanding heights, which gave a clear view of sunset over Afghanistan, thronged with tribesmen with their faces turned to the west in the hope of seeing the slender sickle of the moon in the blaze of the setting sun. If it were not seen, the crowds on the hill-tops, silhouetted against the reddened sky, would melt away in the silence of disappointment. But when at last it was seen, they would disperse singing and shouting with joy that their fast was over.

I tried to find out what was the appearance of the demons that ran about at night, of which everyone spoke as an ordinary matter. But it was difficult, as they used the same word which I have translated as "demon" for anything supernatural. These running demons were apparently four-footed creatures that rushed about singly or in troops, breathing harshly and noisily. They were never seen clearly, but were black and of moderate size. They were not regarded with much apprehension, and they did not seem to do anything except rush about in a confused way. The Pathans considered that witches and wizards used these demons to carry out their acts of hatred. When I told Sher Ali Khan of my encounter with a Hindu fakir, he assumed that the "Sending" was one of these demons. But it was all rather vague.

There was an ancient Buddhist *stupa* in the main Khyber valley. This was about two thousand years old or more. It was in a fair state of preservation, and I suppose once harboured a relic of some saint or even of the Buddha himself. It had been dug into from one side, and its contents, if any, were removed long ago by treasure seekers. The railway passed quite close under

it, and I had made a slight diversion of the line to avoid shattering the knob of rock on which it stood. The tribesmen were disappointed about this, and asked me to blow the whole thing up.

"It is an evil spot, Sahib, haunted by evil spirits."

I suggested asking a Mullah to say prayers over it, but this was received with horror.

"It was built by unbelievers, and is the habitation of devils."

I could not imagine a relic of so mild a religion as Buddhism being tenanted by devils, but this was equally badly received.

"Buddhism is not a religion. Buddhists eat filth. How then can they have a religion?"

So that disposed of Buddhism. The simple faith of these fanatics had something rather fine about it. Buddhism was not a religion, and that was that!

I enquired as to the nature of the demons.

"All we know, Sahib, is that if anyone goes near this unbeliever's tomb at night, he is found next morning strangled. Never shot or stabbed, but strangled. Some say that the demons come out and seize their victim, but others say that there are two gigantic hands which stretch out from the dome and strangle him. But who can say, since there are no survivors to tell the tale?"

I suggested burying a holy man near by, and this was considered to be a reasonable suggestion. The difficulty was to find a sufficiently holy man, and then there was the further difficulty that they would have to wait until he died.

"I don't see the difficulty," I said. "What about the saint's grave at Karamma?"

This was a well-known joke, though the saint's grave was there right enough, and was much venerated by the tribe in whose land the saint was buried. The tale is that the tribe used to be twitted by their neighbours with the fact that there was no holy shrine in their land, so that they always had to go on pilgrimage to some

neighbouring saint's grave, in order to make any supplications. This so worked on the tribe's feelings that they determined to have a holy man's tomb. There was no great competition for the post, but one day there came by in the caravan an obviously holy man from some place in the interior of Asia. From their descriptions, I should think he must have been a Tibetan or some such person. Anyway, nobody could understand a word he said, but he was very old and weary, and he fell out of the caravan to rest in the tribe's territory. He asked by signs for food and drink, which they gave him. The caravan could not stop, but many of the travellers and merchants showed great concern at the holy man's distress. This greatly impressed the tribe, and the hope was born that he might die and be buried with them. From this hope it was a short step to the decision, by unanimous vote, to help the poor old man out of the world. Action quickly followed, and the holy man was duly murdered and buried in an honoured grave. There it is to this day with its headstone and bamboo flags fluttering bravely in the Khyber wind, and many miracles have been wrought by the power of so great a saint. The ribald tell another story not so creditable to the kindly veneration for age and holiness displayed by the tribe. They say that the bones of a donkey are interred at the spot, and that the story of a saint is a fiction. But this is probably mere scandal-mongering, and an unworthy attempt to smirch the fair name of the tribe.

Abdul Gafur Khan, whom I have already mentioned, was a younger man than Sher Ali Khan. He was about my age, and he and I used to wander over the hills sometimes, escorted by his fellow-tribesmen. There was considerable friendship between us, and one day I noticed that he seemed to be bothered and worried about something. I pressed him to tell me, and at last he said he was troubled because stones were falling in his village.

I knew what he meant. In India as well as on the

Frontier it is considered to be a sign of some occult happening when stones fall from the sky.

"I thought at first, Sahib, that it was just mischief by some boys who were trying to trick me, though I do not think anyone would do that."

Abdul Gafur was a man of some importance in his tribe, and it was unlikely that he would be treated disrespectfully. I nodded, and he went on:

"I set men to watch all round, but there was no one. And yet every evening now as soon as it is dusk there comes a thump, and a big stone falls in my courtyard. Just one or two, sometimes in the yard, sometimes on the roof, and one hit the top of my tower. Now, Sahib, no man could throw a stone so as to fall on the top of my tower."

I said this seemed to be a sign of something going to happen, and had he any ideas about it?

"No, Sahib. It is not necessarily a matter for fear. You have understanding from your books, and you know it may be good or bad or just nothing at all. But I am uneasy, and so are all my people. We do not like it when stones begin to fall."

He bade me good-bye and promised to let me know if there were any further happenings. I saw him once or twice during the next week or so, and he said that stones were still falling, but that nothing further had taken place of an unusual nature.

Then one day my servant told me that Abdul Gafur had come, and I made him welcome. As soon as we had settled down to smoke and chat he said:

"Sahib, a curious thing has happened. A few days ago a little girl of ten years in my village fell sick, and seemed like to die. That was no great matter, for girls are of no account, but now a great wonder has taken place. She suddenly sat up and asked for food as though she were completely recovered. Then she slept for a little, and then began to speak rapidly in an unknown tongue. We seem to catch a word here and there, but

not many. This only happens at night. During the day she sleeps."

I was greatly interested, of course, and asked if stones were still falling. He said they had stopped since the girl had spoken in an unknown tongue.

"We are all amazed at this, Sahib, and we wish we could find someone who understands her talk. It is a pity, Sahib, that you cannot come and hear her, but of course it is impossible for you to come to my village after dark. Besides, my people would be angry if you went into the women's quarters. So should I be angry too, if you saw any of my women."

He smiled to take the sting out of his words, and I knew what he meant. I am no good at Oriental languages, so I do not suppose I should have understood any better than the Pathans. The Khyber women were absolutely secluded, and one only saw them sometimes at a distance, when they went to draw water in a body. They were heavily veiled and hidden in shapeless garments, and I do not know what they looked like. I once asked Abdul Gafur what I ought to do if, for example, I came across a Pathan woman lying injured on the road.

"Let her lie," he replied; "if you touched her she would be shamed for life, and her nose would be cut off."

As it was impossible for me to see and hear the wonder-child, I asked Abdul Gafur to keep me informed, and he said he would do so. In a few days' time he said a learned Munshi from Peshawar had heard the voice, and said that the language was Persian, and very good Persian too, as spoken by the gentry. The news had spread and crowds were coming to see the child. They would ask questions, and the child would reply in Persian to a few of the questions.

I asked if true replies were given and Abdul Gafur said he hardly knew, as people usually asked silly questions such as how long would they live, would they ever be rich, and so forth. He no longer spoke of the child, but simply referred to the demon which had possessed

her. He said the demon called itself by some Persian name, which I have forgotten.

"One thing, however, happened which was very remarkable. A friend of mine came to speak to the demon, but, as soon as he came into its presence, the demon grew greatly excited and shouted 'Go! Go!' My friend was alarmed and astonished, but he hesitated and began to put his questions. The demon, however, would not reply; then suddenly it cried 'Go! your shoes are thrown over the wall and your purse is in the fire.' You see, Sahib, he had left his shoes in the courtyard, and sure enough they were found outside, thrown over the wall. He hurried back to his village, and there were the remains of his purse on the fire."

The Pathans usually wear leather wallets strapped round the waist. These wallets or purses are often very attractively embroidered with stitching in metal wire, and I can understand that the demon had found an effective, if rather petty, way of annoying Abdul Gafur's friend.

The wonder deepened when the girl suddenly went completely dumb. Replies to questions were now given in writing. The procedure was that a question was asked verbally, and presently a thin slip of paper floated down with the reply, written in a beautifully neat hand in Persian.

Now, all this was very reminiscent of Old Testament stories of possession, but I found it rather unimpressive. If the best a demon can do is to give a rather feeble conjuring performance, I do not think much of the demon. I asked Abdul Gafur to suggest to the demon that it should come to Landi Kotal and see me, and he said he would. Apparently the suggestion was coldly received, and no reply was given.

After a few weeks the wonder died down. The arrival of the mysterious letters grew fewer and fewer and finally ceased. The girl recovered and became quite normal again. She could remember nothing about the possession, and the whole thing became forgotten as

time went on, but I could not forget one thing Abdul Gafur Khan told me. Without any prompting by me, he had asked the demon one day if the Khyber Railway was a fortunate work, and if it would prosper. This was during the dumb period, and the demon sat silent as usual for some time, and then suddenly laughed and laughed. Then it pointed to where a letter was fluttering down. The letters were written on curious flimsy paper, so flimsy that they did not last, but fell to pieces in a few minutes. The Munshi took the letter and read it. It simply said that ten weeks after Ramzan there would be the greatest storm the Khyber had ever known.

Is it possible that these creatures, called demons by the Pathans, are in some way in touch with the great forces of nature, which it is an engineer's business to control in the service of mankind ? The demon's answer was very much to the point. If true, if was a declaration of war against me and my works. Ten weeks after Ramzan would be in July, about the 20th, say. Storms were not unusual about that time of the year, so a great storm was not impossible. An attack in force by floods on the railway works, as the result of the greatest storm the Khyber had ever known ! It stirred my pulse to think of it. That was the great test for which we were waiting !

It is pleasant sometimes to do silly things provided no one is there to laugh. I was alone with Abdul Gafur Khan when he told me of this message, and he would understand. I turned to the grim hills and raising my arms I shook my fists at them.

" Understand," I cried in English, " the work goes on."

CHAPTER VIII

STORM OVER THE KHYBER

WINTER passes rapidly into summer on the Frontier. By April the invigorating cold dry air has gone and a heavier oppressive feeling comes. If it were not for the terror in store, April would be a lovely month in Peshawar. The sudden warmth brings all manner of flowers out with a rush, and the air is heavy with the scent of roses and sweet peas. But this is only in the Cantonment, where the English, with their love of gardens, have brought in irrigation and set gardeners everywhere to cultivate the flowers they love. Outside the Cantonment the dry, stony land wilts under the increasing power of the sun's rays. The men who will stay behind smile a little bitterly at their womenfolk's raptures over the loveliness of the spring weather, for they know too well how short a period it is before the wrath to come. By the end of April the women and children have nearly all gone to England or to the Hills. It is senseless cruelty to keep them in the Plains, but a few cranks do it, and a few foolish wives think their place is by their husbands' side, but they are the exception. It is a tragedy to watch them growing more pale and wan every week, while the children turn white and sickly till fever attacks them in the autumn. It is much better to put up with a few months of separation and preserve that health without which happiness is impossible.

In some years, as though to tantalise mankind with an illusory reprieve from torment, there comes a strange interlude in the rapid onset of the hot season. Just when the days are on the point of becoming unendurable,

there may come an unseasonable shower of rain, which soaks the ground and tempers the increasing heat for a short spell. Encouraged by this imitation of spring, a thin growth of grass and wild flowers appears everywhere and, for a few days, the grim Khyber is carpeted with little yellow and purple blossoms, which hopefully push their heads a few inches above the stony soil. The harsh air is softened by sweet scents, and a few busy insects appear to gorge themselves, free from competition, on this sudden richness. But this brief spell quickly passes ; the clouds disperse and the sun returns like a fiend unchained, so that, in a single day, the little flowers, that have had no time to do more than raise their heads, are blasted into wisps of dried grass and whirled away by the Khyber wind.

The summit of the Pass is 3500 feet above sea-level, but this is not enough to make much difference to the fury of the hot weather. The barren rocks are baked all day by the sun and reflect it, so that the heat in the narrow valleys is wellnigh intolerable. The Khyber wind seems to blow with a more sinister note than in winter, and it parches the land. By the end of May the hot weather is thoroughly established, and, day after day, the sun blazes down from a sky from which nearly all trace of blue has gone. At times uneasy electrical storms mutter along the hills, but they bring no relief. There is no rain in them, and if they leave the ranges and cross the plain, it is but to raise a dense cloud of dust, which is flung back on the tormented land in twenty minutes of raging tornado, leaving nothing behind save a trail of murk and destruction.

These brief electrical storms can be very destructive. I happened to experience one in Peshawar one Sunday, when I was spending a week-end with a friend. It was very hot, and about noon the sun disappeared and a distant rumble gave warning of what was coming. The servants came running and saw that every door and window was securely fastened, as these storms are usually accompanied by a high wind and clouds of dust, which

smother everything in a bungalow if a door or window is left open. Presently the gloom deepened and a moaning wind stirred the trees. Then a roar was heard approaching, and as the storm came it blotted out everything in a swirling yellow fog of dust. There was no rain, but the wind increased rapidly to hurricane strength, while the whole bungalow shook beneath its rough buffeting. The dim yellow light outside only permitted a visibility of a few yards, and these were filled with a hurrying sequence of debris, broken branches and sometimes a flying sheet of corrugated iron, flapping like an immense bat. The noise and fury were tremendous with continuous thunder adding to the din. A door began to crack and bulge ominously under the pressure, so we piled furniture against it and hoped for the best. Then in the dimly seen outer world a great tree leant over and fell. Normally one would speak of a tree crashing to the ground, but the noise of its fall was not enough to be audible above the uproar of the storm. Then came a few hail-stones driven horizontally by the blast. There were only a few, since these electrical storms are not usually accompanied by rain or hail until later in the year. Thus we were peppered for a minute or so as though a machine-gun had been trained on the bungalow and windows were broken, letting the wind and the dust loose inside the rooms. But the storm departed as rapidly as it had risen. In a few minutes it had died down completely, leaving behind a trail of uprooted trees, broken telegraph lines, and an offence of thick dust everywhere. No coolness even rewarded us for all the discomforts of the storm.

Day after day, week after week, and then month after month, the heat continues, with no relief. Metal is so hot, even in the shade, that it cannot be touched with the bare hand. The evening bath water is heated by standing it in the sun in a blackened can, and even then it is too hot to use without a liberal mixture of cold water. The temperatures rise to 110°, 115°, and on some desperate days to 120° in the shade. It is incredible that

human beings can exist at such high temperatures above body heat. Try an experiment at tea-time with a thermometer. Put the thermometer in a cup of hot tea and see if it registers 115°. Then try and put your finger into the tea. Well, that is the temperature of the Khyber wind in a shady spot, the temperature in which your husbands, brothers and sons live in the hot weather.

Night brings some relief, but not much. There is no coolness at all, only perhaps some lessening of the heat. With luck the temperature falls ten or fifteen degrees, but this is not enough to prevent the bed sheets from feeling warm to the touch. Sleep is not very refreshing when the pillow is soaked with perspiration all night, so that it is well, if possible, to have a siesta in the afternoon to make up a proper allowance of sleep.

In June the papers begin to have reports of the progress of the monsoon. This breaks on the west coast early in June, and heavy rain spreads inland, growing, however, less intense the further it goes. It never reaches the Frontier, and no relief can be expected in the rainy season. To make matters worse, the wind changes in July, and instead of blowing from Afghanistan to India, it blows in the reverse direction. It is now no longer a dry, but a heavy moisture-laden wind, which is unable to cool the body so effectively. Sweat pours off without evaporating, and the oppression grows worse.

Now the problem of thirst becomes a matter for urgent consideration. We had to be out and about as usual, for the work must go on, except during the afternoons; Indian, Pathan and English alike sought shelter then from the withering blast of sun and wind. But at other times, inspections must be carried out on foot along the line and over the hills in the full blaze of the summer heat, and the result was a thirst such as no dweller in a temperate land can understand. This was no mere dryness in the throat, to be pleasantly allayed by a glass of some fancy liquor, but an urgent crying out of the whole being for water. The intense heat seems to dry up the body and thicken the blood, so that even the stoutest

heart finds it a labour to pump the turgid fluid. The parched mouth and throat are only two of the symptoms of distress resulting from insufficient water, and serious results may follow if the deficiency is not supplied. The inexperienced sometimes think that the feeling of exhaustion during the day can be counteracted by alcohol. They are quickly disillusioned, for alcoholic drinks during exposure to the heat of the day are folly. What is wanted is water—good, honest, plain, cold water—and the problem is how to ensure a supply of this whilst out in the open. For tepid or lukewarm water is a nauseating drink in which there is no joy. After several trials we solved the problem by taking with us bags of closely-woven canvas of about the size of the common hot-water bottle. When filled with water, these bags leak slightly so that they are always damp on the outside. Thus there is always evaporation taking place, which cools the bag sufficiently to make the water agreeable. But it does not do to be constantly sipping at the water-bag. For some reason, that does not seem to allay thirst, so it is better to keep going for some hours until the time has come for a rest. Then comes the orderly with the water-bag. First he rinses out the glass to cool it, and clean it. Then he fills it with gurgling cold water, and the first glass quickly disappears. Then another and perhaps another—and, remember, I am not speaking of the polite little tumbler of the English dinner table, but of the noble pint glass of the East. I have quaffed as many as four of these on end, after a particularly hard spell of work, and that makes two quarts. The relief is instant; the water seems to percolate at once to all parts of the body, and the feeling of exhaustion disappears by magic. A brisker perspiration breaks out and the harsh hot wind seems to blow cool for a few minutes. Thus do I sing the praises of cold water in an arid land, but lest I be thought to belong to the anæmic army of teetotallers whose waterlogged palates know not the generous fluids that warm the soul, let me hasten to tell of the more tempered joy of the evening drink.

Here is no desperate need for replenishment of life-giving moisture; but the day's work is done, the sun has gone and in the dusk there comes the clink of ice, the pop and fizz of a soda-water bottle, and the cheerful imbibing of some god-given nectar that stimulates appetite and loosens the tongue in the cheery company of friends. Thus misery is cheated by its own excess, so that the evening drink and, be it added, the evening bath, go far to make the hot weather tolerable.

During the hot weather the Khyber becomes a gigantic laboratory in which Nature, with infinite patience, slowly brews her storms. Day after day the shimmering rocks and fantastic streams of overheated air bring strange mirages. Whirling dust-devils stagger unsteadily across the valleys, appearing suddenly from nowhere, and as suddenly departing. A cloud no bigger than a man's hand grows in a few minutes to a menacing storm-cloud, full of thin, rattling thunder, and in a few minutes shreds out into nothingness. A dull rumble is heard, and the ground is shaken by an earthquake which roars by underneath. To an engineer there are a dozen signs of the great forces at work, and day by day the tension grows.

Into this hellish brew the wind in July brings the one remaining ingredient necessary, moisture. Now Nature is ready, and an occasional sudden unsteadiness of the barometer shows that she is preparing to loose some devilment from her laboratory. The only question is, when will it come?

During our first two years there had been storms, but nothing very bad. They had been localised and, although cascades of water had come charging down the hill-sides and done minor damage here and there, no serious attack had been made. The tribesmen had been closely questioned and a careful examination of flood-marks had been made, but these sources of information gave indefinite and rather disquieting results. The tribesmen naturally viewed matters from quite a different standpoint from ourselves. They were con-

cerned only with damage to their fields and villages, which were well out of the track of possible floods. The railway on the other hand had perforce to cross many waterways, and it was there that we wanted data.

The streams which flowed during storms behaved in the oddest manner. Hall and I would rush out after a storm and try to get measurements of flow. We would find a torrent pouring down in one spectacular waterfall after another, where a few hours before there had been nothing but dry rocks and shingle. Following it down, the torrent would run strongly for a hundred yards or so, and then it was gone, disappeared underground; the dry uncompacted detritus of the valley had sucked it up. Then, a quarter of a mile further on, the flow must have encountered some buried obstacle, for up came the torrent merrily to the surface again and continued its course. In a few hours the whole flow dried up, perhaps for years, till another storm came its way. Hall and I looked at each other in perplexity. What was one to do with torrents which bobbed up, and disappeared again, like this ?

As the date forecasted by Abdul Gafur's demon approached, I looked anxiously at the skies. Bridgework over many of the watercourses was now finished, and in others the foundations were finished and the superstructure was in progress. We were ready. No harm would be done if half-completed piers were submerged, but would the foundations stand ? Were the waterways provided sufficient, or would some unheard-of flood sweep down and obliterate not only a bridge but all our handiwork for hundreds of yards on each side of it ?

Now the heat grew wellnigh intolerable. Gasping, Hall and I told each other it could not last, and a storm must come. Day by day the sky turned from pale blue to yellow brass. An intense glare came from all sides, and there was little difference between sunlight and shadow. Shakings and mutterings came at times out of the yellow murk, and at night flickers of lightning

TRIBESMEN REPAIRING FLOOD DAMAGE IN KHYBER NULLAH

THE SUMMIT OF THE KHYBER RAILWAY

showed that Nature was at work. But she held her hand; there were still a few days before the date appointed.

Then, in the afternoon of July 21st, it was clear that the attack was coming, and coming in force. The strange yellow murk lifted a little, and great masses of cumulus were visible, not only in the quarter whence our storms had hitherto come, but on all sides. I called out to Hall to come and look at them. Great swirling bulbous masses of white cloud were rising with appalling speed to heights we could only conjecture in fantastic estimates. The whole masses were in violent commotion. Other detached clouds were moving rapidly across the sky at different levels and in different directions. There was no wind at ground-level, but now and again sudden gusts picked up clouds of dust and flung them back again. To the north-west an unusually large dust-devil was stalking across the valley.

It was tea-time, and, as I had my tea, I watched the pen of the recording barometer sink steadily down. The telephone was uneasy and kept humming and clicking, almost as if the demon was trying to send me a threatening message in some Plutonic morse code.

The oppression grew, if possible, worse as evening fell. The great clouds of cumulus ceased their upward swirl, and began to spread at the base into curious anvil shapes. Rain could be seen beginning to fall here and there, like streamers of black muslin hanging from the clouds. A globular mass of cloud floated in the north-east like a great Chinese lantern full of the continuous flickering of internal lightnings.

Hall joined me in our little garden, where I stood staring at the magnificent spectacle.

"It looks as if we're in for it this time. I've just had a look at the barometer. The bottom has dropped out of it."

"Do you think it is really going to be a big storm?"

"I think so. This isn't the usual storm-cloud coming over from the west. The storm is all round us. They're catching it over Ali Masjid already."

There was indeed by now an indigo cloud lying low over the main Khyber valley towards Ali Masjid, and a continuous rumble of thunder came from that direction. Now the last traces of blue sky were being quickly covered by hurrying masses of cloud. The light failed rapidly. Then the wind came, moaning dismally and raising a choking dust, as though the heavily charged clouds above us were dragging everything upwards by electrical attraction.

"It won't be long now!" shouted Hall through the rising clamour. "Great Scott! Look at that!"

I turned and not half a mile away a cloud seemed to burst and a wall of water fell to the ground like a curtain. This curtain of water hid everything behind it, and it rapidly advanced towards us with a roar, caused by the beat of the rain on the ground. A moment later thunder and lightning broke out close at hand.

We ran for shelter to our huts and, as I ran, I had one last sight of the hills now rapidly disappearing in the gloom. By some chance I could see the top of the highest peak through a space between two clouds, and a last gleam from the setting sun had caught it. This had a strangely sinister effect, but there was no time for more than a quick glance, for with a yell the storm was on us.

For the next few hours there was nothing to be done but sit and listen to the fury outside. Lightning and thunder were both incessant. Indeed, incessant is hardly the word, for the lightning, coming from several quarters at once, gave almost continuous illumination. The thunder seemed to be high overhead, and lacked the majestic roll of a thunder-clap in England. It was a continuous high-pitched rattle, with only an occasional loud bump when some flash hit the ground near at hand. The rain was beyond description. Solid gouts of green water flung themselves on the ground, which was everywhere awash. Now the enemy was upon us, for thunder and lightning are but sound and fury, but water—this was Nature's weapon. Now, how would the works of man prosper? Night fell, and there was no chance of

going to see some bridge near at hand, even if the road still stood. While the rain ruthlessly beat the ground, I could imagine the attack in progress. Runnel added itself to runnel, gutter to gutter, then swollen drain to drain until the muddy water, lashed by the wind and rain, poured into the overcharged *nullahs*. Now, above the noises of the storm, could be heard the roar of many waters, as the turbulent flood swept a thick brew of mud and boulders down the steep slopes to where my bridges stood. The whole ground was quivering and shaking from the battering of the storm, which renewed itself again and again. On a night like this poor man and his puny works seemed so futile. What could stand against such fury ?

In a brief lull came the sound of footsteps, and Hall burst into my hut, his cheery rubicund face streaming with raindrops.

" Just came to see if you were all right," he shouted above the elemental clamour ; " pretty awful, isn't it ? And more to come, I think."

" I wonder how much of the road will be left to-morrow," I said. " We shall want to go and survey the damage to the line first thing."

" Damage be blowed," grinned Hall. " The railway is all right. There'll be bits of bank washed away here and there, that's all. Don't you worry about the railway. I think we're overbridged, if anything."

Bless him ! Always cheery and optimistic, and usually right.

" I expect a lot of the rain will percolate through cracks into the tunnels, though. We shall have to look out for that."

We sat trying to talk, but the uproar was too great, and presently there came a great flash and all the lights flickered and went out.

" That's torn it," bellowed Hall. " I'm off to bed. Good night." And he splashed back to his hut. I went to bed, too, and lay wondering how long this merciless threshing of the rain would continue and, so wondering,

fell asleep. It's an ill wind that blows nobody any good, and the rain had brought a few hours' respite from the heat. I slept well and woke to a clear, rain-washed world.

In the morning everything looked a bit bedraggled. Our little garden was battered to bits, and untidy heaps of sticks and debris showed where the water had stood. Large pools had to be circumnavigated, but the camp staff were already at work draining these away. No serious damage was reported in the Khyber Railway camp, but there had been a lot of discomfort owing to roofs leaking. Work was rather disorganised while sopping clothes and household effects were laid out to dry in the sun. The ground was steaming vigorously, and for the moment it was deliciously cool.

Then rumours began to circulate. Hasrat Khan arrived and said all his earthwork had been washed away. Both roads in the Ali Masjid gorge had gone. Telephone and telegraph lines to Peshawar both interrupted. A landslip at Michni Kandao has blocked all passage. So the tidings of disaster arrived while Hall and I ate breakfast. Hall's face began to lengthen.

"I can't understand Hasrat Khan's earthwork going west," he said. "There's no catchment area of any size above it."

"Perhaps it hasn't," I said. "Hasrat Khan is a liar, as we know. People seem to think it adds to their importance to bring disastrous news. In a few hours we shall have seen for ourselves."

"If we can get along the road."

"Oh, we'll get along somehow. Our trusty Fiat will bump over anything."

For this sort of inspection we used a Fiat 30-cwt. lorry with pneumatic tyres. They were speedy, powerful machines, and ideal for our purpose. The telephone bell rang and the Brigadier's voice spoke.

"That you, Bayley? Glad to find one line that isn't down. There is a rumour of heavy damage at Ali Masjid. Have you heard anything?"

I told him my meagre budget of rumours.

"I'm going to try and get there and see what has happened," continued the Brigadier. "Care to come with me?"

I said I would be delighted, and I splashed over to the fort, leaving Hall to go his way alone.

"What a storm!" said the Brigadier. "The *tehsildar* tells me it's the worst in living memory. The old men say there was such a storm when Cavagnari was murdered in Kabul. That would be in the seventies or eighties, wouldn't it? How has the railway stood it?"

I said I didn't know yet. There were lots of alarming rumours, but I should be able to see a good deal of the damage on the way to Ali Masjid, and I should have full reports from everywhere by the evening.

The Brigadier was provided with an ancient Ford car for his use. There was a plague of these war relics and no doubt it was sound economy to use them up. But they were a sore trial to the officers and men of the M.T., who had to keep them going. The Sikh driver was wrestling with it in front of the fort. Suddenly it burst into a roar, and shudderingly came to unwilling life.

The sky looked none too promising, as heavy clouds hung round still, and the early morning coolness had given way to a greenhouse heat. So at the last moment we decided to take our waterproofs.

"Though they aren't much good in this weather," grumbled the Brigadier. "If we put them on we shall be soaking wet from the inside in five minutes."

The Ford rattled downhill valiantly. The road seemed to be all right; there was a good deal of debris lying about, but no real damage.

"Railway all right so far," grunted the Brigadier.

I hoped so, but said that the danger points were further down the valley, where flood water would be added to flood water, and something spectacular might have taken place. A little further on we met Abdul Gafur Khan and a little party of his men hurrying up

to Landi Kotal. He hailed us, and we stopped. The Brigadier knew him, and liked him as much as I did.

"I was coming to tell you, Sahib, about the railway. It was a great storm, the greatest I remember, and it is not finished yet. I thought you might be anxious, so I sent my men out early this morning to see if there was any damage in our lands."

"Tell me quickly."

"All is well, Sahib, save at that little bridge near Akbar Khan's village, which is quite buried beneath a landslip, which came down the hill-side. For the rest . . ." and he quickly and intelligently summarised the damage.

"Nothing serious, General, so far. Let's go on. Thanks very much, Abdul Gafur, for coming to tell me. Most kind of you."

"It is nothing, Sahib."

"By the way, Hasrat Khan said all his earthwork was washed away."

"That is nonsense, Sahib. If the earthworks have stood up in our lands, why should his suffer where there are no large *nullahs*. The truth is not in him, and I expect he wanted to trick you into giving him a contract. Good-bye, Sahib, and good luck."

With a protesting jerk the Ford resumed its uneasy progress. We were not sure of being able to reach Ali Masjid on account of the "Irish bridges," or causeways, where the road crossed the main *nullah*. There were innumerable watercourses flowing from the sides of the valley, and these tributaries emptied themselves into a central *nullah,* which wound its way down the centre of the valley. The whole valley had an average slope of about two per cent, that is 1 in 50, so the passage of flood water down the main *nullah* must have been very violent. Although it was only a few hours since the rainfall had ceased, most of the *nullahs* had already stopped flowing, in much the same way as the gutters in a street dry up after a thunderstorm. But the violence of the flow was attested everywhere, by scoured-out

holes, and by piles of debris, and of large boulders and rocks. It was possible that some of the Irish bridges might be impassable for a car owing either to scour or to a high-piled mass of debris.

Meanwhile, as we ran along, I was anxiously scanning the railway, wherever it was visible, for signs of damage. Mile after mile seemed to be all right, although, here and there, a fissure in an embankment was visible, where some local collection of rain-water had run off the top of a bank. This was not serious, and already I could see parties of tribesmen out repairing these—a matter of a few hours' work only.

"But," said the Brigadier, "even those small rifts would interrupt traffic, wouldn't they?"

"True," I replied, "but at present there is only the unprotected earthwork. When the track is laid and ballasted, rain-water falling on the bank will percolate slowly away harmlessly."

"I can't make out," said the Brigadier as we passed a gang of Pathans vigorously patching up traces of storm damage, "how on earth you got these ruffians to work on the line. Only three years ago the mere mention of a railway brought the tribesmen out like a swarm of angry bees. Nowadays that's all changed, and an Afridi I was talking to the other day actually spoke of 'our railway.' They positively take a pride in it."

"Not only that," I said, "but there is tremendous competition and intrigue in order to get contracts for railway work. The power of the purse is strong, even in the Khyber."

We spoke of the pacifying influence of roads and railways, and agreed that the solution of Frontier pacification was the opening up of inaccessible valleys by means of roads first, and then, if necessary, by the construction of railways. The Brigadier told me about the pacification of the Highlands of Scotland brought about by the construction of roads by General Wade.

"The problem is essentially similar," he said, "and there is a strong parallel between the state of the High-

lands two or three hundred years ago and of this Khyber country now. Take the Massacre of Glencoe, and alter all the names, and you will have the story of a Frontier feud. In both cases there is a highly intelligent mountain folk, driven sometimes to desperate deeds by ancient hatreds fermenting in a condition of hardship on the verge of starvation. The solution lies not in a series of wars but in the alleviation of these hard conditions. A well-fed man hates with difficulty. And you can't ease economic scarcity without communications. Your railway is going to be a great peacemaker."

So the Brigadier discoursed. He had the reputation of being a very fine soldier, and I found, as ever, that the finest soldiers were the strongest upholders of peace.

"There is a strong resemblance," continued the Brigadier, "between parts of Scotland and this country. The rampart of the Highlands as seen from the Forth or the Clyde looks very like the hills seen from Peshawar. If you think of the Sma Glen as the Khyber and of Stirling as Jamrud, you'll see what I mean."

And he went on to speak of Highland raids into the Lowlands as furnishing a further parallel.

"But we mustn't push the resemblance too far," he added.

I agreed. This matter of rainfall and storm, on which we were at the moment engaged, pointed to a striking difference between the two countries.

"Hullo! Something wrong here!"

The road sloped sharply down to an Irish bridge or causeway. The causeway was merely a concrete floor at *nullah* bed level, and effective enough in minor floods. But now a gang of Pathans was shovelling away at a great heap of boulders and silt which blocked the crossing, over which a trickle of water was still flowing. A hundred yards downstream a motor lorry was standing forlornly lop-sided with its front axle buried.

The Pathans said the lorry was running late the day before, and trying to reach Landi Kotal before dark. It had tried to splash across, but was swept away. The

driver was all right, and had already gone back to Ali Masjid.

" He's lucky," I said. " He must have been caught in the first break of the storm yesterday evening."

" It gives you some idea of the force of the water."

" Yes. But it's not simply the force of the water that swept the lorry away. On this steep slope the whole bed of the *nullah* is on the move during a flood. It's possible for the lorry to have sailed downstream as though on a moving floor, sinking in as it went. It's lucky not to have toppled over. That's where the danger to the man would have come. The water may only have been a few feet deep, but the moving bed would prevent him from standing against the rush of the water, and he would have been bowled over, banged on the head, and drowned in no time."

A way of sorts had by now been made, and we bumped unsteadily over the *nullah* and on to the other bank, where steady progress was resumed. As we approached the Ali Masjid gorge the signs of destruction increased. Telegraph posts were lying flat amid a tangle of broken wires, and several times we had to stop and bump precariously over moraines of boulders, which had been spewed untidily over the road. We were meeting no traffic, which looked bad, as though there was some serious obstruction farther on.

The hills began to close in on both sides as we neared the gorge. The railway here ran securely along a ledge of solid limestone and crossed several side streams. This was Hasrat Khan's contract, and there was indeed no truth in him, for the railway stood entirely undamaged. I noted, however, a great gap in one side of his village where the high mud wall had collapsed. He would have a bad time from his many enemies until the wall was repaired. I did not like him, he was a liar and a *baghela,* that is, one who had fled from a blood feud, so I did not waste any sympathy on him.

" We're coming to the danger-point now," I explained. " The narrow gorge winds too sharply to make

it possible for the railway to follow the sharp curves of the valley, and the line is forced out into the open and has to cross the main *nullah* several times. Our critics say we ought to face the expense of going into tunnel here, and thus avoid a hazardous series of low-level bridges over the torrent on such shifty foundations. Still, we're going to try," and I explained to the Brigadier the type of foundation proposed.

" If we can do it successfully we shall save an enormous sum of money."

" That's all very well, but what about having a vital line of communication cut during a war."

" It would only be for a few days, anyway. It's true that a line at low-level is vulnerable to flood, but it is also easily repaired."

" Well, it's an arguable point."

We were alone in the echoing gorge. The whole force of the raging torrent had been concentrated here, but there was little in this rocky valley for it to attack. A whole section of the road had gone, and we bumped cautiously over raw shingle. At last we reached the first bridge over the torrent. Bless it ! There it stood sturdily with no sign of damage, with its abutments and piers in perfect alignment. But the approach earthwork and the training works had gone, completely obliterated for a hundred yards or so, and it was quite clear what had happened. The flood water had piled up and poured over the bank somewhere upstream of the bridge works, and had rushed violently down the valley sweeping everything away—including a hundred yards of railway embankment.

" I suppose I ought to have foreseen this, but I didn't, so there it is. Anyway, the bridge is all right. But I shall have to ponder over this problem. Just look where the water rose to, before the bank burst and relieved the bridge. What a sight it must have been ! "

The Brigadier was sympathetic, but could this be guarded against in future ? I thought so, but it was a bit of a problem.

"I wish I could have been here to see the flood."

Bang—bump—bump—rumble—rumble—rumble ! ! !

"Hullo !" I exclaimed. "I believe the storm is coming on again ! What shall we do ? Go on, or turn back ?"

"Let's try and get to Ali Masjid now we've come so far," said the Brigadier. "It's only a couple of miles."

There was some risk in this. There were two roads through the narrowest part of the gorge, one at high level for motor traffic, and one at low level. The latter was a death-trap in a storm, since the precipitous sides of the gorge would prevent escape from the sudden onset of a boiling flood. If the high level road was blocked, and we were forced on to the low level, we might be in some danger. However, we decided to take the risk, as it was only some ten minutes' run to Ali Masjid. An ominous black cloud heaved itself over the top of the limestone precipices as we ran for the car and headed for Ali Masjid. Fortunately there were no serious blocks on the upper road, and in a short time we had clattered into safety and shelter in the Officers' Mess at Ali Masjid. On the way I was glad to see that there were no further signs of damage to the railway, and that all the bridges were intact.

The rain roared down for only a quarter of an hour or so, and then suddenly stopped. We were hospitably entertained to lunch, and were told that both roads were blocked a little further on, where there had been a bad slip, thus accounting for our having met no traffic. The railway was all right as far as they knew. In the Ali Masjid gorge itself there was no great risk, owing to Hearn's wise decision to take the line through the narrowest part of the gorge entirely in tunnel at a high level. The railway thus burrowed safely in tunnel under the multitude of raging torrents which roared down into the gorge.

After lunch I took the opportunity, while the Brigadier was occupied, of walking some distance along the railway works. The camp where we had lunched was

perched on a ridge of rock through which the railway tunnelled. Far below lay the low level road and the little green shrine which gave its name to the gorge. It was a very famous holy place, and there was a little cluster of huts and a tiny bazaar close to it. There seemed to have been a good deal of damage to it, as far as I could see from a distance, but I was more immediately interested in the railway. This looked as if it had been bombarded by an army of giants hurling rocks at it. The violence of the storm had flung these rocks from the precipices above by the force of the rain and wind lashing the sides of the gorge. But this was no great matter, and a few hours' work would clear everything up. In another place I found a great gap torn in a high embankment, but this was due to the fact that the bridge to carry off the flood water was incomplete. There was rather a mess here, and a good deal of bricks and lime had been swept away.

"I think we'd better be getting back," said the Brigadier.

There was still a lot of thunder rumbling somewhere, but the precipices on both sides cut off the view of so much of the sky that we could not locate the storm. We thought it had passed over and away from us, so we once more climbed into the Ford and started for home.

There was quite a lot of water running across the first Irish bridge, which we had crossed quite dry an hour or so before.

"Odd," I said.

There was much more water at the next crossing.

"Do you think we are running towards the storm, instead of away from it? These infernal cliffs hide the view so. Just listen to the thunder!"

"Better push on," said the Brigadier.

At the next crossing, where a muddy flood was flowing vigorously, the driver stopped. Only a few inches deep, but it was increasing as we watched it. There was a hasty consultation, and the driver was instructed to splash through it.

"Only a few inches of water," said the Brigadier. "Perhaps it's only a little local spate, and we shall be able to get on."

The driver accelerated, got frightened half-way across, stopped, tried to start again, and stalled his engine.

At that moment a black cloud came racing down the gorge, cutting off the tops of the crags, and a roar of thunder shook the ground. A grey curtain of rain followed, blotting out the view for more than a few yards away. It was a matter of minutes, perhaps seconds, before a mighty flood would sweep round the corner of the *nullah*. The starting-handle was already under water as I paddled round to the front of the car. Would it start? If not, we must abandon the car and splash for safety while there was time. I groped for the handle and swung it as best I could, and, by some miracle, there was a cheerful roar from the engine. I was nearly washed away by the increasing speed of the flood as I stumbled clear, but in a few seconds we were climbing up the sloping bank of the torrent. Here we were fortunately high over the *nullah* and in no danger.

"Look!" I shouted above the din of the thunder and rain and of another more terrifying sound. Round the corner came a hurrying, tumbling mass of water and boulders. I have heard of a wall of water in describing the onset of a flood, but that does not seem an apt description. Water cannot stand up like a wall. It was rather a series of waves, one behind the other, which broke and reformed a hundred times in each few yards of progress. Everything in its path was swept away. It was as though some Titan had swished a gigantic bucket into the gutter, on the edge of which we stood.

The noise was deafening, and the whole ground shook, and trembled like an earthquake. The uproar was caused not only by the noise of the waters, but by the clash and grind of a myriad boulders as the whole bed of the torrent clattered down the steep slope. We were quite safe from the flood, but we were trapped until it

subsided, because we were on a bluff of rock between two Irish bridges some three hundred yards apart, over which the flood was now raging. Even if there had been any object in doing so, we could not climb the precipice behind us, so there was nothing to be done but wait until the flood subsided. Though battered by the rain and wind and dazed by the fury of the storm, magnified in the narrow fissure in which we had found a precarious refuge, it was impossible not to admire the grandeur of the scene. Every crack and crevice in the great wall of our prison was now a spouting waterfall whose splash was lost in the frantic clamour from above and below. At times there came a great hammer blow with an almost metallic sound, caused by I know not what. Perhaps it was a concentration of the bellowing thunder or maybe the fall of a great rock, but it was only possible to guess, for the ceaseless rush of rain prevented any accurate observation. In the first minute of the rain we were soaked to the skin, and in this wise we remained for some hours, sometimes sitting and cursing our luck and sometimes trotting up and down on our short piece of road to try and keep warm.

I was struck with the brilliant idea of fording the torrent, as soon as it showed signs of falling, and of climbing up to a tunnel and so returning to Landi Kotal on foot along the railway. One attempt at fording was, however, enough, for directly I fairly set foot in the water, I fell full length. The *nullah* bed was in rapid motion downstream. Luckily I managed to grab a rock, or I should have been swept down-stream and rapidly banged into unconsciousness.

So there was nothing to be done but wait miserably. Hours passed before we dared make the attempt, but at last the aged Ford was able to rattle and clank over the wreck of the Irish bridge amid loud cheers. We were utterly beyond taking further interest in anything, and fortunately met nothing worse than piles of debris here and there on the road. All things come to an end, and at last our aged Ford staggered back to Landi Kotal,

where a hot bath and steaming cups of tea changed me from a bedraggled, sodden wisp of shivering humanity to normal.

Nature had done her worst. The railway had been buffeted, banged and bumped this way and that, and had not come out of it so badly. As reports came in, I felt fairly satisfied. Certain weak spots had been shown up, and that was just as well. They could be strengthened.

"Yes," I thought, as I stretched out wearily in bed that night, "on the whole it is good. The attack in force has come, and we have resisted it. To-morrow the work goes on."

CHAPTER IX

LADIES IN THE KHYBER

FOR residential purposes the Khyber was an Eveless Paradise, and unemployment drove the old Serpent to seek other fields. The working week was too unreasonably short for any self-respecting Tempter. For only twice a week, and then only between the hours of ten and three, were ladies permitted to visit the Khyber in a car under suitable male escort. This merely left time for a rush up the Pass, lunch in the Officers' Mess and another rush back again to Peshawar. Passes for this adventure were sparingly given by the Political Agent to Persons of Undoubted Discretion and Unexampled Virtue. These passes were checked on the outward journey at Jamrud, and ticked off again at the same place on the return. No hope here for minxes who might get left behind accidentally on purpose. Stern Brigade Majors and Political Officers checked them in and out like baggage, with no regard for blue eyes or platinum locks.

Twice a week the Khyber was reputed to be safe. That was on Tuesdays and Fridays, when the Pass was picketed from end to end, and the great caravan wound its way through the Khyber as it has done since the beginning of time. From sources in the remote parts of unexplored Asia, it gathers its strength from a hundred tributaries until the great flood is dammed at the gates of the Pass. Twice weekly the flood is released and allowed to flow through the Khyber.

In olden times the caravan was well armed, as indeed it is now, against the bandits who infest the trade routes of Asia. But the Khyber held particular terrors, and the

fierce mountaineers of the Pass had a sinister reputation for robbery and violence. The fierce Pathans must have grown fat on the loot of rich merchants after a successful foray.

But economic law wins in the long run. If looting were too frequent and too promiscuous, trade would diminish or even cease, and the lawless tribesmen would scan the road in vain for victims, and would go hungry. So it came about in time that the looting became systematised and the same robbers who used to exact their toll by force were ready to guarantee protection to the caravan, on condition that it was made worth their while. The tribesmen are Semitic, and well able to grasp the essentials of a business deal. The more the peace was preserved, the more the caravan would bring, and the greater would be the tribal reward.

With the arrival in due course of the *pax Britannica* and of English common sense, the system is easily and sensibly worked. The Political Agent collects the levy from the caravan and distributes it to the tribes, in return for their keeping the peace on the road on Tuesdays and Fridays. The tribes trust the Political Agent to give them a square deal, and he trusts the tribes to carry out their bargain. Every one is content, the tribesmen are free to carry on their blood feuds, and the caravan goes unmolested. There are, however, rules in the game. Not only must the caravan be free from attack, but it must not be endangered by firing on or across the road in the course of some private difference of opinion. And the caravan must see that it clears the Pass by dusk. There can be no guaranteed safety for stragglers.

So on Tuesdays and Fridays the tribesmen picket the heights along the Pass from end to end, each tribe in its own lands. None know better than these fierce men exactly which peaks, pinnacles and crags need picketing. From every commanding point, keen hawk-eyed men, armed with rifles, watch throughout the day. None know better than they whence a gang of bad characters

and outlaws may make a raid, for have not they themselves, in their unregenerate youth, gone a-venturing with such a robber band.

Thus it comes about that, when things are quiet, the Political Agent might indulgently make a concession to human weakness and allow ladies to make the journey to Landi Kotal and back, or even beyond to the Afghan Frontier, though he would look doubtful about this further extension of licence. The danger would be either from the ladies being mixed up in a rumpus, and thus accidentally being involved in trouble, or from deliberate attack by some bad character on a car known to contain English women. The latter danger was not great, for the Koran frowns upon the deliberate molestation and ill-treatment of women, and the tribesmen were, as a whole, deeply shocked at certain horrible outrages on women that occurred, and did all they could to bring the offenders into British territory where they could be dealt with.

Not many ladies made the venture. They were all eager to go, but hard-hearted colonels discouraged subalterns competing for the favours of Amaryllis, and senior officers had to be an Example, even if Neæra coaxed. The 1st Indian Infrantry Brigade was the spearhead of the Army, and had no time for dalliance. The Civil and Political Officers were freer, but they were busy men, and they could not spare the car except on Sundays, when the Khyber was closed to ladies.

But the Khyber Railway Staff were different. These lawless men, owning allegiance neither to Military nor Political magnates, commanding the use of plentiful means of transport, and having some skill in placating the Political Agent, were open to attack. Amaryllis smiled, Neæra coaxed and the Khyber Railway succumbed.

I had no antiquated ideas about it being necessary for a man to be uncomfortable, unhappy, ill-housed and badly fed before he could be efficient. These Victorian notions seemed to me to be simply stupid. We had a

real job of work to tackle, and there would be steady collar-work required over a period of years. Much better to build the railway to the accompaniment of a ripple of laughter than to pull a long face, proclaim ourselves miserable sinners and suffer from overwork and repression. So when vexations gathered about us and things looked black, when tempers grew short and difficulties loomed, I would give my young men a car and my blessing and tell them to go and bring the prettiest girls from Peshawar to lunch. Perhaps I even went and fetched them myself.

My wife and daugher came up several times. The latter was five years old the first time she made the journey and ten the last time, when she drove the last spike, and then, triumphantly, albeit a bit scared, piloted the first train, whistling madly, into Landi Kotal Station. However, she did not come on the first trip of all, when I took my wife up alone.

It was in the very early days, when Horn and I were getting things going before Hearn arrived, that the Political Agent said he would let me take my wife up if I liked. She, bless her, was all for it. I did not like it, but what is a mere husband in a case like this, when adventure called and high enterprise knocked at the door? We had no transport of our own at that time, and it was necessary to requisition a battered Ford from the M.T.

So one Tuesday morning in spring we stuttered along the Mall, turned right at the Club and headed for the distant hills, my wife radiantly happy, and I as nervous as a cat. I would not have minded so much taking somebody else's wife, but to take one's own wife seemed absolutely foolhardy. I eyed every Pathan suspiciously. and when the wretched car broke down and stranded us in the ill-omened Jehangir Kulla of all places, I nearly had a fit. Some passing friends came to the rescue, and with great magnanimity lent us their car, volunteering to bring the Ford on as soon as it was repaired. I have rarely spent a more nerve-racking day.

Later, when I knew the ropes better and understood the tribesmen, I would let them know when I was taking my memsahib up, and with their assurance of protection I felt secure. But that first time was a nightmare, though she enjoyed every minute of it. But, then, she is as bold as a lion, whereas I am not.

When I was not distracted for fear of my own, it was rather fun to take up two ladies and act as showman. It was desperately cold in winter, especially on the outward journey from Peshawar to Landi Kotal in the teeth of the Khyber wind, and in an open touring car with the hood down. I used to warn my friends to put on every warm thing they had, and even then they would arrive at Landi Kotal frozen, and have to be thawed at a roaring fire before lunch. I liked to give them good value, so I would turn up after breakfast at their bungalow in Peshawar with an alarming-looking revolver strapped round me. As I tucked them into the back of the car with plenty of rugs, I would mention the latest news of battle, murder or sudden death, just to get the right atmosphere for the day. Then I and my Sikh chauffeur would take the front seats and off we would start.

Near Jamrud the road crosses the border of British India, which is marked by a line of cairns. No Man's Land had been reached, and the King's writ no longer ran.

"Now we are in the country where a rifle costs a thousand rupees, but a woman's life only five hundred," I shouted over my shoulder. Amaryllis and Neæra squealed a delighted protest, lost in the rush and roar of the Khyber wind we were now beginning to meet. I chuckled, as this was not only good showmanship, but also the plain truth. There is no need for exaggeration on the Frontier, it is provided ready made.

Jamrud came in sight—a mud-walled fort looking from a distance like a battleship sailing across the stony waste. It was surrounded by an untidy cluster of mili-

tary huts, horse troughs and incinerators, the whole being encircled by a barbed-wire entanglement.

"We have to stop here and have our passes examined. They know me, but will you please look as little like Bolshevik emissaries as possible."

Amaryllis and Neæra showed their pass and signed the book with fingers already a little numb with the cold.

"Very strong wind in the Pass to-day, Sahib," said the *babu,* "making much cold for lady Sahibs."

So before going on hats were tied on with scarves and the rug was well tucked round the lady Sahibs. The revolver is taken out and loaded, and off we go again over the two miles of undulating road leading to the jaws of the Pass.

"We are not yet in the Pass," I bawled, "but this piece of road has a bad reputation. Raiders lurk in these *nullahs,* and there have been some nasty incidents."

"Who are those men with rifles?" says Amaryllis.

"*Khassadars,* my dear," I reply, "you can see them picketing all the heights to-day as we go along."

Now the car begins to feel the grade. Over a bridge and round the corner and there is the entry to the Pass, sinister as ever.

"The Khyber!"

"We've been looking forward to this for months," say Amaryllis and Neæra, "and now it has happened. How lovely!"

A ridge slid across and hid the road behind us. I never liked this feeling. I was used to it alone, but now with those two young things in the car—oh, well, never mind. They were looking eagerly round as the magnificent scenery was arranged for us.

"What's that up there?" said one, pointing to a lonely blockhouse on the sky-line.

"Barley Ridge Fort," I said. "Four years ago it was rushed and every man in it killed."

This gives Amaryllis and Neæra something to think

about. Only four years ago! There is silence from the back of the car, and we begin the long climb to Shahgai.

"This valley we are climbing up is Kafir Tangi. We shall climb right out of it and over that ridge over there. You can see on the sky-line a blockhouse that we shall pass."

To and fro, to and fro, to and fro, one hairpin turn after another, the good engine beating steadily as we climbed. I looked back. Was Neæra looking a bit green?

"All right?" I shouted. "Don't be ashamed of saying you're feeling sick, if you are."

Neæra shook her head. Game kid, she was not going to give in.

To and fro, to and fro, lurch and swing. The gradient flattened out a bit and the car took the next curve rather fast in the teeth of the roaring gale. I looked back again. Neæra was undoubtedly a bit green, and Amaryllis was saying something to her. I piloted the car to the edge of the road and stopped.

"There's rather a fine view from here before we go on. We mustn't waste too much time, but we can stop for five minutes."

I pointed out the railway works already visible from here, making a wide sweep round the head of the valley.

"Destroying all the romance," said Amaryllis.

"Making more of it," I said. "Look, you can see right out of the Pass into the Plains. Peshawar lies to the left, but you can't see it. Now take your last look at security and civilisation. Ready?"

Did Neæra give my hand a little warm squeeze as she said she was quite ready?

I took the next curves more steadily, as we were near the top. In a short while the gradient eased, and the road, while still far from straight, stopped its in-and-out swinging and rose to Shahgai Fort on the ridge. The Khyber wind blew with a keener edge, if possible.

"Now you can see the mountains of Tirah, where no

English people can go. It's a great stronghold of the Afridis. They tell me it's quite fertile there, with pine woods and rain every day, even in the hot weather. Over there you can see the beginning of the Ali Masjid gorge. We are running downhill now to get to it, but from there onwards it will be uphill steadily all the way to Landi Kotal, which is the summit."

The view was magnificent in its savage barrenness. Ridge beyond ridge, higher and higher until the jagged teeth of the Tirah mountains stood menacingly against the sky. I was never tired of it, but, as I was driving to-day, I had to give all my attention to the car.

"We shall soon be meeting the caravan," I said. "It's one of the wonders of the world. Five miles long, and it is like the migration of a people, rather than a caravan. It takes two hours to pass."

The wind tossed these bits of information to the two girls, now completely recovered from the bad passage up the Shahgai rise.

"This is Windy Corner with a bad reputation. Several cars have been shot up here."

"Anyone killed?" said Amaryllis and Neæra, wide-eyed.

"Yes."

We swung round the corner past Ali Masjid with its little green shrine and bazaar. The fort stood boldly up on a limestone crag.

"Oo—oo—oo," chorused the back seat. This was the fort of their dreams, with a narrow zig-zag path up from the gorge, to where its walls stood sheer on the edge of a great precipice. There had been many a fight here for the possession of the gorge, and I would have liked to tell of these, but the blast of the wind prevented more than a few scraps of talk. At the Atroza Post on the road the *khassadars* saw my car coming, and turned out to give me a salute as we took the sharp corner slowly. The *jemadar* waved a greeting.

"An old friend of mine," I said. "I have a large assortment of villainous acquaintances in the Pass."

Amaryllis and Neæra smiled a little smile.

"We've heard a lot about you," they said.

"Would you like to meet a real live murderer?" I asked.

They would simply love to.

Now the road clung to the sides of the gorge and crept along ledges blasted out of the rock Precipice above and precipice below, careful driving was necessary.

"There's the other road for slow traffic below us. We ought to meet the caravan about here. Ah, there is the head of it."

The caravan was led by four *khassadars* followed by a string of magnificent Bakhtiari camels, great hairy beasts stepping slowly along with crates of fruit slung each side. A splendid specimen of humanity strode easily with them, six feet tall and russet-complexioned. Behind him two strapping russet wenches followed chattering and laughing. They looked us straight in the eyes and passed on. And then came the rest in a ceaseless stream, the camels padding noiselessly, the donkeys with pattering hooves and everywhere men, women and children, mostly walking, but here and there riding a camel or a donkey. Little babies, too small to walk, were sitting tied to the backs of camels, their little heads nodding violently to and fro.

Amaryllis and Neæra cried out at this—"No baby could stand it," they said.

The two roads joined for a short distance, and we had to slow down and stop several times before getting clear again. The sharp scent of the fruit-crates and the whiff of the camels dominated all other smells.

"What do they bring? And who are the people?"

"Fruit, carpets, Angora cats and dancing girls," I said.

"Don't be silly," cried Neæra.

"Fact," I said. "Frankincense, myrrh——"

"What are they?"

"I don't know. And they take back matches, corrugated iron, copper sheet, sewing machines, gramophone

records——" I stopped, warned by a look from Neæra.

" But who are the people ? "

" The big russet-complexioned folk are Powindahs, but that simply means a travelling merchant. I don't know what part of Asia they properly belong to."

We had to stop again owing to a huddle of camels and donkeys that hemmed us in. One of the *khassadar* escort came and helped to clear the block with much shouting.

" There are also a lot of travellers who come with the caravan for security. If you look you can see specimens of all the races of Asia."

We were able to creep forward slowly.

" The Powindahs are not necessarily the owners of the merchandise they carry. Most of them are simply Asiatic Carter Patersons."

As far as we could see in both directions the caravan road was filled with the stream of men and animals. There was no confusion, but the pace was slow. It was twenty miles from Landi Kotal to Jamrud, and this distance had to be covered in one day, so there was no time for stopping. The speed was not much more than two miles an hour, so they could just do the distance in a winter's day.

Amaryllis and Neæra sat silent in wonder. There seemed no end to this procession.

" It's like a train of ants," said Neæra.

" Only they don't scurry like ants," said Amaryllis.

The car crept forward a few inches. The camels were not frightened by it. They regarded it with infinite contempt. At last we got clear on to the motor road again. The two roads were never far from each other in the narrow valley, and sometimes they crossed each other. At such places *khassadars* directed the traffic like London policemen.

" Ought I to stop and tell that *khassadar* I think he is wonderful ? " said Amaryllis.

"You tell that to the Press on your return," I said, "that is, if you get back alive."

We were now running easily up the main Khyber valley, which was opening out wider. We should follow this to the divide at the head of the valley. Stony fields came into view and Afridi villages with their watch-towers. I had told my two guests some tales of blood feuds and other horrors, and they looked round understandingly. I saw old Khwazai on the road, and we hailed him. The old villain came hastening up with his ready smile.

"Salaam, Sahib. Are you well? Are you fit and strong? May you never be tired!"

We exchanged the customary salutations.

"I have two friends with me to-day."

Khwazai looked over their heads with grave and contemptuous courtesy. The huzzies ought to be veiled, and, anyway, they were very plain.

"Salaam, mensahib, salaam," and he turned to continue his talk with me.

We continued our journey. Amaryllis and Neæra were a little silent. Then——

"What a handsome man. I hate him. He despised us."

They were a bit ruffled. They were not used to being despised. Quite the reverse. I chuckled.

"What are you laughing at?"

"Nothing!"

"I hate you too. I hate all men!"

"That's the Buddhist *stupa* I told you about, where the hands come out and strangle you," I ventured over my shoulder.

Amaryllis and Neæra regarded me oddly.

"Do you really believe in Black Magic?"

But I pretended not to hear.

"Landi Kotal in sight," I pointed, "it's behind that rocky ridge with the two blockhouses. We shall be there in twenty minutes. Hungry?"

ALI MASJID GORGE

LANDI KOTAL AT THE SUMMIT OF THE KHYBER PASS

" Famished."

"' We've made pretty good time. If we hurry up and gobble lunch, I may be able to take you on to the Frontier of Afghanistan. That's right down the other side beyond the Kotal. Can't promise, but if the news is good, I'll risk it, if you're game. There *is* some risk."

Delighted chirps assured me of the gameness. Just two hours after leaving Peshawar, we ran into Landi Kotal. At the Railway camp we were received by my old servant, Rafiuddin, with a benevolent smile. He knew exactly how everything should be arranged, and had even laid a packet of hairpins on the dressing-table in the guest hut, regardless of changed fashions. There was a roaring fire, too, to thaw the two girls, who were frozen wellnigh stiff. Amaryllis and Neæra disappeared into the guest hut with many injunctions to hurry up. The tangles of Neæra's hair would need heavy repairs after two hours' rush through the Khyber wind

Then after many bangings on the door and entreaties to make haste, they appeared, and we crossed the little garden to the mess hut, where we sat down to a hearty lunch.

" I love your little garden," said Amaryllis.

" And the dovecot," cried Neæra.

" After lunch," I said with my mouth full, " we shall descend sharply to Landi Khana, one thousand feet below us. The news is good, and we can go on. The road is steep and winding and, after we pass Michni Kandao, you will see Afghanistan and the Kabul river spread out like a map. The railway is mostly in tunnels, and does not disfigure the country very much."

" Is the road like the Shahgai rise ? " queried Neæra anxiously.

" Steeper, but not so twisty. You'll be all right, and I will take it gently."

So, munching our last mouthfuls in haste, we once more packed into my car and set off with our backs still

turned to Peshawar. We ran right through Landi Kotal camp and past the gates of the Fort.

"How big it is," said Amaryllis.

"Yes. It can hold a battalion. The officers' quarters are very nice, with a little garden like ours, and a well of its own."

"How nice."

"In 1897 it was sacked, and the dead were thrown into the well, completely filling it."

Dead silence from the back seat.

Now the road began to descend sharply, but just outside Landi Kotal I stopped to look at the Serai.

"This is where the caravan halts for the night."

"I see. A caravanserai."

"Yes, but they don't use the word caravan. This is simply called the Serai."

It was a huge square surrounded by a high wall with the inevitable *burji* at the corners. Along one side was a row of shops for foodstuffs, fodder, and clothing, with a cobbler's shop and a blacksmith. Along another wall was a series of lean-to sheds and feeding-troughs for donkeys and mules. It was empty at the moment, as the caravan had left in the early morning for Jamrud, and the incoming caravan from Jamrud would not arrive till the evening.

"What," asked Amaryllis, "are those buildings in that little extra enclosure over there?"

"Those are the women's quarters where they can lodge in some privacy, if they can afford it, and if there is room. They are rather crowded at this time of the year, when the caravan is at its biggest."

"But what do the poor things do, if there is no room?"

"Then they must manage as best they can in the open courtyard, unless they can get a little shelter among the animals under those sheds, where the feeding-troughs are."

Amaryllis and Neæra exclaimed at the injustice of this.

"Do you remember an old story?" I asked. "It was about one Joseph with Mary, his espoused wife, who were on a journey. And she brought forth her first-born son and wrapped him in swaddling clothes and laid him in a manger; because there was no room for them in the inn."

It was a soft-eyed Amaryllis and Neæra that looked on the Serai.

"No room for them in the inn. In the Serai?" they breathed.

"Yes. This is the kind of caravanserai that is found all over the East from Palestine to China."

"Can you tell us any more, please, about the Serai?"

"We must get on. A man's life shall be as grass upon the housetops. Do you see the top of that *burji?* There was a little rain a few days ago, and so those poor little blades of grass have sprung from seeds blown by the wind. But in a few days they will be dried up and the grass will be dead."

Beyond Landi Kotal the Pass road becomes much more sinister looking. It worms its way down a narrow crack which grows deeper and quieter and more full of echoes. A mile from the Kotal there is a sharp turn in the road and suddenly the most wonderful view in the world is seen. I stopped the car. We were all silent from sheer amazement. No words could describe it, and no photograph or picture could suggest it. The foreground dropped sharply away, so that we felt as though we were in a balloon.

"Afghanistan!" I said. "The actual frontier is down there by that little shanty. There will be Afghan sentries there."

Amaryllis and Neæra said nothing.

"Tradition has it that it was here that Kitchener came, when he said the Khyber Railway was impossible."

"Where is the railway?"

"Gone underground and swung far over to the right into the Tora Tigga valley, a very bad land where even

I must always take an escort. Then it swings back through more tunnels and turns up down there. You can see the embankment immediately below us, near that collection of huts, which is Landi Khana."

We ran on, Neæra a little thoughtful and introspective, and at the bottom of the descent met, by a stroke of luck, the *tehsildar,* a magnificent man six foot four inches in his socks, one of six sons all in Government service.

"Can we go on to the Frontier, Khan Sahib?"

"Yes. I'll come with you. You have your revolver? Well, that's two of us. But don't be afraid, lady sahib, there is no danger to-day."

So the gigantic bulk of the Khan Sahib was squeezed into the front seat, and the Sikh chauffeur clung precariously on the running-board. The good Khyber road ended at Landi Khana, and we felt our way cautiously along the caravan track.

"It's only about a mile more," I explained.

Amaryllis and Neæra, tight-lipped and bright-eyed, looked eagerly around. This was in truth an Adventure. But there was not very much to see. The barren, stony desolation of the valley was perhaps a little more pronounced, that was all. And presently there was an untidy wire fence, and a soldier in an unfamiliar uniform. Everywhere a tumble of ridges and a blockhouse on the sky-line.

"Frontier Post," I said, "the very last of all. Beyond lies Asia."

"Perhaps it would be as well if the lady sahibs did not stay here very long," said the Khan Sahib. "It is not a good place."

And so back to Peshawar. Up the long climb to Michni Kandao and Landi Kotal, then the easy run down the main valley to Ali Masjid, through the gorge and up to Shahgai. Gently down the descent from Shahgai, so as to spare Neæra as much as possible, and so out of the Pass to Jamrud. The *babu* ticked off Amaryllis and Neæra from his list as safely returned,

3.15 p.m., and there only remained the ten-mile stretch over stony plains to Peshawar, civilisation, warmth, tea, and delighted chatter about the day's adventures.

This day gave me an idea. I broached it to Hall, and he definitely approved. But would the contractors like it? Enquiry from the contractors elicited approving chuckles. They were not unbending Puritans like that old scoundrel Khwazai. Every one knew the Sahibs were mad, and, if they thought it would bring good luck to the bridge, it would be a good thing. The idea was to get all the prettiest girls in Peshawar to lay the foundation stones of the principal bridges, one at a time, that is, not all together. We made out a list of the bridges. Anxiously we considered whether there were that number of really pretty girls. I said I would ask Zoe and Macha. They're both married, objected Hall. Macha is a widow, I said, and, if I suggest it to Khwazai, Zoe will be, too. I don't press it, said Hall. Very well, then, Zoe and Macha, that's two. Hall added four more names. A pity your memsahib is in England, he said. We want two more, what about Incognita? Too fat. Or Miranda? Too thin. It was a serious problem, but at last eight girls were agreed upon.

Zoe was the first. The contractor entered into the fun of the thing and rigged up streams of bunting. He even had cakes and fruit and ghastly-looking bottles of pink and green aerated waters from Peshawar. The Pathans scented a *tomasha* and perched like crows on the rocks all round. A row of veiled feminine heads peeped over the wall of a village not far off. The heights all round were picketed.

There was no band, no glitter, no speeches. Just ourselves, the Pathans, and the grim hills. And bright sunshine. The Khyber wind was kind and blew a gentle blast, so that the bunting fluttered bravely in the cold rush of clean air. Presently came Zoe escorted by Hall in her car. The *khassadars* drew up in a ragged line and presented arms in a hearty, but wildly inaccurate, version of the movement. No refreshments yet, business

first. So Zoe tripped down to the torrent, where the foundation stone hung over the appointed spot, and the Pathans flocked round, full of curiosity.

"What do I do?" queried Zoe anxiously.

"Quite simple. The masons will lower the stone into place when you tell them to. You then take this hammer and tap the stone, saying, 'I declare this stone to be well and truly laid.'"

"Will you tell them to lower it?"

"All right. You can put anything you like under the stone, and it will be built into the bridge and stay there for ever and ever, until the archæologists in A.D. 10000 dig it up."

The stone began to descend. Zoe looked a bit thoughtful, rummaged in her bag, and put something under the stone. Something silver. Was it a rupee, or something else? Zoe only laughed when I asked her what it was some days later. Just laughed and then kissed the top of her husband's head and rumpled his hair. Then they both laughed and wouldn't tell me anything.

"I declare this stone to be well and truly laid."

Tap, tap, tap.

The Pathans caught the idea and broke out into shouts, wishing good luck to the bridge. The contractor grinned. This was a Good Thing and the Sahibs were not so mad after all.

Zoe blenched at the refreshments. Hot, sizzling gobbets of mutton on skewers had now been added to the menu.

"The mutton is delicious," I said. "You slide a mouthful off the skewer with your fingers and eat it thus. Better have one just to please the old boy."

Zoe nibbled and asked for another and then another. It was delicious and the Khyber wind sharpens the appetite. The Pathans laughed and made way courteously for the memsahib to return to her car. The little ceremony had been a great success. Zoe departed amid a scene of enthusiasm.

And so one by one, as the foundations were ready, these gracious and lovely ladies came to the grim Khyber and brought luck with them. I looked up at the hills and smiled. With Nature's own weapons would I fight them ! A foundation stone, laid by the hand of that most mysterious of Nature's works, was strong magic ! I chuckled and rubbed my hands.

The rule that ladies must leave the Khyber before dusk was broken only once. The Political Agent was talking this matter over with me, and, greatly daring, he smote his knee and said:

" We'll take our wives up for a week-end ! "

And we did. But only that once. Soon after, the dreadful murder of Mrs. Ellis and the abduction of her daughter shocked even the blood-stained Frontier, and all precautions were doubled and redoubled. But this dreadful event still lay in the future, and our wives, who were great friends, jumped at the chance.

So one evening in Landi Kotal as the sun set, I had the strange experience of having my wife in the other arm-chair over the fire. Inside our bullet-proof hut, there was no danger, and I did not feel nervous. We dined with the Political Agent and his wife in the Fort, and the Brigadier, disapproving but amused at the escapade, was there too. It was a strange setting for the meal. Over the port, the Brigadier ventured that the defence of Landi Kotal with ladies inside would have to be a very different operation from the defence without the complication of ladies. We began to wonder whether the escapade was wise. Anyway, things were very quiet at present, I said. On the Frontier, mused the Brigadier, things boiled up without notice.

The Railway camp was outside the Fort, and I had a man with a lantern to see us home. I told him to go twenty yards ahead.

" Why ? " asked my wife.

" Snipers would shoot at the lamp and kill him instead of us," I answered callously. The Brigadier was right ; tactics *were* different with ladies present.

Next day we were invited to tea by Khan Bahadur Malik Mir Akbar Khan, the chieftain of the Shinwaris.

" It's rather a mouthful," I said, " Khan Bahadur is a title, Malik means chief, and Mir Akbar Khan is his name. You call him Khan Bahadur when you talk to him."

His village was about two miles away, and a fairly good track enabled cars to reach it, for the Malik was a rich man by local standards, and owned two cars. A great entertainment awaited us. The village was the usual fort, and the *tomasha* took place in the courtyard, and on a covered veranda facing it. A musician played to us the stirring music of the Pathans on a reed flute accompanied by drums. There is something terribly exciting about this music even when it is a plaintive love song. Then some boys with long hair, dressed as girls and devoid of morals, danced a vigorous dance to a pipe and tom-tom, whose players walked in and out amongst the boys and boxed their ears if they did not dance vigorously enough. Next a fine handsome man sprang up and danced alone with much stamping and crouching like the Russians, while the spectators shouted encouragement. Then came the famous stick dance, in which four men with short sticks in each hand dance a mimic fight. The sticks clash against each other in perfect time to the quick rhythm of the dance, which grows faster and faster till the dancers roll on the ground, still in time to the rapid click of their sticks.

Then the old Malik asked us to sit down at table for refreshments. We began with delicious Russian tea, accompanied by Huntley and Palmer's biscuits and Pathan bread. My wife was hungry in the keen air and made a hearty tea. This was, however, only a beginning. The real business of the day now began. Towels were handed round, and then each guest had a roast chicken put in front of him. We proceeded to tear these to pieces with our fingers, and very good eating they were. After this little appetiser, great dishes of *pilau* were placed on the table. This dish consists of

masses of steaming rice with chunks of mutton embedded in it. You help yourself to handfuls. The old Malik was delighted, and pressed every one to eat more. As good manners required, the Shinwaris made digestive noises indicative of the satisfaction of their appetites. My wife glanced despairingly at me, and made a valiant effort to eat. Piles of fruit ended the feast.

Now it was time to go. The Khan Bahadur with many apologies, because he knew the English did not take presents, asked if he might present each lady with a gold coin as a souvenir. I do not know what it was, but it was a very lovely barbaric gold coin from the depths of Asia. The Political Agent and I exchanged a look, and the present was courteously refused. It was not the custom of the English, and the pleasure of the entertainment had been more than enough. The old Malik nodded and smiled, and said he quite understood. We left amid a *feu de joie* of bombs and crackers. The Shinwaris pressed round each car for a handshake, and it was slow progress for a little while. The boys ran alongside like boys all the world over, turning cartwheels and begging for pennies, though the elders disapproved of this.

Not long after this Mir Akbar Khan was murdered. By that time he had become quite isolated from the other Shinwaris, who were jealous of his position and of his wealth. He was a shrewd old man, and did very well out of his railway contracts as well as in other business he undertook in Peshawar. It was said that he kept his money in the form of gold ingots, buried in his village where we attended the feast. If so, this may have had something to do with his murder. He was a staunch upholder of the English, and his violent end was a matter for great regret.

The morning after the feast my wife and I arranged for an escort and walked on pious pilgrimage to a place where a British force had camped, when Roberts marched to Kabul and Kandahar. My wife's father had been campaigning there in the 'eighties, and must have

camped on this spot. It was still known as "General's Camp," and you could still trace the ground plan of the rough huts they had built to shelter themselves from the sun and the wind. The paths they had made for picketing the heights and for going down to the spring of water below could still be seen. They had been just one of the many hosts that had surged through the Khyber. My wife poked eagerly about among the ruins, trying to reconstruct it all in her mind from her father's dimly remembered tales. He had been seized with cholera here and had survived to tell the tale. He had lain on his bed and told his servant to keep fetching water and swill it over him continuously. Thus the old hero had survived the dread disease which destroyed so many of weaker fibre. We spent a pleasant hour in the bright sunshine, and then returned to Landi Kotal in a thoughtful mood. And in the afternoon we returned to Peshawar.

My wife went Home after this for a year, and I had the idea of trying to get the authorities to let her stay at Landi Kotal on her return. But it was no more than an idea, for the activities of the murderous Ajab Khan soon afterwards dispelled it. This man was responsible for many outrages, and finally murdered an English lady in Kohat and abducted her daughter. This shocked even the lawless Frontier, and the tribesmen actively assisted in the rescue of the daughter unharmed. But all precautions were stiffened up and even in Peshawar itself it was necessary to be careful. Ajab was an impudent scoundrel, and he sent word that he was going to carry out a similar outrage in Peshawar to his Kohat crime. This happened just before I was going down to stay with some friends in Peshawar for a week-end. I had always looked upon a stay in Peshawar, with all its civilised amenities, as a sort of rest-cure from the insecurity of the Khyber. But this time I found a state of tension with police and troops everywhere, and armoured cars at cross-roads with their engines ticking over. At my friends' bungalow I found them all laugh-

ing over a Brigade Order detailing the precautions to be taken and concluding with the joyous and justly celebrated paragraph to the effect that no lady was to sleep alone ! Of course the authorities were perfectly right to take all precautions, and I was able to see a rather impressive exhibition of their readiness. At about seven o'clock that evening there was some firing across the perimeter into some regimental lines, whereupon a nervous bugler blew the General Alarm. This was taken up on all sides, and in a few moments Peshawar Cantonment was like an overturned beehive. The Club emptied in an instant, and troops were doubling to their allotted stations within a few minutes. The alarm died down when it was found that there had only been some promiscuous firing and not an organised raid.

On another and scandalous occasion, or very nearly scandalous I should rather say, an American lady nearly spent the night at Landi Kotal. I had been on ten days' leave to Simla, and had met many good friends, and it appears that I had said to one partner at a dance that she must certainly visit the Khyber before leaving India. I must have told a moving tale, for one day I returned from my rounds to my little hut at about three o'clock in the afternoon. I was met by Rafiuddin, my faithful old servant who looked after me like a father. Strong disapproval was registered in every bristle of his white beard as he told me that a Miss Sahib had come. I did not understand, and settled down to a job of office work, but presently the outraged old man appeared again and said the Miss Sahib was in the guest house and wished to see me. Mystified, I went across to the hut, and there, sure enough, was a real live lady, and a very charming lady too. It was rather dark in the hut coming in out of the sun.

" I see you don't recognise me," said a voice with a faint transatlantic accent.

I humbly and apologetically agreed.

" Don't you remember that dance at the Grand Hotel ? " said a reproachful voice.

Enlightenment came with a rush.

"But, Helen, you can't stay here," I cried. "How did you come? How are you going back?"

American women are invincible. She had got a pass from the Political Agent somehow.

"Then I saw a lorry going along the Mall in Peshawar heading in the right direction, so I flagged it and said, 'Landi Kotal?' and the driver nodded, so I got in and here I am!"

"But the examining post at Jamrud!"

"I just said I was an American, and the *babu* said that was all right."

"But how are you going back?"

"The driver said he wasn't going back. So I thought I'd better see you. I've always found Englishmen very nice and helpful."

"Had any food?"

"No."

The scandalised Rafiuddin rapidly produced tea, toast and eggs, while I pondered.

"It's too late for you to go back to Peshawar now, but I can lend you a pair of pyjamas and a new toothbrush. You'll have to sleep alone in the guest house, and that means having sentries posted all round it, and that means telling the Brigadier, and that means trouble. Then I shall have to telephone to the Political Agent, otherwise they'll have a fit when you are not checked out at Jamrud."

"I guess so," and Helen cheerfully went on with her tea.

I was frantically whirling the handle of the telephone.

"The damn thing's out of order. Oh! Hullo! Hullo! Get me Peshawar Exchange. Line broken? Not ready till to-morrow? Good Heavens!"

Helen cracked another egg and looked enquiringly.

"The line to Peshawar is down," I said with the calmness of despair, "and the result is that you will be reported missing by the examining post at Jamrud.

They won't be able to telephone up here for news of you. There'll be a General Alarm. Troops moving. You're a bad girl, and ought to be spanked."

Helen asked for some more toast.

I was whirling the telephone handle again.

"Shall I go and see the Brigadier?" ventured Helen helpfully.

"You'll stay here and go on with your tea," and I bolted across to the Fort. I burst into the surprised Brigadier's office, and he listened indulgently.

"One moment," he said, and called through the door to the Staff Captain, "ask Colonel Jones to wait a minute."

"No, I won't supply any sentries," he said "There are too many already on duties that must be performed."

"But I can't leave the lady to sleep alone in an unguarded hut," I said.

"Quite so."

"But," I gasped, "I can't have her sleeping in my hut. Rafiuddin would never forgive me."

"I always said that ladies in the Khyber were a mistake."

"But this is no ordinary lady. She came in a lorry."

"So you say," he twinkled.

"But an American! International complications!"

"That's why I propose sending her back to Peshawar."

"But how? It's too late. I wouldn't risk it."

"It *is* a bit late. But Colonel Jones came up to-day, and he is leaving at once, and as he has an escort with him, I'll take the risk. Please fetch the lady, and I'll explain to Jones."

Back to Helen who had settled down very comfortably. There was no time for long explanations. I bundled her into her coat, protesting.

"Run," I said.

Breathlessly we reached Colonel Jones's car. He and the Brigadier seemed to be amused about something.

"Thank you so much," said Helen, a bit blown. "I

told you British officers always helped me out of my difficulties."

The Brigadier walked back with me.

"I've saved your reputation," he said, and laughed.

"Would you really have refused to supply sentries if she couldn't have got away?"

"Of course not. I should have had to save your reputation anyway."

. . . . . .

If perchance you read these lines, dear ladies in the Khyber, do you remember. An engineer growing a little weary with the strain salutes you!

CHAPTER X

DANGER UNDERGROUND

TIME was getting on. Work was started at the end of 1920; how long ago it seemed! 1921 passed, then 1922 and 1923 with steady progress being made, and now came 1924. I looked back over the intervening years since the first sod had been turned with some satisfaction, but we were not yet out of the wood. I had started the work in charge of No. 2 Division only, but, as we progressed, more and more had been added to my Division, until I was now in charge of all works. It was a great responsibility, but the work brought great compensations. I know of no finer joy than that of designing and building some great work. An engineer then becomes a creator, and cannot be denied a humble place among the ranks of the artists. He has the privilege and the delight, if he is a man of understanding, of creating something which is not only beautiful but useful, and since he is usually a plain, rugged sort of fellow, his works should be informed with a natural simplicity and candour. He passes through the same alternations of hope and fear, of anxiety and confidence, of despair and exaltation, as the creative artist, and on the completion of his work he has the added agonising experience of the test of his bridge or his dam by the use to which it is put. Those who cross a bridge swiftly in a fast train perhaps never spare a thought for the engineer who once stood and watched the first train rumble slowly over the bridge; so terribly heavy it seems as the great locomotive hesitates a little and then gently rolls forward. It is a moment charged with deep emotion, which is released

in a little impromptu waving and cheering and whistling. Then the work goes on, for engineers are also men of business and work under the spur of economic necessity, like other honest craftsmen. And this is doubtless very good for them, as it is for all good workmen. The sleek amateur, sure of his three meals, never yet produced the equal of his hungry colleague.

One of the greatest enemies with which the engineer has to contend is—delay. The everyday running costs of a great work are so huge, that each day of delay means the fruitless expenditure of a large sum. Apart from the natural fret to get on with the job, this consideration of costly delay is a constant source of anxiety. We had framed estimates of cost, which had had to be revised once or twice, and Authority in distant Delhi was properly watchful. Authority had the honour to request reasons why the excess over the original estimate, while understandable in view of the many uncertainties in a work of such magnitude under unusual conditions, etc. etc. All very proper, and it was an obvious duty to control expenditure and placate Authority.

Now a railway is clearly incomplete until every yard of it is laid. It would be no use having the whole Khyber Railway complete with the exception of a gap of fifty yards in the middle. So it was desirable to synchronise the rate of progress on all works, if possible, in order that there might be no vexatious gap at some difficult place when the rest was done. Not only vexatious, but costly because of the delay to the completion of the whole. Thus the appearance of special difficulties in some of the tunnels where none had been expected was a serious blow. These difficulties were due to the presence in some tunnels of large volumes of water, which, under certain circumstances, converted the shale into a treacherous slippery mud, through which tunnelling was a slow and dangerous proceeding.

In the early days, I and all of us congratulated ourselves on the dryness of the shale in the desiccated

Khyber region. Indeed, we foresaw difficulties in getting sufficient water for men and materials in an almost rainless tract. Storm water from occasional violent storms raged destructively down the bare hill-sides once or twice a year, and caused special problems in bridgework, but we assumed that once safely inside the hills we should find hard, dry, compacted shale like slate which would be easy to tunnel. On the whole this forecast was realised, and many of the tunnels were driven without any difficulty. But in a few cases, and notably in Michni tunnel, a truly appalling state of affairs was revealed as soon as the heading was driven. Perhaps we should have foreseen this, but looking back now, I do not think it was possible. The presence of water in such great quantities inside these steep barren ridges is still a mystery to me.

You can represent one of the innumerable shale ridges by making your finger-tips meet in an exaggerated gesture of prayer with the tips pointing upwards. Your two hands now make a model of a steep sky-pointing ridge, so steep that it is almost impossible to scramble up its dry, crumbling slopes. Now imagine a tunnel driven through from the back of one hand to the other at about the height of your knuckles. That was roughly how the problem presented itself before we started. The tunnel would only be three or four hundred yards long and we had no suspicion of what we should find. The first few yards would be in ordinary shale, a little troublesome to deal with, but not difficult. And then, against all expectations, there came a change. These drills suddenly sank almost without resistance into sodden wet mush, and water poured out in increasing volume the farther we went. To make matters worse, geologists reported that the water was highly impregnated with deleterious salts, which might prevent our mortar from setting properly, and would rot the bricks away in time It was a cruel blow.

To make matters worse still, these dangerous tunnels were mostly beyond Landi Kotal, at the far end of the

Pass, where transport difficulties were at their maximum, and where only meagre supplies of bricks and mortar could be taken in panniers on the backs of donkeys over goat tracks among the hills. I had hoped to be able to squeeze a train through partially constructed tunnels, and then finish them off with copious supplies of everything brought up by the train. But it was now clear that the minimum amount of work required for security was not going to be far off full completion of all works in these tunnels under the most adverse conditions. This again would add enormously to the cost. I shook my head in perplexity as the many sides of the problem emerged.

Well, there was nothing for it but to concentrate most of our scanty supplies on Michni tunnel and the other troublesome ones, while doing the minimum possible in the remaining tunnels, to enable the track to be laid, and so allow the train to bring plenty of timber, bricks and mortar. I explained this to my splendid staff, and they enthusiastically responded, as always, to the call. None knew better than they that the process of finding out what was the minimum compatible with safety would involve risks, however carefully the necessary precautions were taken. It is a relief to remember that, although mistakes were made, and that, although slips and collapses occurred, accidents involving injury and loss of life were mercifully few.

In order to make working conditions as good as possible, ventilation, water supply and electric light were laid on, and adequate arrangements for sanitation and medical services were organised. Thus these remote hills were disturbed by the throb of a little power-house, and the chatter of air-drills, while at night the gleam of electric lights twinkled bravely. For night work became necessary in order to avoid the delay which might endanger the orderly progress of the railway as a whole to its appointed conclusion. Neither I nor any of my staff could be out at night, but Shinwari excavators

would have to work unsupervised between sunset and sunrise. Furthermore, under the pressure of emergency, when the safety of the work was involved, masons and carpenters must remain in the tunnel all night, after proper arrangements had been made for their protection from hostile raiders.

Still, in spite of our best efforts, working conditions in the worst tunnels were deplorable. Excavators, carpenters and masons worked under an incessant rain of mud and water, often within a few inches of straining timbers, groaning with the pressure of the disturbed mountain squeezing in upon them. This pressure often appeared very menacing, and in Michni tunnel, not only did roof and sides thrust in upon us, but the floor tried to burst upwards, so that an inverted arch had to be built underneath. At times, I almost despaired and very nearly decided to wait until the train could bring a shield and compressed-air apparatus, such as is used for tunnelling under porous river-beds. And all the while there was the haunting fear of attack on our works by raiders out for loot, or by an enemy at blood feud with the contractor. Defence against hostile man, as well as against hostile Nature, could not be relaxed for an instant. Thus it was not only the groaning timbers that felt the strain.

Peters was not very hopeful. Accustomed to easier conditions in a civilised country, he appeared to be disturbed by the ignorance and fatalism of the tribesmen. He would wave his arms with inarticulate despair at the appalling risk taken by some Shinwari during his absence. Then a torrent of speech in an unknown Balkan tongue would relieve his feelings. By the sound of it, it was a very good language to swear in, but we could unfortunately only guess at its meaning. But he was never really happy with that infernal shale—he would shake his head at the many signs of danger and mutter to himself about them. I would ask what he thought of our rate of progress, which at times dwindled almost to *nil.* "Yes, yes," he would cry, and take off

his hat and rub the back of his head, "yes, yes," diminuendo.

Trouble began as soon as a start was made to enlarge a heading to full tunnel size in a bad patch of wet shale. An attempt was made to work upwards from the heading, which was at formation level, to the roof level. At once a torrent of liquid mud poured into the heading, and as fast as this was cleared away the torrent was renewed. Then the sides of the heading burst in. This was most alarming, and when the debris was cleared away, after some days' terribly slow work, there was a large hole above us from whose black and dripping sides further discharges of mud took place without warning. Peters and his men with great courage swarmed into the hole, trailing flex for their electric lights behind them, and made valiant attempts time and again to shore up the sides with timber. Again and again we thought we had stemmed the trouble, but again and again, in the night, when there was no one there, our timbers were swept away in a further collapse. There seemed no end to it. Day after day passed until the whole hill-side fell into the cavern, which had been growing larger and larger with each collapse. Even this did not end the trouble, for the sides of the hole went on breaking away until a great crater formed in the hill above, narrowing down to the little heading nearly a hundred feet below. It was a useful lesson, and showed the necessity for working continuously night and day in a bad patch, in spite of the insecurity of the country at night. It was clearly impossible to leave these hills unwatched. Pressure seemed to develop suddenly and unexpectedly, and unless working parties were on the spot ready to deal with an emergency, a collapse might occur. I had my suspicions that some of our troubles were due to hostile action. It was terribly disheartening sometimes to leave the tunnel works in the evening, with a clear advance all nicely timbered up ready for the masonry arch to be built the next day, and then to hear that, on arrival at work in the morn-

ing, everything had been found crashed down in confusion. This did not often happen, but when it did, it was disastrous, as it is a very difficult matter to clear up and re-timber a slip inside a tunnel. On one occasion there were signs of fire having burnt through an important support, and I was suspicious. It was always a possibility that some enemy would elude the sentries and creep in, and this fear considerably increased our anxieties during critical periods of the work.

The plan of operations in driving a tunnel in bad ground is roughly as follows. You must imagine a portion of the roof completed with a good solid arch of brickwork overhead. At the working face there is visible a nasty oozing mass of black shale apparently trying to burst into the tunnel workings, and only restrained by a small forest of props. The problem is to cut away say an eight-foot advance of the shale leaving sufficient room for the masons to build the arched roof. When that is done a further advance can be made, and so on.

The problem of undercutting and shoring up a clear space for the erection of an arch is, however, not easily solved. The method was to excavate forward a narrow heading, say twelve feet long. As soon as this was done, a massive beam of timber was dragged forward and fixed with one end resting on the completed arch, and the other standing on sturdy props at the further end of the heading. This massive beam was called a crown bar, and the safety of further operations depended on it. Next the heading was cautiously widened on one side, and, after widening it a few feet, another crown bar was placed in position. This process was repeated until the original heading was widened out of all recognition and turned into the void space required, in which an arch could be built. Forms were rapidly erected on which the arch was built and with a sigh of relief an advance of eight feet could be recorded. It was then necessary to fill up the space between the arch and the roof of the excavation with packing of any waste

materials available, or, if necessary, with concrete. All was then ready for a fresh advance by repeating the same process. The same crown bars were used over and over again by pulling them forward into the fresh length of heading excavated.

Now all this sounds very nice and easy. In actual fact this simple rotation of work could rarely be achieved. Each yard of advance presented fresh variations of the main problem, and it was very dangerous and unpleasant work for every one. Perhaps the most disagreeable thing was when the pressure of the mountain forced down the ends of the crown bars so as to infringe on the space required for building the arch. It was a matter of extreme difficulty to restore them to their proper place against the overpowering thrust of the semi-liquid mud. If a collapse were allowed to take place an enormous cavity would have formed and masses of semi-liquid shale would have poured into the workings, and this disaster would have blocked progress probably for months. Minor slips of this nature did occur, and my sturdy staff had to climb up into the resulting cavity and rapidly restore equilibrium with a number of timber props. Their courage was marvellous when such a difficulty had to be tackled.

All the time there was a constant rain of mud and water, and the creaking timbers gave evidence of the strain put upon them, as the shifting hill squeezed first in this direction and then in that. It was indeed more the rule than the exception to find timbers so tightly jammed, when the time came for the next advance, that it was impossible to move them, and they simply had to be left where they were. On one disastrous occasion, the massive crown bars were crushed outright under the pressure, and we were presented with a pretty kettle of fish. It would take too long to describe how this trouble was overcome, but overcome it was, and the work went on.

The shale was not only terribly treacherous stuff to work in, but it varied in the most heart-breaking

manner. In places it would be extremely hard and impregnated with crystalline material, which blunted and broke the steel drills. Then in one yard it would change to soft stuff such as I have described above. Sometimes there were signs giving us warning of such an impending change, but not always. On one occasion we were working forward happily in Adam Kasai tunnel in fairly hard rock. Peters and I had just concluded the inspection of a neighbouring tunnel when men came running with news of trouble in Adam Kasai tunnel. We hastened there and found a most remarkable situation. On one side, where we thought we were working in solid rock, this now proved to be a mere skin, and the side had burst in exposing soft mush oozing with water. The roof arch had been completed for some twenty feet forward, and the collapse of the rock at the side on which the arch had been standing left the arch completely unsupported. It was still standing apparently quite undamaged, incredible though this appeared. For a moment we hesitated to go under a massive arch, which by all the laws of Nature ought to come crashing to the ground at any moment. Then Peters and his gang rushed forward with props and wedges, and in a short time the arch was underpinned. By next day, masons had built up a side wall, and the tunnel was saved from an awkward collapse.

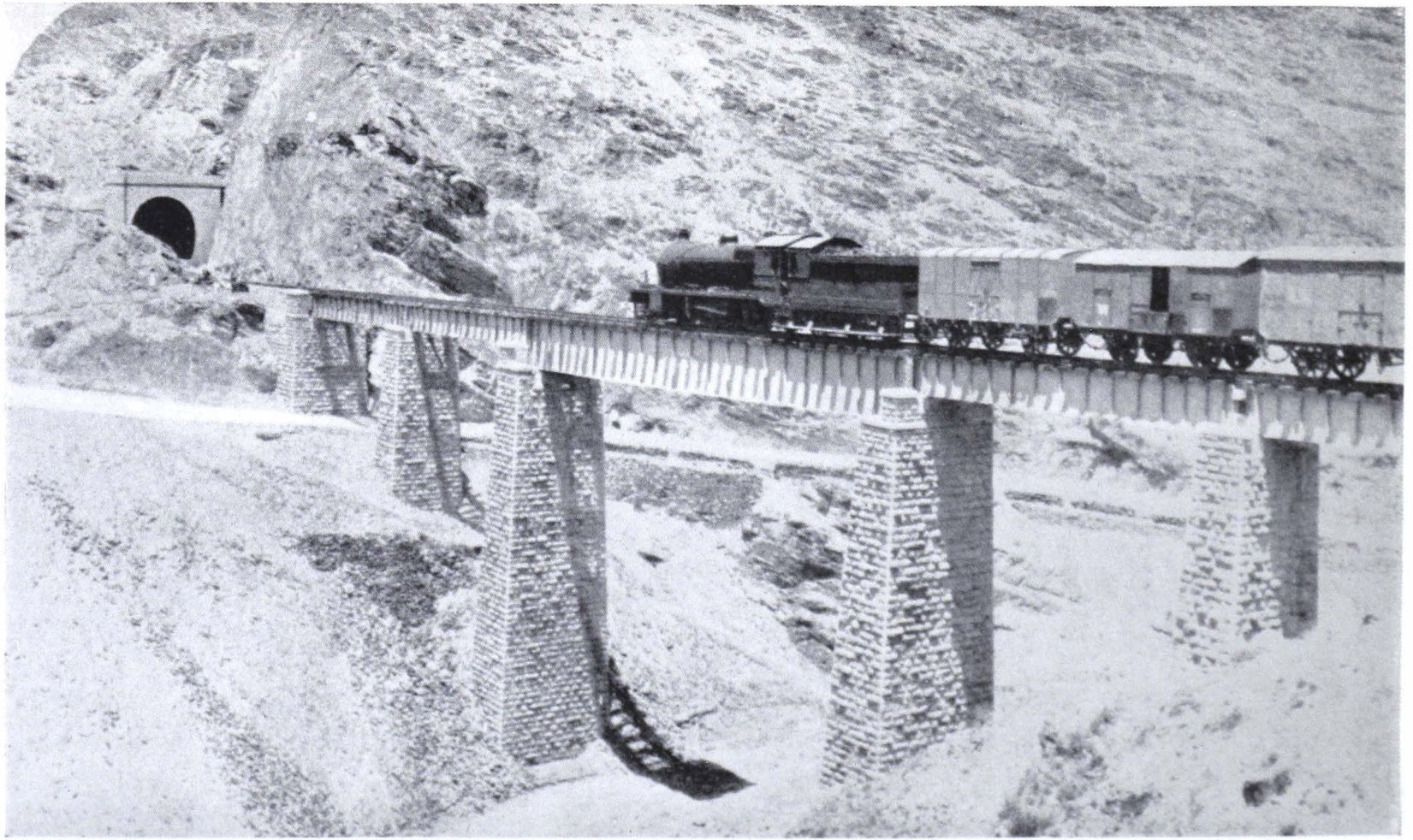
So long as work was passing through bad patches of shale we were never free from constant alarms. As the Pathans and Shinwaris grew more experienced, our anxieties were relieved to some extent, but their astonishing bravery was often an embarrassment, as they took the most appalling risks, if not constantly watched. My supervising staff could not be everywhere at once, but they had to move rapidly from place to place, not only to protect the tribesmen from themselves, but to protect our works from the consequences of their folly.

In many cases the rock appeared so hard that we left the side walls in their natural state without putting in

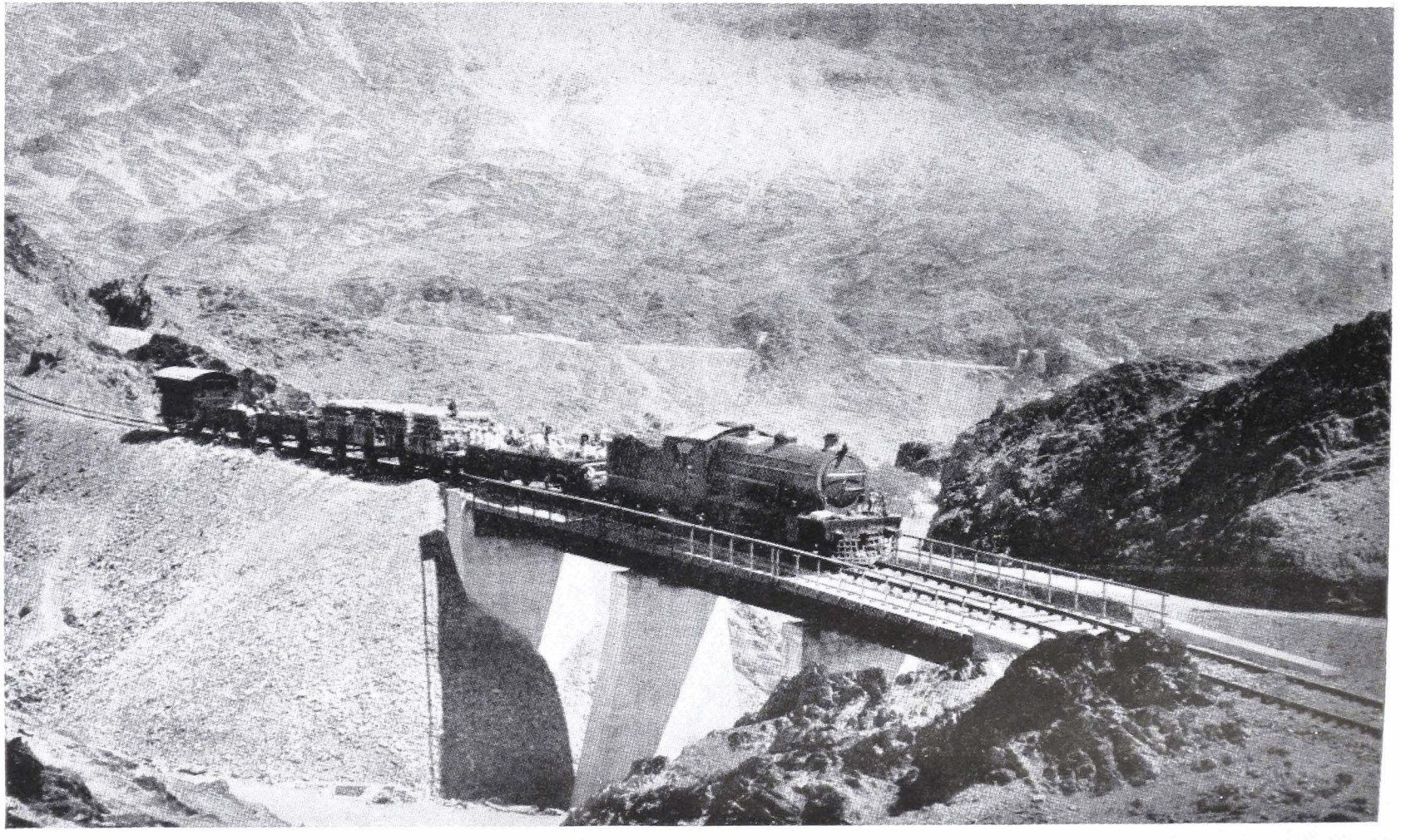
masonry. Sometimes a thin skin of masonry was put in, not to support the roof, but in order to protect the shale side walls from weathering. I suspected that the rock, even when fairly hard, might deteriorate after years of exposure, and I thought this weathering might be checked by covering it with a skin of masonry. This gave Nature a chance to plague us with further devilment. For it turned out that the shale did deteriorate when exposed, not after many years, but with an insidious rapidity. Warning was given by sudden unexpected slips in completed tunnels, which necessitated desperately rapid building of side walls to prevent absolute collapse. In a few cases actual collapse took place, and troublesome repairs were necessary. It became apparent that the lining of all tunnels in shale, however deceptively hard the rock appeared, would have to be carried out within a few years.

As if all these troubles were not enough, the actual instability of the hills themselves conspired to cause anxiety. At one place the hill had been so blasted, banged, thumped and generally be-devilled by us, that a huge landslip started, and the consequent movement of the hill sheared the tunnel in half, so that one end of it was moved several inches out of alignment. A movement of this description, of course, so cracked the unfortunate tunnel masonry that it was ruined. With a sigh, I gave orders for some months of careful work to be taken down cautiously and rebuilt.

The tribesmen were terribly careless about handling explosives. There were several accidents due to their neglect of the simple precautions required. Gelignite is a safe form of dynamite, and it will not explode if dropped or crushed or even if set alight in the open air. A gelignite cartridge looks like a short candle, yellowish in colour and rather soft, like stiff putty. In order to explode the gelignite cartridge it must be detonated. This is done by boring a hole in the cartridge and inserting a detonator in the hole. The hole can be made by pressing an ordinary pencil into the cartridge,



GIRDER BRIDGE OVER A LOOP IN THE MOTOR ROAD



CONSTRUCTION TRAIN ASCENDING THE GRADE TO SHAHGAI

which is soft enough to be penetrated in this manner. The detonator is a short copper tube open at one end, and having some fulminate of mercury stuck in the inside of the closed end. Fulminate is an immensely powerful but very dangerous explosive. A slight tap or a scratch will set it off, and so will the flame from a fuse. Thus detonators, although they contain only a tiny piece of fulminate, have to be treated with great care. One of these little detonators is quite enough to blow the hand to pieces, if it were exploded by careless handling. The fuse of any desired length is cut from a coil, and one end is inserted in the detonator, in which it is an easy fit. The copper tube is then pinched with a pair of pincers so as to grip the fuse. Then the detonator is pressed into the hole in the gelignite cartridge, which is then alive and highly dangerous. The live cartridge is then pushed to the bottom of a hole ready drilled in the rock to be blasted, and the hole is filled with earth or sand firmly rammed home. Everything is now ready, and when the fuse has been lighted, it burns steadily down at a regular rate, giving the blasting supervistor plenty of time to get away. In due course, the burning fuse reaches the detonator and sets it off, and the detonator instantaneously sets off the gelignite.

The tribesmen rapidly grew very adept at using explosives, but their utter disregard of elementary precautions was terrifying. For instance, I saw a man who had mislaid the pincers for clipping the detonator on to the fuse put the detonator in his mouth and bite it! If the detonator had gone off it would have blown his head to pieces. He merely laughed when I remonstrated, and said that a man can only die once.

In case of a misfire, great precautions must be taken. The situation in such a case is that the fuse has burnt out, but, for some unknown reason, the detonator has failed to explode. There is thus a live cartridge inside the rock, and if drilling operations are recommenced the drill may touch the cartridge, and set it off with disastrous results. The proper procedure is to wait for

half an hour, or longer if possible, to make sure that the cartridge has really misfired, for, sometimes, the fuse is defective or damaged, and burns much longer than expected. Then a hole must be drilled in the rock a few feet distant, and blasted so as either to explode the misfire with the shock or, at any rate, to shatter the rock and enable the misfired cartridge to be found in the debris, when it can be removed and destroyed.

By continually drumming into contractors the need for rigorous care, and by a strict system of rationing them with explosives, accidents were few and far between. When they did occur the indifference of the tribesmen to the resulting injuries made strict enquiry very difficult. When the headings were being driven, there was an unexplained explosion, and two of Mir Akbar Khan's men were killed. They were the only two men in the heading at the time, and evidence was scanty as to the cause of the accident, which was never fully ascertained. I was very upset about it, and when Mir Akbar Khan came to see me the next day, I assumed that he wanted to talk about it, and perhaps claim compensation for the loss of his men. However, he was his usual cheery self, and talked about various matters, gossiping away until at last he said he must be going. So I thought I had better broach the subject myself, and I said how sorry I was to hear about the accident to his two men.

"Oh, yes, they're dead," said Mir Akbar Khan, and proceeded to chat about something else. Apparently he never gave a thought to the matter, and he never mentioned it again. It was not exactly callousness but fatalism of outlook. A man must die some day, they said, and shrugged their shoulders.

Coupled with their alarming disregard of danger was an extreme physical hardihood. The injured received little or no sympathy from their fellows. In their own tribal fights, if an injured man could not get up and walk off, he was left to die or be murdered by

the enemy. A wounded man would therefore often succeed in reaching his own village with the most terrible injuries, and would eventually recover from them. It was always said that it was very difficult to kill a Pathan, and I can well believe it. Thus in case of an accident on the works the injured usually got up and walked back to their villages, refusing all offers of help, and they would usually recover. There was an excellent medical service available, but the Pathans were suspicious of hospitals, and preferred to go home to their own people. I can only remember one occasion on which a badly injured man was brought into Landi Kotal by his friends. He was obviously badly injured, and in a bad way, so I sent him in my car straight to the hospital in Peshawar with two of his friends. Two days later he was missing from his bed in hospital, having walked off in the night back to his village, fifteen miles away, where he recovered. My action in sending him to Peshawar in my own car was looked upon by the tribesmen as an amiable, but quite unnecessary, piece of eccentricity. They gently scolded me, and poked fun at me for being so compassionate. I protested that two of the names of the One were the Compassionate and the Merciful. Very true, was the reply, somewhat wonderingly. Well, then, I said, why shouldn't I be compassionate and merciful ? But this was considered rather shocking ; Bayley Sahib, who read many books, ought to know better than this. Truly a hard country, and no place for weaklings.

I spoke to many of the tribesmen about the danger underground, but they pooh-poohed it.

" Never mind, Sahib," they said in effect, " it is difficult and dangerous, but the work will prosper. Our railway will soon be finished."

For they now spoke of " our railway," and seemed to be proud of it. What a change from a few years back, when the first few contractors had to fight their enemies, and incurred a lot of unpopularity among their fellow-tribesmen. Even now there were sometimes rumours of

a hostile faction in Tirah, who would one day swarm down into the Khyber and smash up everything. The Khyber tribesmen, however, merely laughed at this threat and said they were not going to have their railway stopped.

And so the work went on. Perhaps I was growing a little haggard and hollow-eyed. Sleep did not seem to be so refreshing as usual, and little things, which would have made me laugh a few years before, now assumed a menacing aspect. My friends told me to go on leave, but I could not bring myself to do it. I did go on a brief ten-days holiday to Simla or to Kashmir, and then pined to get back. I imagined that danger somehow threatened my works, and I must get back to them. I told myself that everything would be all right as soon as the end was in sight. When the rails were laid and only a few unimportant works remained, I would relax, and all would be well.

Meanwhile there was danger everywhere, I thought. Danger from flood above ground, danger from treacherous strata underground, danger from the tribesmen, danger and hostility everywhere. And yet I loved it all, and could not leave it. The cruel fascination of the Frontier had caught me. No money would have tempted me to go, and a fierce determination to defy all the forces in opposition drove me on. The Padre remonstrated with me.

"You're putting too much of yourself into this old railway of yours," he said, understandingly. "Relax for a bit. Take six months leave, and then come back and finish it off."

I shook my head obstinately.

"What would my people think if I ran away?" I said.

"Don't be an ass," he replied. "Haven't you insisted on all of them taking leave regularly?"

"That's different."

"Suppose you crock up, how will that help your people, as you call them?"

" I'm not going to crock up. I'm feeling perfectly fit, only a bit tired. You see, I'm in charge of the whole work now, and I can't very well take long leave."

The Padre gave it up, but he was perfectly right. I ought to have remembered those wise words I had heard long ago. What was it he had said ? Something about the Frontier wearing a man out if he did not get away at times. Well, I had stuck it for four years, nearly as long as the War. A good many people had come and gone in that time, and I was the oldest inhabitant of Landi Kotal. I reflected rather uneasily on the number of men who did not seem able to stand the Frontier, and had gone. Some of them had broken down badly, and had been invalided elsewhere. Surely I was not going to be like that ? A man was entitled to be a bit tired after four years in this hard and cruel land. Another year, perhaps eighteen months, would do it.

Away with these silly fancies ! I was perfectly well, and ate hearty and slept, well, not so hearty. . . . Danger everywhere, but the work goes on.

CHAPTER XI

DISTINGUISHED VISITORS

THERE are two places in the world where, if you wait long enough, you can see every one of any importance. One is Victoria Station and the other is Landi Kotal. For the Khyber is one of the wonders of the world, and distinguished travellers are taken there as a matter of course during a tour of India.

Very distinguished people are always charming, and it was a great pleasure to be presented to some great man whose name is familiar to every one. Others, however, needed humanising, and the Khyber usually had the desired effect of removing the frills and trimmings from the lesser fry, who were foolish enough to wear them elsewhere. During a trip up the Pass they would chat and laugh quite naturally and happily. They seemed to find the Frontier air stimulating, and we tried to give them as enjoyable a day as possible.

There was a mild plague of intrepid travellers every winter, when conditions were easy and pleasant. These people would hire a taxi in Peshawar with a steady nerve, and make a bold dash up the Khyber, and back again, on one of the caravan days when the Pass was picketed. With cool daring they would take snapshots of the view from Michni Kandao, which never came out because the view is all background. They would then go away and write of the terrors of the Khyber's Grim Gate of Death, or some such picturesque phrase. They were usually harmless and pleasant people, but not always.

There was one gentleman who, after a flying visit, managed to write a wonderful article for a celebrated

illustrated paper about the Russian menace, and the stealthy advance of the Bolsheviks, who were secretly constructing a railway towards the North-West Frontier of India. This was all very alarming and exciting, and verisimilitude was added to his tale by actual photographs of the railway which was secretly being constructed. The photographs were, in fact, very good ones of the Khyber Railway ! I believe one of my youngsters sent the Editor of the paper concerned some pictures of the Bolsheviks who were building the railway, but as we were all clean-shaven and therefore lacked that hairiness which journalism demands from Bolshevism, the photographs were not accepted for publication. I have often wondered since how a railway can be secretly constructed. It seemed to me to be a noisy, untidy sort of business, difficult to conceal.

Distinguished visitors who were very welcome were brother engineers. Their comments and criticisms were always helpful. The works were, of course, similar to those carried out elsewhere, and our colleagues spared us the annoyance caused by some visitors, who went into raptures over some ordinary piece of work of no particular importance. What appeared to impress them was that the railway was being built by untutored tribesmen. They expressed themselves as delighted and impressed with the sight of a great engineering work being built by a horde of murderers and thieves. I suppose it was a bit remarkable, but I was now so used to the idea that it did not seem anything out of the way. They condoled with me over the cruel character of some of the shale, and said they had never seen anything like it.

Then we were sometimes formally inspected by Authority from far-off Delhi. Authority writing official documents, generally expressing pain at some misdemeanour, was a very different matter from Authority in person, accompanied by Authority's wife and daughter, looking forward to an exciting day in the Khyber. Authority in the distance had the honour to suggest and could not refrain from expressing the

opinion ; and, after politely damning that troublesome engineer, Authority had the honour to be his most obedient servant. But Authority in person had a disarming smile and a warm shake of the hand, and many a pleasant day I have spent, being officially inspected. On one memorable occasion two very High Authorities with their good ladies, after a frugal and hasty lunch at Landi Kotal, came to the Afghan Frontier in one of our Fiat lorries. Under the stimulating influence of the crowd of us in a lorry, we sang the old songs of bean-feasting days, and High Authority's wife and I exchanged hats. The Frontier is like that. Gold lace and trimmings do not seem to go with such a real man's life, and they quietly disappear. This makes things very pleasant, because Authority is really a very fine fellow, and would not be where he is if he were not. There was one Very Great Person indeed, to whom I was told off to act as guide. As we started off with much pomp and ceremony, I trotted out my guide's set speech.

" On the right, Your Excellency——"

" For God's sake, don't call me that ! "

" What do I call you, then? "

" Oh, anything—Bill or Darling, if you like, but not Excellency. Let's enjoy ourselves."

And enjoy ourselves we did.

Distinguished foreigners came too. There was Clemenceau himself, full of vigour in spite of his years. At one time, too, there was a lot of coming and going between Peshawar and Kabul, on the part of foreign envoys and attachés. One of the latter electrified Peshawar with a beautiful speech at a dinner party, when he was betrayed by the English idiom.

" It is you, madame," he assured his hostess, " who are the most accomplished and lovely lady in Peshawar from the top of your head to your bottom ! "

One of our most interesting visitors was Countess Roberts, the daughter of Lord Roberts, whom I had the privilege of escorting up the Pass. She had often visited

it as a girl, and knew just as much, and more, about the Khyber and its campaigns, than we did. To her great joy there was an old photograph in the fort at Landi Kotal, in which both she, as a young girl, and her father appeared. She gave us many lively reminiscences of the whiskered heroes in the group.

The most astonishing visitor of all completely floored me on his arrival. One day Malik Mir Akbar Khan came to see me, and said he wished to introduce his friend, Abdul Wahid Khan. I said I should be delighted to see him, and in came another Shinwari dressed just like the Malik. I gave him the customary salutation, and offered him a chair, and was staggered to receive a reply in English.

"Pleased to meet you, Boss."

And then seeing my astonishment he explained:

"You see, I went as a little boy of ten years old to Australia with my father, who was running a camel train in Queensland, and I've been there ever since."

It seemed that he had prospered, and that he was now a rich man. He thought of investing some of his money in opening up Afghanistan. He spoke of the other members of his Syndicate, commanding I forget how many millions. I sat spellbound at hearing all this talk from one who was outwardly indistinguishable from any other tribesman. He expressed astonishment at the way they lived and horror at their blood feuds. I felt the world was turning topsy-turvy.

"This is all very astonishing, Abdul Wahid," I said.

"Now isn't it nice to hear you call me that. The Australians could never get their tongues round it, and they call me Mr. Wade. I've married an Australian girl, too."

"And are you going to bring Mrs. Wade to the Khyber?"

"No, sir. Mrs. Wade will stay in Australia. Good Lord, the very idea of my wife living here makes my blood run cold."

I congratulated him on his wisdom. Others of his

race were not so wise and considerate as Mr. Wade. I knew, of course, that many Pathans had gone to Australia with camel trains and some married Australian girls. This was all right if they remained in Australia, but some of them returned, bringing their wives with them. Now and again one saw a white woman in the caravan leaving India, and the despair written on her face as she at last realised her fate was a troublesome memory. I saw Mr. Wade once or twice, and he seemed very hopeful about the prospects of business. Perhaps he is succeeding, and I wish him luck. These Afridis and Shinwaris are intelligent men, and, away from their traditional environment, they ought to do well, provided they are educated enough to take their place in civilisation.

At one time things were so quiet that a professional travelling theatrical company was allowed to come to Landi Kotal. They were rushed up from Peshawar, and gave a show at noon and were then rushed back again. The theatre for the occasion was the crazy little cinema where an enterprising Parsee exhibited the films of several years ago, whenever his engine was in running order. The ladies of the troupe included a Serpentine Dancer, who had shocked even Peshawar Club by her dancing, and that means a good deal. The performance at Landi Kotal was strictly for men only by force of circumstances, and the good lady excelled herself. Even the Moulin Rouge would have taken a ruddier tinge. The troops were delighted, and so were the Khyber Railway, and the whole show was an immense success. The only embarrassed person was the officer detailed to see that the troupe had proper accommodation for dressing and so on, and the wildest offers were made for a volume of his reminiscences. A blot on the proceedings was the language of the acrobatic dancer who came down with a dull thud on the stage. She had expected to find it of resilient planking, whereas it was made of hard, sun-dried clay concealed by a carpet.

The cost of the Khyber Railway was exercising the

minds of Authority at one time, but not seriously, I think. It has made India impregnable from land attack for one quarter of the cost of a single battleship. But, of course, it was a duty to carry out all works as economically as possible. The blessed word Economy roused the financial pundits, who gave tongue, and an Exalted One arrived. His frills were fixtures, and even the Frontier failed to dislodge them. With majestic pomposity we progressed up the Khyber, and I grew haggard and hoarse from giving explanations of the obvious. All appeared to be going well, but at last disaster, final and irrevocable, overwhelmed me. For in full view, outside a tunnel portal, there was an electric bulb—oh, shame ! —burning in full daylight. Someone made a rush to find the switch and turn it off, but it was too late, too late. The Exalted One pointed an accusing finger which trembled slightly with righteous indignation.

" What is the meaning of this ? "

" Well," I hastily improvised, " on a work of this magnitude we have to think of everything. The light is kept burning in case there is an eclipse of the sun."

The Exalted One was not amused, and I had to listen to a long lecture on Economy and the Scrupulous Care with which, etc. etc. The Exalted One was so pleased with his detection of this crime that he actually unbent and smiled once, just before we got back to Peshawar.

There were a number of inspections of the garrison by various Army authorities from the Commander-in-Chief downwards. These did not, of course, affect me so far as Army affairs were concerned, but it appeared to be customary for inspecting officers to express pained astonishment or amused exasperation at finding a large body of civilians firmly established inside the perimeter of the camp. They would then give me Notice to Quit, varying from one month to, on one occasion, twenty-four hours. On my enquiring where I was to go, they would reply that it was none of their business. So when the prescribed ritual was performed, I took a leaf out of Peters' book and cried, " Yes, yes," which seemed to

satisfy everybody, for nothing further ever happened. Indeed, on one occasion when an Inspector had come and gone without my receiving the customary Notice I went and complained to the Brigadier at the slight, which was, I said, doubtless due to some oversight. The Brigadier obligingly gave me twenty-four hours' Notice then and there, and I cried, "Yes, yes," so that honour was satisfied.

Not all our visitors came from India. There was the memorable incursion of an Afghan colonel, and a detachment of the Afghan Army on the occasion of the conclusion of peace with Afghanistan. The Afghan colonel was a magnificent sight. He was dressed in a dark green uniform of a smart cut, and over everything he had a sweeping cloak of the same colour with a high, rolled collar. He wore yellow gauntlets and high boots, and he was hung with an alarming assortment of weapons and cartridge holders. A smart fez completed an ensemble which would have graced a prince of Ruritania. Not so the troops; they marched in twos and even then found some difficulty in keeping step. I was standing with the Khyber Maliks watching the ceremony, which included rather an impressive service conducted by a Mullah. At the end of the service the troops broke alarmingly into a *feu de joie,* which they fired by emptying their magazines, each man for himself, from the hip, using ball cartridge. Bullets were whistling all over the place, and the old Maliks thought this was a great joke but a waste of ammunition. The contrast with a detachment of British troops was rather remarkable, and I asked a Malik jestingly what weapons were needed to fight the Afghan Army. His Rabelaisian reply is quite untranslatable, but it summed up tersely and effectively his opinion of the relative value of the two armies.

The obvious pleasure which most visitors derived from a jaunt up the Khyber gave us the idea of being ourselves visitors to some more remote region, where English people rarely or never penetrated. These rare

excursions could only be undertaken after obtaining the Political Agent's permission, and after arranging for tribal escort and responsibility. It is much better to arrange matters quietly and sensibly beforehand; intrepid travellers who rush in, after outwitting the authorities, are a bit of a nuisance, since hurried and improvised arrangements have then to be made to secure their safety, which they attribute, of course, to their own intrepidity. By making proper arrangements I was able to see something of the Kabul River valley. This is a mighty river which penetrates the ranges in a long and devious gorge. It rises in Afghanistan and joins the Indus at Attock. The melting snows of spring and summer bring it down in flood, and the sight of the swirling, eddying stream rushing through the gorge was very impressive. The gorge was quite impassable either to shipping or to passage by land along the banks. Indeed, there are no banks to the river in the ordinary sense of the word. The gorge is usually V-shaped, and the rushing water fills the bottom of the gigantic gully without giving reasonable foothold at its edge. It is tantalising to look down from above and see the great volume of water pouring through dreadful and arid wastes among the hills without giving any relief to their thirst. Perhaps some day a great scheme of irrigation by pumping may be evolved, but at present the waters roll down into India, where the English impound them in mighty works of irrigation, which turn deserts into gardens. An attempt was once made to build a railway along this terrific gorge, and traces of the works may still be seen standing as monuments to the engineers who built them. The legend of the impossibility of the Khyber route was one of the reasons for this valiant effort. Its abandonment no doubt broke the hearts of the engineers of that day, but I do not suppose anybody worried about that. Perhaps one day, as part of a great irrigation scheme, this broken road may be rebuilt and continued, to the honour of the pioneers who made it. Thus might the ancient demons of this terrible land be

finally exorcised and give place to the gentler sprites of a rich pasture land flowing with milk and honey.

Another expedition took me into the Loi Shilman valley, where I was hospitably entertained by the almost extinct tribe of Shilmanis. They were a miserable looking crew scratching a bare livelihood from a few stony acres in the valley. But they were an extremely handsome lot with a decided Grecian cast to their features. There must have been a strong Greek influence in these parts at one time when Alexander and his Macedonians invaded India. It is believed that Alexander himself did not pass through the Khyber, but that he went by mountain paths some distance to the north, where he probably stayed some time, being entertained by friendly tribes. But there is also reason to believe that a detachment came through the Khyber, where they also may have stayed. We unearthed one broken Greek coin on which the word "Basileus" could be read, but nothing else. I could not induce the tribesman who found it to part with it, so it was never properly examined. Whatever the truth of the matter may be, the Shilmanis could have sat as models for classical sculptures, and it seems a pity that their rapid extinction seems certain.

The most delightful excursion of all was suggested by Hall. The English are always driven by an urge to scale the peaks around them, and we were no exception. We had done a fair amount of scrambling up and down while out shooting *chikor*. These hardy birds were, however, in no danger from me. They would crouch, concealed in some stony patch, and rise with a whirr under my nose. By the time I had dropped my gun in a fright, picked it up, and tried to fire with the safety-catch still on, the birds had skimmed low along the ground and disappeared into a hollow. However, I liked being out on the hills, and was always ready to go shooting, though I preferred to leave my gun behind. It saved carrying a heavy burden about, and my con-

tribution to the bag was the same, whether I took a gun or not.

These expeditions gave rise to a bold project to climb to the top of Lakar Sar, a high limestone peak which dominated the surrounding hills. Hall said he would talk to the Sultan Khel, in whose lands it probably lay. So Abdul Gafur Khan came to see us and explained the difficulties.

"You see, Sahib, it is undoubtedly in Sultan Khel territory, but no one ever goes there. No sahib has been to the top except Varbteyn Sahib (Warburton, the first Political Agent, who has become a legendary character). It is a bad land where there may be many outlaws lurking in caves."

He explained how there was a large area of almost unexplored territory around the peak, into which outlaws fled from both Mohmand and Afridi lands. However, after thinking the matter over for a day or two, he and the whole tribe entered into the fun of the thing. They said they invited us, as their guests, to go to the top of Lakar Sar, and they would make all arrangements for food and camping. This was irresistible, and Hall and I, with four officers of the Seaforth Highlanders, eventually were the guests of the Sultan Khel on the journey, which would be two days' march. So one day in May, when the first heat of the hot season had already set in, we motored to Abdul Gafur's village, where, after a hearty breakfast, we set off on foot to scale the heights.

Practically the whole tribe, some two hundred men, came with us, armed to the teeth. They picketed the heights as we advanced in a manner which brought forth the professional admiration of the soldiers. Our scanty baggage on mules did not amount to much, as there was no need for tents, and we intended to bivouac like the tribesmen on the bare hill-side. The route lay at first up a rugged crack in the limestone cliffs. There was a sort of path, but it was rough going. The mules were amazing, but it was difficult even for them, and near the

top one of them suddenly slipped and went over with a frightened squeal. The poor creature was carrying a load of soda-water, which Abdul Gafur had provided out of courtesy to us. The mule fell sheer for about five hundred feet and was, of course, killed instantly, while the soda-water bottles all blew up with a loud explosion. The Pathans, with their usual callousness, thought this a tremendous joke, and Abdul Gafur could hardly express his regret at losing the soda-water owing to his gusts of laughter. From the top of this chimney-like crack the route eased off somewhat, and a steady grind up one narrow valley after another ensued. However, we were all in good condition, and evening found us arriving safely at our camping-place in a narrow limestone rift, where there was sufficient water for our little army. Here the Pathans had hospitably spread some dried grass on a ledge of rock. A great fire was laid, which lit the narrow gorge with a warm red glow, and all the tribesmen, save those actually on picket duty, perched themselves on the rocks around it. The first business was food, and they killed sheep, which had been driven along with us. These were flung, hair and all, on to the fire, while a greybeard turned them this way and that. For us, tit-bits of mutton were threaded on wooden skewers, and these were cooked by twiddling the skewers over glowing charcoal. With Pathan bread, which is baked from coarse flour into large flat loaves, this made a perfect meal. The Pathans dismembered the sheep, and devoured them hungrily. Then Abdul Gafur, who was sitting with us, said they were going to sing.

"Good," said I, "and we will give you song for song. We will sing the English songs, and you sing anything you like, even the Afridi war song."

For I had often heard of the Afridi war song, and had longed to hear it. Abdul Gafur Khan looked doubtful.

"The words are not suitable for the Sahib's ears," he said; "they are all about the great victories of our people, and how the *nullahs* run with the blood of the English."

"I know. But we shall perhaps not understand the words. I would hear the music."

"Very well, Sahib. For you we will sing it, later on, but not now. My people will perhaps get very excited, but do not be afraid. You are our guests."

A flute sounded and silence fell as the plaintive music of a love song echoed gently among the harsh crags. Then a voice from somewhere took it up, and sang sweetly with strange modulations unfamiliar to Western ears. At last I understood their music, now that I heard it in such a perfect setting among these quiet, hawk-eyed men. The stars twinkled, the red fire waxed and waned and all around lurked danger, while the gentle voice and the flute told the age-old tale.

"Now, Sahib, you promised to sing."

"We will all sing together after the custom of the English," I said.

Abdul Gafur explained to his people, and there were cries of encouragement from all sides. We gave them the "Old Leather Jacket" and "Down among the Dead Men," which were well received, though none of us could sing much. A solo from the flute of more martial music, accompanied by a drum, followed, and they then asked for "Down among the Dead Men" again, which was greeted with loud applause.

Every one was now well fed and in a good humour. We chatted easily and comfortably with our hosts about many things. Many of them had fought against us in the last Frontier campaign, and the Seaforth officers found plenty to discuss. Presently a greybeard stood forth alone in the firelight and began a sort of recitative.

"It is the beginning of the War Song, Sahib," said Abdul Gafur, and I noticed that he pulled his rifle forward into a handy position.

"I will sit among you," he said. "Sometimes our young men get excited and do foolish things. But not if I sit among you," and he smiled deprecatingly. His brother also came and sat with us.

The old man's tale began quietly, while he faced this

way and that. It was a recitative, but there was a rhythm in it, to which the tribesmen responded at times with a long drawn-out "Wallay-ay-ay!" Then the greybeard began to quicken the beat of his rhythm and to illustrate his song with fierce gestures, while the tribal responses took on a deeper and more threatening tone. I looked at Abdul Gafur, and he was transformed. His lips were pressed together and his nostrils quivered. He saw me looking at him and smiled quickly.

"It is exciting for us Pathans," he murmured with his eyes on the ancient. "Wallay-ay-ay!"

It was magnificent. We had gone back through the ages to the beginning of poetry. Thus was poetry born from the recital of tribal triumphs, with the intense rush of feeling from the audience adding to the inspiration of the poet. I could not understand the words, but there was no mistaking the maddening swiftness of the surge and beat of the rhythm. I was carried away on a quivering sweep of emotion, of elemental blood-lust.

"Wallay-ay-ay!" I whispered.

Now the old warrior was stamping and gesticulating as he chanted. It was almost a dance, and the tribesmen began to sway to and fro. Here and there an Afridi sprang to his feet.

"Wallay-ay-ay!" he cried.

Someone tossed the singer a rifle and his dance immediately began to interpret the movements of a warrior darting forward among the crags, taking cover and firing as he went. The tribesmen sprang to their feet and, precariously perched as they were, stamped, shouted, crouched and aimed in perfect time to the song. A wild exhilaration filled me, and I, too, wanted to brandish a rifle and stamp and shout. They swayed this way and that as the waves of emotion passed over them. Something primitive was loose in the narrow, echoing gorge, and swirled, eddying here and there at the bidding of the singer. These wild men were in the grip of something very ancient and very evil. They crowded closer in to the greybeard with fierce cries and

savage gestures. The rush of emotion was almost suffocating.

Abdul Gafur Khan was saying something to his brother, who nodded. He held up his hand, with a last shout of "Wallay-ay-ay!" the tumult subsided. The greybeard melted into the crowd and the song broke off. I drew a deep breath. It was impossible to talk for a time. Abdul Gafur smiled.

"I told you it was exciting, Sahib. Now perhaps it is time to sleep as we must start early to-morrow."

We were glad to stretch ourselves on the sweet-smelling hay, and slept soundly under the clear sky. Next morning the climb was continued. It was a steep but not difficult ascent to the top, where we were able to stay for an hour or so before starting back. The return journey was uneventful, but there was an awkward moment when our little army of Sultan Khel tribesmen entered Shinwari territory. However, amicable explanations and apologies were accepted on condition that our escort returned by the shortest route to their own villages. It was a most enjoyable expedition, and I think the tribesmen liked it as much as we did.

A few American tourists found their way to the Khyber, although it is a long way from the regular tourist track across India followed by most of their countrymen. As a rule they were in too great a hurry to establish any contact with the hospitable English people of Peshawar. Sometimes, however, these charming folk had letters of introduction, and we were able to give them an enjoyable time, but one of them was so stiff and unbending that no one could do anything with him. He considered the Khyber a very ordinary sort of road, of which there were much finer examples in his own country. The tribesmen and the caravan met with strong disapproval, as no American Government would have allowed such primitive conditions to go unamended. He enquired the cost of building Landi Kotal Fort, and was pained at my romantic suggestion that a good few lives had been included in the price. He said

he referred to dollars, not lives. So I thought it would please him if I said a million dollars, and it did. He cheered up and examined his surroundings with renewed interest. He was, of course, a solemn ass with the manners of a schoolmaster, not at all typical of his race, and he spent his day correcting our misapprehensions. I was thankful that he was not an engineer, or I should have been severely censured.

By far the most distinguished of our visitors was the Prince of Wales. The news of his coming was received with intense interest by the tribesmen. These ruffians, as I have repeatedly said, were no fools. They had a shrewd idea of world politics so far as they affected Islam. The defeat of Turkey and the disappearance of the Khalifate had deeply shaken them, but they accepted quite simply the fact that the British Empire was paramount in the world, and the King was to them a very real Person, wielding the immense power of the British Raj. I was eagerly questioned as to whether it was indeed the actual son of the King who was coming.

"Yes, the eldest son," I replied.

Deep-chested exclamations of approval greeted the news, and I was asked if they would be allowed to see him. I said that the Prince was well known by all to be a man who had understanding, and he would doubtless wish to meet the tribesmen. Their delight at the great Meeting at Jamrud, where the Prince accepted ceremonial gifts of sheep, was very genuine, and by all accounts the Prince enjoyed his day in the Khyber very much.

The tribesmen were furious at ill-natured rumours circulated by Hindu agitators that there would be a hostile demonstration against the Prince in Peshawar City. I had a difficult time explaining away the Raj's toleration of agitators.

"It is true, Sahib, that the yapping of dogs does no harm, but that is no reason why a stone should not be cast at them. Why does the King allow it?"

It was a difficult question to answer. Our easy-going

tolerance of noisy people, who do not really matter, was quite incomprehensible to them.

" Let the Chief Commissioner Sahib give us the word, and we will loot the City ! "

And they would have done it thoroughly and effectively. My protests that the harmless trader would suffer equally with the *babu* agitators were quite ineffective. Tribal law is what they understood. If the tribe offend, let the tribe suffer ! Peshawar City offended, let Peshawar City suffer ! The fierce old warriors got quite worked up about it. Finally they concluded that the King must have some very bad advisers in London, who did not know anything about Peshawar City.

There were some grounds for the tribesmen's belief that the *babu* agitators might cause trouble. Peshawar City is the wickedest City on earth and contains samples of every kind of blackguardism in Asia, not excepting the political agitator. These men are very cunning, and unscrupulous, and can achieve a good deal among a credulous and illiterate population. The wilder and more improbable the rumour, the more easily it seemed to be believed. We ourselves are not exempt from this strange perversity. A statement of such ordinary interest as that the Archbishop of Canterbury is an amiable and scholarly gentleman much beloved by all, arouses only mild interest, and would scarcely get into the evening papers. The rumour that the equally estimable Dean of X made his money by forging banknotes and kept a harem would have a wide circulation, especially among the knowing ones. How much more then must it be expected that the most absurd stories would run like wildfire through the inflammable bazaars of Peshawar.

The tribesmen's anger reached boiling-point, and some of them actually went to the Political Agent and asked if they might go to Peshawar and beat up the bazaars, so as to have everything quiet by the time the Prince arrived. I expect he was immensely amused, but

of course he explained that the Government were quite able to look after the matter without the unconventional assistance of the fierce Afridis. In the event nothing much happened during the Prince's visit to the City, though precautions had, of course, to be taken. I was not present in the City, but I heard all about it afterwards from one of my friends.

"Sahib, it happened in this way. The Hindu pigs were squealing very loud in the days before the Prince came, so we consulted among ourselves as to what we should do. The Political Agent had told us there would be no order to loot the City, but we thought that perhaps the Chief Commissioner Sahib or the General Sahib might give permission, if the Hindu pigs offered insult to the Prince before his face. So we decided that many of us would gather in the City in the market place, where the Prince would come to receive an Address. There we would wait for a sign, and if it came we would loot the City. All fell out as we had arranged, and many hundreds of us were there. So we waited, and presently the High Officers came and sat on the Platform. We looked eagerly at the Chief Commissioner Sahib to give a sign to our Malik, who was standing near him. The Chief Commissioner Sahib saw the Malik and all of us, and he smiled a greeting. So we thought that all was well and that the sign would come, perhaps, later on. But all was quiet. Then the Chief Commissioner Sahib beckoned to the General Sahib, who sat near him, and they spoke some words, and the General Sahib nodded. That seemed good, for doubtless the General Sahib agreed that it would be a good plan to loot the City. So we watched silently and waited. Then a Hindu pig at the back of the crowd cried out 'Gandhi ki Jai,' or some such foolishness. He was soon silenced, for some of us were there, and we looked eagerly for the sign. The General Sahib was looking to the Chief Commissioner Sahib for an order, but he sat quietly looking straight in front of him. And then, Sahib, while we waited for a sign, the Prince and all the High Officers went away,

so that there was no sign and no order to loot the City. I do not understand. Such things could not have happened in the days of Nicholson Sahib."

The dear old savages ! Their feelings were of intense reverence and genuine love for the Crown, and they would have delighted in indulging in an orgy of bloodshed in order to demonstrate their feelings. They were too simple-minded to realise that no such idea ever entered the heads of our estimable Administrators.

. . . . . .

I have often wondered if our distinguished visitors ever realised what great pleasure they gave to us all. In the remote Khyber, outside the boundaries of the Empire, we sometimes felt ourselves forgotten. But not by every one. Although we lived outside the British Empire, the Income-Tax collector never failed to deduct Income-Tax at the source. He did not, however, visit the Khyber. . . .

CHAPTER XII

THE END IN SIGHT

AT the beginning of 1925 long stretches of formation-level were ready, and it became necessary to prepare for the great day when the permanent way could be laid. It was indeed possible, somewhat earlier than this, to lay the permanent way from Jamrud to Bagiari at the entrance to the Pass, over comparatively easy country. This length covered only a few miles, but it was worth laying it, for it slightly shortened the run of our motor vehicles working out from railhead.

A deep cutting at Bagiari had given a good deal of trouble, and, by the time it was finished, there was practically a clear run ahead to the summit at Landi Kotal, along the completed formation, through tunnels and cuttings and over bridges and embankments. Every few miles there was a station with a station building. These stations were not intended seriously for passenger or goods traffic, which would be almost non-existent, but they were necessary to enable trains to pass each other, as the Khyber Railway is a single line. The station buildings are really forts, and are built as such, although they also house the station-master and his staff. The style of architecture is perhaps sufficiently indicated by one of the instructions on a drawing, which reads:

"Combined Booking Office Window and Machine-Gun Loophole."

However, in spite of their grim utility I think we managed to make a nice-looking job of the buildings, and they fitted into the surrounding hills admirably. One of these buildings or forts served two railway

stations. This sounds an impossibility, but it is a fact, and it is due to the serpentine character of the line. Owing to its sinuous twisting, it so happens that Changi Station and Medanak Station, although two miles apart by railway, lie one above the other on the side of a steep spur, so that a good hearty stonethrow from Changi would fall in Medanak. Thus the same little fort does for both stations.

Large supplies of rails, rail-fittings and sleepers were accumulated at Jamrud in preparation for the beginning of track-laying. This permanent way depot was, curiously enough, very attractive to raiding gangs. The rails, weighing half a ton each, were too heavy to steal, but the fittings, such as bolts and fishplates, were liable to disappear in large numbers. They were of course made of very high quality steel, and it appeared that the tribesmen valued them for forging down into knives, daggers, and rifle parts. Concealed somewhere in the hills was a rifle factory, where weapons were laboriously made by hand. I have often seen the products of this factory and, at a casual inspection, the rifle was indistinguishable from a British Service rifle. On handling it, however, the difference was obvious, and the counterfeit rifle was seen to be a very clumsy affair. It was made by imitating, as accurately as possible, the parts of a service weapon. The imitation even extended to the marks—the number, crown and G.R.—although sometimes these were carelessly put upside down. The whole thing was rather crude, but it undoubtedly fired Service ammunition, and at short range it was a murderous weapon. The difference in quality between a " Pass " rifle and a Service rifle is indicated by the price. A stolen British rifle sold for a thousand rupees, whereas the counterfeit was only worth a hundred. Thus the factory did not seriously compete with the rifle-stealing industry, while it provided an additional market for the products of ammunition stealers.

But the locomotive was whistling impatiently to enter the Khyber, and the new crop of difficulties caused by

raids on our permanent way supplies had to be overcome. As usual the provision of fortified posts, manned by *khassadars,* solved the difficulty as far as the storage depot was concerned, but new troubles arose as soon as track-laying started. It became a practice for thieves to remove at night as many fishplates and bolts as they could carry, thus endangering the safety of the first train out next morning, as well as causing a lot of vexatious delay and petty financial loss.

However, the great day came, and the echoes of the Pass were disturbed by the snorting and whistling of the train carrying forward supplies of rails, fittings and sleepers. No attempt was made to break records as the track needed particular care in laying. On a flat desert or prairie it is possible to lay track at the rate of one, or even two or more, miles a day. But we did not aim at laying more than a quarter of a mile. The line was on a series of sharp curves with very little straight portions between them, and there was a transition section at the beginning and end of every curve. This is provided so that the moving train does not abruptly change from the straight to a curve, but is eased over the change by a section of gradually increasing curvature. The super-elevation of the outer rail over the inner is also gradually increased to the required amount along the transition curve. There were vertical curves, too, where there was an abrupt change of grade, so as to enable a train climbing a three per cent grade, for example, to roll gently over to the level at the change of grade. So there was a good deal of tricky work in laying our track, which had to be done carefully since the effect of a derailment at some desolate spot on the side of a precipitous mountain might have been serious. Every day a quarter of a mile of track was laid and consolidated, and every morning the train puffed up the Pass, pushing trucks laden with a further quarter of a mile of materials.

I had a large scale map of the railway on the wall of my office, and every day I marked on it the new site

of railhead. Now that the end was in sight, I ought to have been filled with an exaltation of relief and joy. A quarter of a mile further ! And then next day another quarter of a mile ! Why was it that an increasing and alarming weariness assailed me and sapped my will-power ? Another quarter of a mile ! My mind filled with forebodings about landslips and floods. Suppose the shaking of the ground by the train started a landslip ! If the daily progress telegram was late, I sat with my head in my hands waiting for tidings of disaster. The telegram at last—another quarter of a mile ! Then if some quite ordinary happening delayed progress for a day or so, I would break out into an unreasoning fit of impatience. People were kind, and congratulated me on the near approach of the completion of the great work, and I would give a ghastly grin and be barely civil. And then I would go and sit alone and be ashamed of myself and brood over imaginary troubles. So near the end, and so tired ! But I determined to keep on. Another six months, say a year at the outside, would do it. A year ? A year seemed a terribly long time.

Then came the news that the Viceroy, accompanied by numerous officers of State, would open the railway. Could I give an approximate date ? I said I thought about October or November 1925, and this became a new source of worry for my tired brain. Suppose something happened and the railway was not ready by then ? In imagination I heard the jeers of my friends and enemies, and a sense of failure oppressed me, in place of joy at a fine piece of work well done.

Of course, all this seems very foolish to look back upon now, but then we poor human beings are foolish, especially when overstrained and tired. I had only myself to thank, as I had gone on year after year without a proper holiday, against the advice of men experienced in Frontier ways. They knew only too well how the hard conditions of life wear a man down—the racking change from freezing cold in winter to burning heat in summer, the lurking fear of assassination or torture,

the poor, thin food, all superimposed on the inevitable anxieties attending the construction of a great railway. Perhaps there was some excuse for a great and growing weariness, but none for my own folly in not going away for a holiday. At the time a fury of energy drove me on, and I grudged every day spent away from my beloved works. Is it possible that so prosaic a person as an engineer can have something of the artist in him and suffer from a frenzy of creative energy, succeeded by the inevitable reaction ?

A quarter of a mile a day ! Multiply the number of miles still remaining to Landi Kotal by four and that would be the number of days until the train reached the summit. Better add a week for unforeseen delays. With something of my old spirit I roused myself. We would have an unofficial and unauthorised celebration the day the track reached the summit. The pomp and ceremony of the Viceregal opening would come later when everything was completed, but we Dwellers in the Pass were a lawless lot, and why should we not have a little fun ? The matter was eagerly discussed in the bar of the Peshawar Club. We had no railway carriages, only some battered trucks, but they would serve. An improvised bar and a barrel of beer could be fitted into a truck. A regiment, which shall be nameless, promised its band, and the affair took shape.

I began to visualise the majestic progress of the train, pushed by our leaky old engine, about as much in need of repair as myself. First a gaily decorated truck containing the band, blowing triumphant fanfares, and then several truckloads of members of the Peshawar Club, followed by the truck containing the barrel of beer, and at the back old Puffing Billy. The garrison at Landi Kotal entered into the spirit of the thing, and promised a magnificently unofficial and unorthodox reception at the summit.

But it was not to be. The whole affair was openly and eagerly discussed, and invitations were incessantly demanded. Thus it came to the ears of Authority.

Authority was deeply pained and shocked to hear of the contemplated celebration. Was I not aware that the opening ceremony would be performed by the Viceroy ? And did I not see that the gilt would be completely taken off the gingerbread if the contemplated unofficial ceremony took place ? Under the circumstances Authority had the honour to state that it was impossible to approve of the proposed unofficial opening of the railway, and it was forbidden.

Impossible ! Forbidden ! Where had I heard those two words before ? My mind went back to those far-off days, how many years ago, when the bare idea of starting work was scoffed at. How many intervening years of effort and struggle. How many survivors of the original staff ! How many sleepless nights, laborious days and scorned delights ! How many days left ! Five miles multiplied by four equals twenty days. Better say a little over three weeks. But our little bit of nonsense was impossible and forbidden ! Discouraged, and with my headache rather worse than usual, I braced myself to take the strain once more.

One other little project had to be abandoned too, but for different reasons. At Landi Kotal station I had laid on water and started a fine garden. Flowers, fruit trees and vegetables throve in a virgin patch of soil once they were given water, and a little green oasis softened the harsh outlines of the fortified station. I had it in mind to erect in this garden, at the very summit of the Khyber Pass, a vainglorious monument in the form of a pylon. On each of the four faces there would be an inscription commemorating the efforts of the Christians, Mohammedans, Hindus and Sikhs who had worked on the railway. I wrote to the Padre for a suitable Latin inscription after searching the Bible in vain. The only thing anywhere near what I wanted was " And the great Beast cried, Amen," but it did not seem right somehow. The Padre's scholarship was also unequal to the occasion for once.

I then consulted Mir Akbar Khan.

"It is in my mind, Mir Akbar, to build a *burji* in the railway garden at Landi Kotal station."

"Very good talk. The riflemen can then keep thieves and bad characters away."

"Not so. This is to be a *burji* of peace, not of war."

He looked puzzled. Was the Sahib about to make one of his famous jokes? He began to smile in anticipation.

"My *burji* is to be a sign of peace, here at the summit of the Khyber Pass, where the people think only of bloodshed and war. The Government desires peace."

"No doubt it is as you say. But what is a *burji* of peace? I have not heard of such a thing."

"The tower will be four square, and it will stand in the garden, where God gives the kindly fruits of the earth. One side will face towards Mecca, and there we will put an inscription from the Koran Sherif."

"Good. Very good."

"On the opposite face we will put an inscription from the Bible Sherif in Latin, which is the ancient language of Rome."

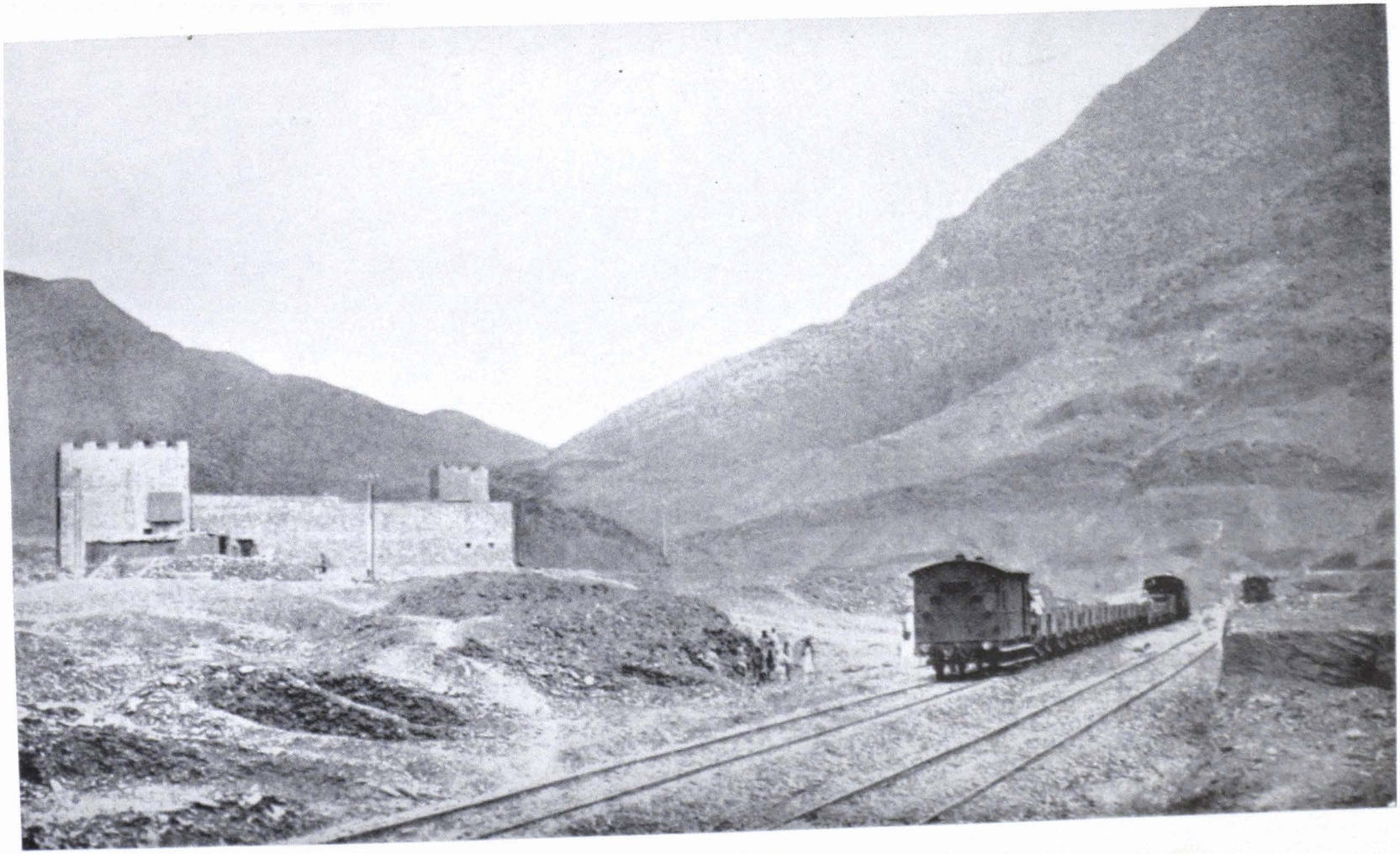
The old man nodded. Rome he knew about, although they always meant Constantinople on the Frontier when they spoke of Rome. This part of the East never seems to have grasped that the ancient Empire of Rome had been divided ages ago, and that the capital of the Eastern half had been called Constantinople.

"That is a good idea, Sahib, and I, who am an old man, and have some understanding, wish you well. But," he hesitated, "our young men are foolish, and would not understand the Latin words."

"On the other two faces we will inscribe in Hindi and Gurmukhi suitable words from the Holy Books of the Hindus and Sikhs."

The old man's hair bristled with horror.

"Sahib," he gasped, "you do not mean what you say. This is our country, and infidel pigs have no place in it. Yah! Let them work indeed for pay, and when they have drawn their pay, let them go. But that their devil's



SHAHGAI STATION

Note the station building constructed like a fort.

incantations should be written in stone on the same *burji* as the words of the holy Koran——" words failed him.

"Why not?" I urged. "God is one, and all people are his children."

"Not Kafirs," he snapped, "they have no religion."

It was quite impossible to move him. My suggestion had genuinely horrified him. He assured me that the *burji* would not survive one night, but would be blown up and destroyed with the full approval of public opinion. And he stumped off in high dudgeon.

Next day he came to see me again with his good-humour restored. I assured him that I had given up the idea of the four inscriptions.

"Very good talk, Sahib, and we know it was only a passing madness because you are very tired."

"It is true, Malik Sahib. When I began this work I was a young man. Now, after a few years, I have grown old and tired."

"Never fear, Sahib, it will pass. Soon you will go to your own country, and you will be cured."

My own country! A sudden overpowering surge of desire for the scent of the hay in an English June shook me and I could not speak. The old Malik laid his hand on my knee in sympathy, for he read in my face the longing for Home.

"Do not speak for a space," he said. "It is even so with us when we go to a strange land. There are many Pathans in Bombay and Calcutta, and even across the sea. For many years they will rest content, and then suddenly in one night, the desire for the Hills will come upon them. Then they will abandon everything, and not rest until they return to their own country."

So the kindly old man gossiped on to give me time to recover myself.

"Have patience, Sahib, for I have come with a request. We have talked over your wish for a monument to peace here at the top of the Khyber. Now what could be a better monument than a *masjid*, at which travellers

can pray before and after a journey. Put a *masjid* in your garden, Sahib, and all will be well."

"How can I build a *masjid* with Government money and on railway land, which is Government land? You know quite well that the Government favours no religion and opposes no religion. All men are free on Government lands to worship as they please."

"We know it, Sahib, but there is a piece of land just outside the garden which is not Government land."

The old man looked at me just like a naughty boy about to suggest an escapade.

"We also know that you cannot spend Government money on a *masjid,* but——" he twisted in his chair and stroked his beard.

"Well?"

"There are many thieves about, and bricks and mortar might be stolen. And other things, too, required for building," he blurted out and stopped.

"You old villain!" I said. "And I suppose water-pipes to provide water for the Faithful to wash in, could also be stolen?"

He looked rather ashamed of himself.

"They have already been stolen, Sahib."

I was rather taken aback. It was distinctly embarrassing that they should steal building materials from under my nose to build a *masjid,* and then call it *my* monument to peace. But it was quite clear that their minds were made up. The little *masjid* grew rapidly, and they made quite a nice looking job of it. Any attempt to find out how and where the materials were stolen met with failure. No one knew anything at all about it. All accounts were in perfect order, and every one seemed to be highly amused. When it was finished Mir Akbar came to see me.

"It is done, Sahib, and a Mullah has been appointed. Every day he prays for you. That is better than a *burji* with devil's incantations written on it." And he chuckled happily.

At last the daily construction train puffed to within

sight of Landi Kotal. Only two or three days now before it would steam in and draw up at the platform. Although denied our ribald ceremony, I felt that the day must be marked somehow. Years ago I had promised my wife that she should drive the first train into Landi Kotal station. It would not do to let the daily construction train lay the last quarter of a mile and then let my wife drive a train alongside the platform. Her train would not then be the first train, but the second. So rails and sleepers were sent ahead by lorry and laid in the station yard in advance of the arrival of the true railhead. This crept nearer and nearer, until there was only a gap of a few yards. Then my wife and I, with our daughter, now a young lady of nearly ten years, drove up the Pass along the familiar road through Jamrud, Shahgai, Ali Masjid and the main Khyber valley to the summit. There a tremendous crowd of tribesmen had collected. I had told them that as a further sign of peace, the last spike would be hammered home by my daughter, and that my wife would then drive the first train into Landi Kotal station.

"Very good talk," they said, "let the Lady Sahib have no fear."

There was no ceremony. I watched the last rails laid in place by many willing hands. Clank, clank, clank, as the fish-bolts were inserted and the nuts screwed home. Then a musical tonk-tonk as the spikes were driven into the sleepers.

All save one, the last!

"Be pleased to come, Missy Sahib." She held my hand tight. "Take the hammer, Missy Sahib. Don't be afraid."

With lips pressed a little tight together she took the hammer and looked at me and my wife. So many men, and so fierce looking! Yet they were smiling and laughing.

"Come, Missy Sahib."

So she stepped forward, and, tonk-tonk-tonk, the spike was driven.

My wife took my arm, and we went to where Puffing Billy was sizzling impatiently. I stumbled a bit over the sleepers. Then we all climbed into the cab of the engine.

"Thus, Lady Sahib, you blow the whistle. Now I will give you a little help to turn on steam, so."

The battered train jerked forward. It was only a lot of old trucks and a brake van pushed by a wheezing veteran, but it was a train, and the first train in! Fog signals in reckless numbers exploded beneath our wheels, and the tribesmen let off crackers and bombs, and ran alongside cheering and shouting.

"Whistle again, Lady Sahib."

And so, feeling its way cautiously over the newly-laid points and round the last curve, the grimy train clattered, whistling madly, into Landi Kotal station, and drew up at the platform.

. . . . . .

Everything after this seemed to be a bit flat. However, there was still a good deal to be done in finishing up work. The section from Landi Kotal to the Afghan Frontier, which was not yet finished, was still giving me some anxiety in the tunnels. But it was getting done, and there was now not nearly so much work to do. Six months of hot weather lay ahead, and then the great opening ceremony would come.

All our transport difficulties were now over, and the hard-worked motor lorries could be laid up. A trainload of materials snorted daily up the Pass, stopping here and there to dump them wherever required. This was a great and welcome change from the former transport by lorry to some roadside depot, whence donkey panniers provided the only possible means of carriage.

The train not only carried materials but a crowd of tribesmen. They considered that the railway belonged to them, and no idea of paying a fare entered their heads. True, the railway was not yet officially open and no fares could be charged, until it had been inspected

and passed by the Government Inspector. In normal country I should have prevented the populace from making informal use of the trains, which were required for our own purposes. But here things were quite different, and it was scarcely practicable to prevent armed ruffians from jumping on and off the train, especially as they were genuinely indignant at the absurdity of trying to prevent them from using their own railway. Evidently the job of ticket collector on the Khyber Railway was going to be no sinecure.

With their usual disregard of danger the tribesmen jumped on and off the train as it laboured up the grade. As it passed a group of villages, it was a sight to see a number of bundles of personal belongings shoot from the train and go bounding down the side of the embankment. A moment later a number of human forms discharged themselves precariously and landed sprawling. It was a most unpleasantly dangerous proceeding, and several were killed or maimed.

I found, too, that my jesting words of long ago, advising the tribesmen to build the railway and then loot the trains, now came home to roost. There were certain things that the tribesmen always coveted. Sleepers were much valued by them, as was to be expected in a timberless land. They used them in building their villages amongst other things. Again, bags of Portland cement were highly prized, and any portable thing made of steel or iron was considered fair game. Hitherto these things had been transported by road, and it was a rule of the game that raids must not take place on the road. But the railway, their railway, was different, and the Pathans became expert railway thieves. Their methods were ingenious and simple. Suppose some sacks of cement were to be taken from a passing train. Two or three tribesmen with several donkeys would be seen standing apparently aimlessly by the side of the line. As the train passed them, they would suddenly throw a grapnel, attached to a rope, on to the truck loaded with cement. The other end of

the rope had already been tied to the base of a telegraph post so, as soon as the rope tightened, a number of sacks would be clawed off the train. These were quickly loaded on the donkeys and disappeared among the hills, before an alarm could be given. Things did not always go quite smoothly, and sometimes the rope broke or the telegraph pole was dragged down, if the grapnel became too firmly wedged. There was also the unfortunate occasion when the grapnel did not catch in sacks of cement but in the baggy clothes of some members of a tribe at feud with the thieves. These unfortunates were thereby dragged violently off the train and were sufficiently undamaged to engage then and there in a bloody battle with the thieves.

A *khassadar* guard on each train kept the trouble from thieving within limits, but anything of value had to be sent in a closed wagon, which was sealed and padlocked. Mysterious thefts, however, occurred from these wagons, which arrived at their destination, after a non-stop run, with the padlock broken and the contents missing. The mystery was solved by one of the thieves, who was so proud of his prowess that he volunteered to give me a demonstration of his skill. So, on a convenient siding, an engine, with a padlocked wagon attached, puffed steadily along while the thief waited by the side of the track. As the little train passed him he ran nimbly forward and leapt on to the side of the wagon, where he clung precariously like a fly. He had in one hand a large stone, with which he so bashed and banged the padlock that it presently broke loose, when he was able to undo the bolts and bars holding the wagon door and climb in. How he managed to cling on by his toes and one hand while he did all the necessary manipulation with his free hand, I cannot say. I timed him, and it took him one minute and thirty-five seconds before he was standing inside the wagon grinning proudly at us.

For our own purposes of rapid movement and inspection we fitted railway wheels to some of our lorries. This we did in our own workshops, and it was a triumph

of improvisation. The lorries, with the steering securely locked, hummed along the track in fine style. They were a bit noisy, but they were handy and swift, even on the steepest grade. This was important, because they occupied a section of single line just as much as a train, but cleared it much quicker owing to their relatively high speed. A trip in one of them was much sought after by visitors, and it certainly was most enjoyable running in and out of the tunnels and spiralling up the sinuous line to the summit.

As the hot weather progressed the coming Viceregal opening began to loom nearer and nearer. A tremendous concourse of guests was expected, two trainloads of them. There was to be a ceremony at Jamrud, and hundreds of cars would come by road from Peshawar to Jamrud. Car parks, retiring rooms, police posts and what not had to be arranged. I had two hundred copies of an illustrated guide to the Khyber made, with one specially nice one for the Viceroy and another just like it for my wife. We were getting terribly civilised, and the old spacious days of lawlessness were slipping away. But all was going well ; if only I did not feel so tired !

Then I thought it would be as well to get the Viceregal train sent up to Jamrud, so that we could give it a run over the railway. It consisted of very long bogie coaches, and I wanted to see how they took our sharp curves and steep gradients. There was no reason whatever to think that anything would happen, but it was best to make sure by actual trial. So one day the long, shining white train drew up at Jamrud station, where four great engines were attached. A large number of railway officials came with it for the joy-ride, and among them a lot of old friends. I ought to have had a most enjoyable day in their company, but I was like a bear with a sore head. We had an excellent breakfast in the dining-car on the way up. I sat in my seat, gloomy and morose, gazing out of the window as the train chugged past well-remembered spots, where I had scrambled over the hills, chaffing and scolding the tribesmen, and

delighting in overcoming all difficulties. Now I sat stirring a cup of coffee in a dining-car, as the train steadily mounted the grade, click-click over the rail-joints. It seemed all wrong somehow.

The train glided on and all went well. Through the Ali Masjid gorge the grade eased off, and there was a stretch of level track, along which we gathered speed. Far below us the road held one or two cars, whose passengers gazed wonderingly up at us. But the line was so much in tunnel here that my friends had no proper view of the gorge. Then we emerged at the far end into the open, and puffed steadily towards the main Khyber valley. I pushed my plate away impatiently and shook my head. From my window I could see the long white train snaking round a curve, past the place where the Brigadier and I had spent that long miserable day soaked to the skin, when we were trapped by the torrent. And now I sat in a dining-car stirring a cup of coffee. Something snapped inside me ; this was the end. No more joyous days with the tribesmen striding over the hills in the teeth of the roaring Khyber wind.

The train took the last curve and the points at Landi Kotal, and ran easily alongside the platform. So that was all right, and the line could be opened any day now. The Government Inspector would come and formally pass the line after inspection, and then the Viceroy would come and declare it open. After that it would form part of the North-Western Railway of India. Only a month now. A month ? A month suddenly seemed an impossibly long time.

My friends were very kind and nice. They said they knew I had had a hell of a time, but it was nearly over now. The Opening Ceremony would be a great day. They all came and tried to cheer me up, till they left me with only one intimate friend.

" Are you feeling all right ? "

" Not too fit. Sorry I was so rude this morning."

" That's all right, old boy. We all understand."

I sat alone at the Club in Peshawar thinking. Think-

ing, not of the Railway ; that was done. Had I not sat in a dining-car and watched the Khyber hills slide past ? I was thinking and longing for the green fields of England, thinking of a soft wet wind blowing up from the south-west and bringing with it the smell of the good red earth. A doctor friend came and sat with me.

" Have a drink ? "

" No, thanks."

" Feeling all right ? "

" Yes, so long as I hold on to myself. If I let go——"

" Steady, old boy."

We talked of indifferent things. Then he asked:

" Are you keen on staying for the Viceregal show ? "

" Hate the very idea of it."

" Just spread your hand out like this. Bend your fingers back as far as they'll go. Like this. H'm. Like to dine with me to-night ? "

" Very much. Why did my fingers twitch like that ? "

" You're a bit done up. We'll talk it over to-night."

That night they broke the news to me. I must go Home at once. Never mind the opening ceremony ; the job was done, and that was all that mattered. Ten years hence the ceremony would be forgotten, but the railway would be there. Did I think my wife would come down from the Hills ? Better go to bed for a few days. Keep your health and let everything else go to the devil.

Then came the news that the Viceroy would be unable to come to the Opening. His wife was very ill.

. . . . . .

I did not go up the Khyber again. After a few days in bed, looked after by my wife, I felt better, but too utterly fatigued to do anything. Everyone was very kind, and, as soon as possible, we travelled by easy stages to Bombay and took ship for Home.

EPILOGUE

Extract from *The Times* dated November 3rd, 1925. (By kind permission of the Times Publishing Company.)

JAMRUD, *November 2nd.*

IN brilliant sunshine and in the presence of a distinguished assembly, Sir Charles Innes, the Railway Member of the Governor-General's Council, acting on behalf of the Viceroy, to-day performed the ceremony of opening the Khyber Railway. After a speech in which Sir Clement Hindley, Chief Commissioner of Railways, praised the marvellous achievement of the engineers, especially Colonel Hearn and Mr. Victor Bayley, and the co-operation of Political and Military officers, Sir Charles Innes, amid cheers, pulled the lever which released the gates and threw open the line leading through the grim Pass to the Afghan border. He declared that he believed the railway would stir men's imagination far beyond the limits of British India, and would bring profit to people who had hitherto existed with difficulty on a meagre livelihood from the land. The Political Agent and twenty Afridi Maliks were presented to Sir Charles Innes, the Maliks adding a picturesque touch to a remarkable scene. The guests then left for Landi Kotal in special trains, the line rising by loops and spirals, over high bridges, through thirty-four tunnels and several gorges. The journey created unbounded admiration in the minds of all at the manner in which the difficulties had been surmounted by the engineers.