down into hell! That an English lady should have been able to endure these extreme hardships, and to have shown so much tact and perseverance in overcoming not only physical difficulties, but also those human obstacles which are generally the greatest impediment in the way of travelling, is a matter of particular congratulation. And we who have listened to her this evening must not only congratulate Mrs. Forbes upon her great pluck, energy, and spirit, and the long foresight with which she planned out this remarkable journey, but also upon the admirable manner in which she has described her journey to us. On all these accounts I know you will wish me to convey to Mrs. Forbes an especially hearty vote of thanks for the extremely interesting paper which she has given to us.

TRAVELS IN TURKISTAN 1918-20

Captain L. V. S. Blacker, Q.V.O. Corps of Guides, Punjab F.F.

Read at the Meeting of the Society, 2 May 1921. Map following p. 248. Part 1. A Mission to Kashgar.

A WORD of explanation will be needed to account to you for the presence of His Majesty's troops in Central Asia. That takes us back to the autumn of 1917, when Falkenhayn's "Yilderim" army wavered in his hands, and the German higher command saw that the Byzantium-Baghdad-Basra line, and its goal at Bombay, were for ever out of their grasp. The cry of "Pan-Islam," too, had made no impression on the loyal ears of Punjabi, Maroccan, or Lesghian, and the fertile brains of the C.U.P. were instructed to find a new one. Though checked in the deserts, in Arabia, Iraq, and Iran, yet a certain success had crowned enemy efforts to spread the taint of treason in Moscow, and their thoughts turned to Turan and to the steppes.

Islam had spurned the Prussian, so his vapid psychology took him back to Attila, his forbear, and to the monstrous iniquities of Tamerlane and Ghengiz Khan. His strategists pondered over Batum, Baku, and Bukhara; his secret agents spoke in the caravanserais of the spacious days before Mahomed brought a civilization, while Afghan cities filled with Osmanli drill-sergeants and Magyar gun-layers.

The Red Terror, nourished by German trade agencies, had laid hold of Tashkent and spread over all the Russian dominion in Turkistan, where 180,000 Germans, Austrians, and Magyars had been confined in their prison camps. Amongst these were the men that had been the garrison of Przemyśl. In October 1917 all were "comrades," so of course there could be no prisoners, and the kindly Soviet opened the gates in the barbed wire and discontinued the ration issue. Ninety thousand exprisoners of war died during that winter. Many of the survivors joined the Red Army, some fled to Afghanistan, and some worked for, or starved with, the easy-going Kirghiz and Sarts.

All this the German turned to account. In Afghanistan he formed the "Imperial and Royal East Indian Detachment"; in Turkistan, missions, under various cloaks, organized the surviving prisoners into battalions and brigades, gave them good new uniforms and boots, and tried to smuggle trained specialists to Afghanistan. In 1918 Turkish troops had penetrated into the Caucasus, and a German Army Corps was earmarked for Baku, which indeed it reached. It could from Baku be railed to within five days' march of Herat, or to within twelve days of Kabul. The hordes of the steppes, so hoped Enver, who now imagined himself a second Hulaku Khan, would pour at his bidding to the passes of the Hindu Kush, and then German, Turk, Austrian, Afghan, and Tatar together into the fertile plains of the Sutlei and the Ganges.

It was a fine dream, and a prosaic modern touch was lent by the three years' cotton crop of Ferghana and Sir Daria, many thousands of tons, that the enemy desired to transport into Germany to be made into propellants, either through Baku or else by way of Orenburg and Moscow. This vast store of cotton now lay rotting in the warehouses of Turkistan, or served as bullet-proof protection on Bolshevik armoured trains.

In early 1918 all these matters were hidden from us, or only discerned dimly across the great spaces of deserts and ice-bound mountain ranges, over which even the hardy Central Asian trader now seldom came. Information was essential, so three missions of widely different size were dispatched. From Baghdad General Dunsterville set out on his venture to the Caspian that he has so well described. Through Baluchistan and up across the 700 miles of East Persian desert went Sir Wilfred Malleson's Mission; whilst our own party, the smallest of all, trudged up in March and April 1918, over the northern passes of Kashmir, through Gilgit and Hunza, to come under Sir George Macartney in Kashgar, in Chinese Turkistan.

The Mission comprised three British officers, not including Sir George himself, whom we were to meet at Kashgar, and sixteen soldiers, of whom all but two belonged to the "Q.V.O." Corps of Guides; the two were riflemen of the Royal Garhwal Rifles. It was most appropriate that the Guides should have furnished nearly all the soldiers of the mission. As long ago as 1873 a troop of the Guides Cavalry and a platoon of the Guides' Mounted Infantry had crossed the 18,000-foot Karakoram Pass, and penetrated with Sir Douglas Forsyth to Yarkand and Kashgar, then ruled by Yakub Khan, the Atalik Ghazi, who had expelled the Chinese and annihilated their garrisons. This little force traversed all Eastern Turkistan, even making its way into the then unknown region that is now called Semirechia and into the Tian-Shan.

Our little band packed themselves into a few lorries at Rawalpindi, and in two days reached Srinagar. We crossed the great Wular lake in boats, and the real journey began. It was now April and the country was all under snow, and in these conditions the Tragbal and Burzil passes

were not too easy to cross, even at midnight. We were fortunate not to encounter any avalanches, and sixteen days' chilly marching took us to hospitable Gilgit. Our baggage required no less than 180 porters, who consequently had to move in three separate columns, a day's march apart.

In Hunza we met with a real full-blooded welcome from His Highness the Mir and all his hearty lieges. We crossed the Mintaka Pass on to the Chinese Pamirs accompanied by a Hunza escort, with whom our Regulars had established very friendly relations. At Tashkurghan we met some of the 6th Orenburg Cossacks, who were holding that post on their own account, carefully ignored by the Bolsheviks.

These Orenburg Cossacks are a fine hardy lot of men, and we had met before in 1914. My regiment has been stationed for nearly eighty years in the most northerly cantonment of the Frontier Province, and the 5th and 6th Orenburg Regiments have for many years been just opposite across the frontier, only a few ranges of hills away. Consequently the regiments have seen a good deal of each other in the past, in remote valleys of Central Asia. On this occasion we were allies, and the fact was celebrated with junketings.

Next day over in the Chinese fort we dined also with the Chinese Amban, who holds both military and civil charge of the Chinese Pamirs, and then pushed on towards Yangi Hissar and Kashgar over the passes of Kök Moinak, Kizil Dawan, and Kara Dawan.

We had employed yak transport from the south side of the Mintaka instead of porters, and now all hands were mounted on the little shaggy Kirghiz ponies. This track is that usually taken when the Gez defile is blocked by floods. It is in many places very rough, and the passage of the Tangitar gorge is no easy matter. For miles one fords the torrent every few minutes and clambers over rough boulders. At last after several days we came out into the wide valley of Chong Kurghan that opens on to the plain of Turkistan and the Takla Makan desert.

In due course we reached Kashgar by way of Yangi Hissar, meeting with a sumptuous reception from the Chinese authorities at each place. Our host at Yangi Hissar was a Chinese Mahomedan Colonel, Ma-Tung-Ling. He made us at home in his yamen, hung with texts from the Koran painted in the Chinese fashion in curiously Chineseified Arabic characters in black on red paper and silk scrolls. Phlegmatic as the Chinese are, their officers could not refrain from commenting on the bearing and turn-out of our detachment and on the handling of their arms.

It soon became clear to us even in Kashgar that the Tashkent Bolshevik Soviet was a power in the land. The first revolution had passed off almost bloodlessly, but a reaction set in. The Orenburg Cossacks, under Ataman Dutov, had achieved much success against the Red Army in 1918 in the steppes north of Tashkent, and in March, as far as I can remember, they attacked the city, aided by the cadets of the Military College. They soon defeated the Bolsheviks, but some evil



THE EAST PERSIAN DESERT



MARKET AT BAIRAM ALI: RUINS OF OLD MERV IN DISTANCE



HILL OF PANJ MAND ON THE TRACK FROM MESHED TO KELAT-I-NADIRI



INTERIOR OF KELAT-I-NADIRI ON MISTY DAY, LOOKING NORTH TOWARDS DARBAND-I-NAFT. JA-I-GUMBAZ IN MIDDLE DISTANCE

genius prompted them to put themselves under the command of a lawyer. Hence the Soviet very soon turned the tables on them, and they lost the city, though they retained a hold of the Orenburg Railway that connects Moscow with Tashkent. This circumstance was of no little value to the Allies, since it prevented the Turkistan cotton crop from being sent to Germany by that route. In fact, the operations of this loyalist army of Orenburg Cossacks form a fine chapter in the story of the war, and one that has not come into the limelight. For three years this force of Ataman Dutov's, averaging some seven thousand strong, often without ammunition, fighting with swords and lances, held its own against the Red forces all round them. They were quite isolated from Allied help, and in fact from any other loyal force, except for the brief period when they were in touch with the army of Admiral Kolchak, himself a Cossack.

Meanwhile the Musalman of Tashkent, Kokand, and Bukhara revolted against the Soviet. In all three cities the rising was suppressed with great slaughter. Kokand was razed to the ground by high explosive shell-fire, and thirty thousand souls were reported massacred: it had been one of the greatest commercial cities of Asia. In Bukhara one Kolesov used armoured cars in the crowded streets, which ran with blood. Although the Reds gained control over the city, to this day they have little or no hold over the country districts, where large bands of Uzbegs and Kipchaks roam the valleys, maintaining a guerilla warfare against any Bolshevik force that leaves the railway and the guns of its armoured trains.

In June three British officers of the Mission, under Sir George Macartney, left Kashgar for Tashkent. A motor bicycle, brought up from India packed in six loads, was used here for the first time, from Kashgar up to the Kizil Dawan in the Tian-Shan. We spent practically three months in Russian territory, and Sir George has himself described the episode in the *Central Asian Fournal* of June 1920.

In Turkistan five wars were being waged against the Bolsheviks: by the Orenburg Cossacks on the north; by the Semirechensk Cossacks in the east; by several thousand Uzbegs under Irgash Bai and Mahomed Amin Beg in Ferghana to the south-east; by the Turkman under Oraz Sardar in the south; and by the Ural Cossacks on the Sea of Aral.

To crown all, during the week in which we arrived in Tashkent, three companies of the XIXth Punjabis joined the Mensheviks coming from the south-west and made our situation still more hopelessly involved. The Soviet were worried and showed a tendency to hold us responsible for their troubles, especially in the matter of the XIXth Punjabis of General Malleson's force. However, we had a more or less plausible explanation for everything.

The Mission, under Sir George, returned towards Kashgar when its work in Tashkent was completed, crossing the frontier into China in the end of September. We did not touch Kashgar, but eluding certain Bolshevik efforts at Andijan, Osh, and Gulcha, travelled on to the Pamir over the Terek Dawan, now under snow, and thence by a goat track over the hills to Kök Su and into Chinese territory at Irkeshtam.

At Irkeshtam we found a number of loyal Russians in the Customs post on the Russian side of the frontier, and two Bolsheviks in the telegraph office up the hillside. We outnumbered them and had no trouble. From here we took a little-known track leading down the Kizil Su valley on to Opal and Tashmalik, and were able to make a few topographical notes and to write a description of the route.

At Tashkurghan exciting news awaited us. A gang of two hundred Germans, Turks, and Afghans had been seen by a merchant crossing over from the Great Pamir north-eastwards towards Yarkand.

This news was for us the forerunner of seven weeks' desperate marching over unexplored snow-bound ranges in the kit we stood up in, and, at times, on the shortest of short commons. In view of the reported strength of the enemy we called in the detachment of the 6th Orenburg Cossacks at the post to help us, and with our force made up to some fifteen rifles, pushed along at dusk down the wild gorge of the Tashkurghan river where it plunges down from "high Pamere" to the great plains. It was a nightmare march, for up to three in the morning the men and ponies were clambering along the face of cliffs that would have been difficult in broad daylight. Some extraordinarily good luck favoured us, and we made the wretched hovels of Shindi without any broken bones. There was no trace of our party here, and the gorge lower down to the north-east is impassable for man or beast, so after five hours' sleep we pushed south-eastwards up a pleasant valley to Wacha, where there are one or two hamlets and some grazing-grounds of the Aryan Sarikolis. A track goes from here to Sherbus, lower down on the Tashkurghan river, but it is so dizzy that even the Pamir Tajiks have to be led over it blindfolded by the local people.

At night we all rendezvoused at Wacha, having found no trail, and had a good and much-needed feed off a fat Pamir sheep seethed in a great pot, into which every one dipped his fingers. Next day we crossed the Sarikol range by an unmapped pass near peak 18,550 and struck the Taghdumbash valley again. We left the Cossacks watching the Mariong Pamir in case anything might turn up. At Dafdar we struck fresh news. Fifteen mounted armed men had come over from the Russian side, across the Sari Kuram pass, had passed through the hamlet at midnight, and a lonely shepherd had seen their tracks in the untrodden snow of Ili Su. We pushed on up the desolate Oprang, collecting seven rifles of the Hunza Company of Scouts from Payik, and (thanks to Sir George's efforts) an indispensable pony-load of flour, which was to be our sustenance for a long time to come.

Up in the Oprang we plunged into the blue. Snow was falling and the ponies' feet made no sound. Ahead of us lay the hugest mountain rampart in the world. After dark we came to a couple of small ragged yurts in the gorge of the Ili Su, and found two Kirghiz damsels who made us welcome and confirmed the news of the party we were after. Next morning snow was still falling, and we, bipeds and quadrupeds, had a tough scramble over ice-sheets and cliff faces to the top of this pass of Ili Su. Sven Hedin, as he describes in his book 'Through Asia' (vol. I, p. 686), tried to cross it, but turned back. On the crest, about 17,000 feet, the sun came out and our eyes were gladdened by unmistakable tracks in the snow of the north slope. We hurried on down, finding more tracks, and bivouacked in the snow under a cliff and some boulders. All next day we struggled down this abominable steep and rocky valley, having latterly to push through close-knit thickets. We came also upon a broken tea-bowl marked "Made in Japan." The fracture was new, and it was too good to have belonged to some wandering shepherd; it must have come from Afghanistan.

Sometimes one or two Tajiks come down to a spot here called Issik Bulak, where is a hut and some traces of ploughing. We found a couple of yaks here that were most useful as mounts. Then dropping out of the snow we bivouacked alongside roaring brushwood fires in a glade called Baital Jilga, where we found a new empty cartridge case. We had now got to know the tracks pretty well from gazing at them some fourteen hours a day, and could identify the various horses that the enemy rode from their hoof prints. Next day was memorable, for we came down on to the mighty Raskam itself. For a short time we were racked with uncertainty. Were the tracks going to lead up the valley to the east, whither we would have to pursue for hundreds of miles through the desolate wastes of the Raskam and the unexplored Kara Kash towards Khotan, and to Lop Nor and possibly even to Shanghai?

It was known that von Hentig, a justly celebrated German emissary, had a year before made a similar journey from Badakshan, and we reckoned ourselves to be on the track of some one of the same kidney. The trail led down to the water's edge, and we just managed to cross the swift river. It was a touch-and-go business, and only the standing luck of the British Army saved several drownings, or, what would have been just as bad, the loss of some rifles. We had become so hardened to cold after weeks of the wintry Pamir that the stripping off of our clothes to struggle through the Raskam seemed like a pleasant sun bath, though the month was November and the altitude 10,000 feet. The trail led slanting up the great stark slope of the mighty Kuen-lun, and when we panted for breath at the summit of the Tupa Dawan a most wonderful view unfolded itself. To the south the mighty snow-peaks of Muztagh, Oprang, and Hunza; to the east the desolate Karakoram; to the north ridge upon stark ridge unrecognizable from the vague map; to the west we looked down into the untrodden gorge of the mysterious Raskam, flowing between sheer cliffs towering 7000 feet from the water's edge.

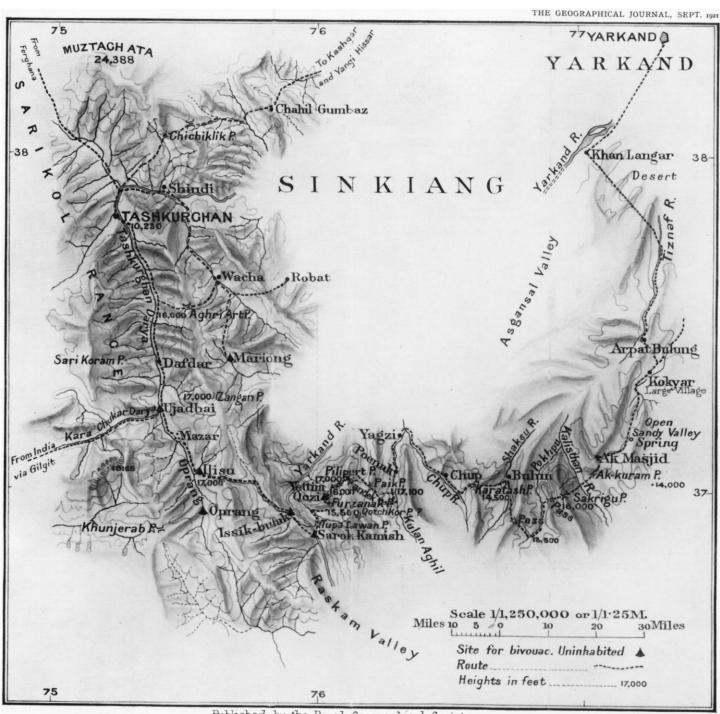
From here we plunged down a break-neck shaly slope into the

Quotchkor ravine, where we baked some of our dwindling flour into flapjacks on flat slabs of stone. Two hours on through dense thickets at the bottom of a narrow V-shaped cleft to our great surprise we came upon Fatima, a loquacious Kirghiz woman with a little old silent husband; they probably belonged to some hamlet down the Raskam valley. She told us that our pursued were now only five days ahead of us, and this was confirmed by the distinctly fresher tracks. She even sold us a little barleymeal after some wheedling, and this helped the food supply. As we did not know where we were going, or how far the nearest cultivation was, or how many days' rations the enemy had, it was most welcome. Lower down the hills by which we were shut in seemed to get lower, and it seemed that we were only a few days' march from the plains of Turkistan. We learnt better afterwards.

Suddenly the trail ended. Casts forward were fruitless, both hillsides were unclimbable, so we went through the thick jungle in the valley bottom with fixed bayonets. We found nothing; suddenly the regular dafadar came upon the narrow mouth of a side ravine so filled with scrub that it had appeared to be unbroken hillside. Up this funnel the tracks led, and we followed, with all precautions against an ambuscade. We climbed and climbed up a small steep valley, and towards the upland was a small trickle of a spring where we had to bivouac for the sake of the exhausted animals. An early start into deepening snow took us up to a lung-racking pass of some 17,500 feet, called Furzanak, whence we continued the taking of bearings that we had commenced on the Tupa Dawan.

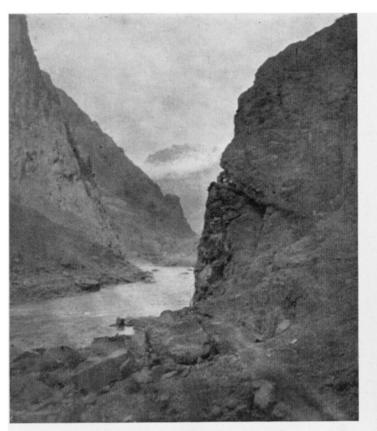
The descent led apparently nowhere into a maze of rock-bound ravines, but at noon we came to a tiny patch of grass. The enemy had spent the night here and reshod some of his ponies. A dead tame quail and his pathetic little straw cage told us the nationality of at least some of the party. Then a desperate climb of 4000 slippery feet found us at the summit of another snow-bound pass, grimly named Yettim Qozi ("the pass of the last lamb"). The struggling moon lit our way down to a bleak open upland, a "hanging valley" swept by a bitter wind. water, no fuel, and no grass, so supperless to bed we went in holes scraped in the snow. This was the worst bivouac of the lot, and next day the wretched nags were too weak to be ridden an inch; however, they carried each man's blanket and our tiny stock of flour. The next pass called the Kandek was easy to ascend, but had a most breakneck descent to a tiny patch of grass near by a spring. We made our one and only meal here. This single r al had become a routine: we had neither time nor food for more the Raskam a fortunate shot had secured us a young burhel, which we had roasted whole over a brushwood fire and devoured, tearing it with our hands. This gave us a stomachful of meat, and the recollection of it lasted for several days. The food situation was now critical, and I had to watch the men to see that they did not give me more than my share.

Captain Blacker's Route from Chinese Pamir to Yarkand.
October, 1918.



Published by the Royal Geographical Society.

CHINESE PAMIR-YARKAND Blacker.

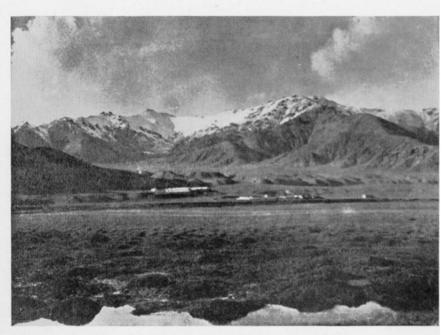


THE UPPER VALLEY OF THE OXUS



RUSSIAN FORT OF





RUSSIAN FORT OF PAMIRSKI (MURGHABI)

THE OXUS

The next pass was called Pilipert, and we crossed it in the afternoon of the same day. It was one of the most difficult of over a hundred high passes that I have crossed. There was a snow cornice on the summit, a desperate matter for the ponies, of whom two died on the descent into the valley, where we found the cold remains of a fire and the round trace where a yurt had been, and this seemed to bring us back into the world of men.

Next morning we crossed the worst of the lot, the Payik pass with a cornice on the summit and ice-sheets on the slopes, so bad that unridden as they were two more ponies died on the way down to Kulan Aghil. The effects of the cold, exposure, and hunger began to show themselves on the men, and they suffered from old wounds picked up in France, Africa, and Persia. But not a word of complaint was there; the growing freshness of the trail was a constant source of joy to all ranks, and they were eager to push on. We had crossed six difficult passes in four days' climbing and descending about 54,000 feet. We had thus covered 16 map miles in over sixty hours' marching. Deasy describes how it took him ten days to cover 12 miles in this region.

We dropped into a valley full of vegetation, and the prospect was brighter. The map seemed less nebulous, and I knew that this Kulan Aghil valley had been traversed before by a European. Deasy calls this valley Kulan Urgi. A few miles down was a hamlet of five huts called Poenak, and we were once again amongst human beings, including at least one fair and apple-cheeked damsel with a kind heart for a soldier. We obtained some more ponies here, some barley and a sheep, and having, after many days, dined, fate could not harm us.

Now to our surprise the trail did not lead straight to Yarkand over the Sandal pass, but turned to the east up the valley of Chup. This is blank on the map, but actually holds some tiny homesteads every few miles and a little cultivation. We rounded up some more ponies, leaving our worn-out steeds behind, and at five in the evening reached a village high up in the valley, where we got some information from the Yuzbashi of the Kirghiz. Pushing on at dusk, by midnight we reached the summit of a desolate pass, a weirdly beautiful scene. To the south and east were the ice-bound peaks of the Karakoram and Kuenlun, virgin snow fields and glaciers as far as the eye could reach, the smallest details showing up clearly in the bright beams of the moon. Ahead of us to the north was a labyrinth of deep and gloomy gorges, equally unknown and untrodden, in black shadow. We were again in snow, but a steep path took us down through loess dust to a spring, forming the headwaters of the unmapped Shaksu.

At three in the morning we staggered in to a hamlet called Bulun, not on the map. The aborigines were astonished at seeing two batches of strangers in forty-eight hours, and they all talked at once at the tops of their voices. We were only two days behind the pursued, but here we got off the trail, confused as it was by the villagers' yaks and goats. It was too late to turn back when we found the error. So we hoped to hit the tracks again later and pushed on. During all that day and night we made a nightmare march. We had to toil over four great passes, led up to by endless winding gorges. Of the first two I never found the names, as we met no human being, but the third and fourth are called Sakrigu and Akkas, and we crossed them in a soundless darkness. There was no track north from the Sakrigu; the animals floundered and struggled amidst huge boulders, and the scene was so ghostly that we could scarcely believe ourselves on this planet.

The cliff sides, a few yards apart, towered sheer up for thousands of feet, and at one turn a titanic excrescence of rock showed up like a perfectly formed ace of spades. This we took for a good omen, and when we debouched at midnight from the dreadful canyon to the desolate valley of the Kalisthan the men were still cheery, although there was no grass, fuel, or shelter. We pushed on over a fourth pass, and almost unconscious with fatigue came to the wretched deserted hamlet of Jibrail at four in the morning.

In this one march we had crossed four passes averaging about 14,000 feet, the last two in the dark. I estimate that we had covered something like 30,000 feet of ascent and descent in that time. Towards the latter part of the march we were too numbed to take much count of our surroundings, though this whole region, including the Chup, Shaksu, Pokhpu, and Kalisthan valleys, is almost unknown. Bogdanovich, however, made a journey into part of it in the nineties of the last century. Chup is a broad spacious valley, with plenty of vegetation. The lower part is rough and stony; the upper part is walled in by rounded turf-covered hills of loess, in which tracks are worn down into strange narrow runnels of 3 or 4 feet deep. Night marching here is a most creepy proceeding, since men and animals move silently in the deep dust, and the whole countryside is shrouded in an unearthly stillness as one toils up along the brink of some misty chasm.

On the north side, in the Bulun valley and in the next valley on, we found rougher and steeper hillsides covered with pine trees, which seem very rare in all the ranges east of the Tian Shan; at any rate, there are none to be seen in the Kara Kash valley further east by the Karakoram, nor yet in the valleys further west till one gets to Bostan Terek.

The Shaksu and Pokhpu country is wild in the extreme. Till we crossed the Kalisthan we were in a labyrinth of immensely deep canyons, with vertical sides, barren of vegetation except a little scrubby grass that covered the tops of the passes.

In Pokhpu there are one or two huts and tiny patches of barley tilled by people called Taghliks. The whole population of the area, however, did not seem to be more than half a dozen.

On the Akkas pass we found loess again.

At Jibrail there was no water, so we slept for a very few hours in a hut and then pushed on. Just as we were riding off down the valley a very old pink-faced Kirghiz, with a couple of horsemen, evidently a man of some consequence, and from his green turban apparently a Haji, came round the corner, much surprised to meet an armed party, and somewhat overwhelmed by the uncompromising aspect of the ragged and hirsute men. His attempt to cross-question us was anticipated by our demands for an explanation of his presence and doings, and eventually we took him along with us. He became most friendly and helpful, in time.

Since coming down from the Kara Tash during the night we had had no water, and we were very glad to find a kind woman in a hut in the Ak Masjid valley who gave us some out of a gourd about midday. We were now in a broad open sandy valley, bounded by low hills, which took us to Kök Yar (often called Kugiar on maps). The country was very dry, and this was the only drink we got till we reached that village. Here we really got back to the world and truly realized the meaning of the word "Vitamine," as only men can who have been for weeks on nothing but meal and meat, with precious little of the latter. We filled up on corn-cobs and melons and felt years younger.

Only five hours could be spared for eating and sleeping, since we realized that the pursued were probably in the Tiznaf valley, the next one parallel to ours to the west. I sent into Karghalik, making certain unostentatious arrangements there, and at midnight, mounting our horses again, we carried out a compass march over the low range of hills that separated the two valleys. Careful steering aided by luck brought us straight down into Arpat Bulun village, after an exhausting march through the fine deep sand which covers all these foothills. We found no clue in this village, and so pushed on straight across the desert to Khan Langar, which we reached about midday next day. Our track took us clear of the foothills, and now and again we came to little patches amidst the sand irrigated artificially by water led down from the hills. This march was extremely trying, since we had had no proper sleep since we left Poenak four days before, and we had a continuous fight to keep awake whilst marching.

Khan Langar is a big village on one of the countless branches that the Yarkand river is split up into. It is on the edge of the big fertile oasis. We pushed on to Posgam, reaching it at about three in the morning, after a lot of trouble in the dark amongst the irrigation ditches and canals.

Next morning found us in the Chini Bagh a mile outside Yarkand city. One of the men was sent inside with orders to bring out the Aksakal (consular trade agent) without attracting attention, and in this way we got on to the trail of our pursued again. Before the teeming population was properly awake we cantered through the narrow alleys, and suddenly the inhabitants of the Badakshan Sarai received the surprise

of their lives when nearly a score of distinctly tough-looking Punjabis, Pathans, Hazaras, and Kanjutis, bursting in on them with their bayonets fixed, made them put up their hands. The sorting out of the fifteen that we wanted and the securing of their Austrian rifles and bayonets took some little time and care, but we got all but two, who with some more rifles were arrested by the Chinese later on. To our great disappointment there was no German with them.

The next two days were spent in ceremonial interchanges of visits with the Chinese Mandarin.

Having captured our prisoners, our next object was to rejoin our battalions in Palestine and Mesopotamia as quickly as possible. We covered the 155 miles to Kashgar in two and a half days, and as the season was late much of this was done by night.

We spent a few days in Kashgar, handing over our prisoners to the Chinese authorities and collecting fresh ponies and rations for the journey to India. The month was November, and the crossing of the Pamirs and all the great ranges to the south of us did not seem a very pleasant prospect, especially as we had no tents and no more kit than we stood up in. Every day made the outlook worse, so we pushed off to Tashmalik on November 5, Guy Fawkes' day, with rumours of Boche peace talk in our ears. We reached the Chinese fort at Bulunkul on the snowy evening of the third day, and found ourselves in the grip of a Pamir winter. At Payik, on the sixth day out, we found the broad swift Karachukor river frozen 2 to 3 feet thick, and many Kirghiz lying dead from influenza. This was at an altitude of 14,000 feet, and no Kirghiz would have been there at all in that season had not Bolshevik depredations driven them from the lower valleys of the Alai.

We were very glad to get over the Mintaka, and the night's bivouac at Mirkushi, in an open sheep pen, at 13,000 feet seemed almost stuffy after the howling blast of the Pamir. I had managed to provide the detachment with sheepskin caps at Kashgar, and to wrap the stirrups in felt, which undoubtedly helped to ensure our immunity from frostbite; all the same the cold was something never to be forgotten. My men were old and tough campaigners, some of whom had been bandits in civil life, and they needed no dry-nursing in the matter of their fingers, toes, and ears. Every man of the party but two contracted influenza, but nevertheless kept up with the patrol, which averaged over 40 miles a day; in fact, it was essential to keep moving if we hoped to reach lower levels without catastrophe.

At Gircha we got in touch again with our good Hunza friends and slept on beds under roofs, wonderful and almost forgotten luxuries. At Gulmit, falling in with His Highness the Mir, we played the very intensive polo of the country and watched dances. Two days more found us in Gilgit, on the twelfth day out from Kashgar, which I think was pretty good going for winter. We had to leave our ponies here, and pushed on







PASS BETWEEN BAJGIRAN AND JIRISTAN IN THE KURD COUNTRY OF NORTHERN KHURASAN



DURBADAM VILLAGE NEAR KUCHAN, NORTHERN KHURASAN

on foot over the Burzil and Tragbal passes into Kashmir and all the luxuries of civilization.

Part II. To Trans-Caspia.

The men had only had a few days' leave in their homes when the second phase of our wanderings opened, and we were sent up through eastern Persia to the Merv front. Railhead was then at Mirjawa, arid and sunbaked even in December, and we marched up across the dreadful dreary wastes of Persia for some 800 miles. After plodding along for about 300 of these we got into higher ground and more northerly latitudes and found ourselves in winter once again. In fact, for a good many days we marched through deep snow, having to our joy exchanged our camels for a wagon at Birjand. Snow fell frequently, but it was child's play compared to the Pamirs, even if some of the quaint black hospital and commissariat followers from Madras, Bombay, and Hindustan found it a little too bracing.

We arrived at Meshed in January, and after a few days there pushed on through the snowbound Kara Dagh into the Trans-Caspian province of Turkistan, the home of the Turkman, till now a tribe of almost legendary fame

We reached Merv by train and found our force headquarters installed in the late Tsar's palace at Bairam Ali, an eastern suburb of the town. Merv just before the war had been quite a flourishing city of western American appearance and seemingly of mushroom growth. Really, of course, it is one of the oldest cities in the world. Many great ruins cover the oasis; one former Merv was built by Alexander, and half a dozen others by great conquerors: Greek, Mongol, Arab, Tatar, and Persian.

Our force was a curious and motley assemblage. The Commanderin-chief was General Sir Oraz Sardar, K.C.M.G., a Tekke Turkman, and the son of their chieftain Tagma Sardar who was killed in 1884 defending Geok Tapa against Skobelef. Our general, then a youth, was sent to the Imperial Corps of Pages at Petrograd, and finally became a Major-General in the Imperial Army. Under him, the British portion of the force was commanded by Brigadier-General Beatty, and comprised one section of two 18-pounder guns of No. 44 Battery R.F.A., two or three squadrons of the 28th Light Cavalry, and the 1st Battalion of the 10th Punjab Infantry. Besides this there were two or three batteries of Russian guns and howitzers, manned by Menshevik officers and N.C.O.'s: a squadron of Russian Cavalry, similarly composed, and a couple of regiments of Turkman horse and a battalion of foot. The Bolsheviks, some seven thousand strong, had been very roughly handled by this little force. which had only just grown to its present size. At the actions of Artik. Kaakha, and Dushakh the Red Army, which included some five thousand trained regular Magyar and Austrian soldiers, had been routed by less than three companies of the Punjabis, who with a squadron or two of cavalry bore the brunt of the fighting. Even the guns did not arrive till later.

These little battles, away in the remote deserts of Central Asia, had no little effect on the duration of the great war itself. They were fought, it must be remembered, when General Dunsterville's two British battalions had been forced out of Baku, and hence nothing but these few hundred Punjabi bayonets stood up against the German plan of uniting a German Corps from the Caucasus with probable Afghan armies, with thirty or forty Austrian battalions from Turkistan, with the Red Army, and with Enver's hoped-for insanitary hordes. Nor was this end reached without severe fighting: at Dushakh alone Major Knollys' tiny force lost 50 per cent. of its effectives, including every officer. Nevertheless the Bolsheviks were chased 300 miles in four months.

These three battles were fought whilst we were still in Tashkent, and in almost daily intercourse with the Soviet and their War Ministry. fact of being on the wrong side of our own front was of great interest to us, and the panic that the commissars got into at the news of each fresh defeat caused us vast if carefully suppressed merriment. Before long the very mention of the word "sipahi" made them shiver with apprehension. In February another action took place; the Red Army sustained a fourth reverse, but as, for reasons of high policy, they were not to be pursued to the Oxus, stationary warfare ensued through February and March. During this breathing space some of the detachment were occupied in getting into touch with our Turkman allies and compiling information about them, largely ethnological. Meanwhile the Turkman regiments were in an unsatisfactory state, lacking discipline and cohesion almost entirely and technical training to a very great extent. So the balance of my N.C.O.'s were put on to instruct them, with most encouraging results. Karaz Sardar's regiment was perhaps the best of the three. He was a very fine old man and very typical of his race. He and some of his sons were killed later in a Bolshevik ambush near the Persian border.

These Turkman are of course the same that one reads of in Morier's "Haji Baba of Ispahan" and celebrated for their wonderful raids into Persia. O'Donovan, who was with them in 1885, gives an excellent picture of their life in his 'Merv Oasis.' They are a hospitable, frank, upstanding and engaging race, and were very friendly to us, especially to the Punjabis, with whom they have much in common. They are not unwarlike, but one doubts whether they could ever stand against Afghans, Pathans, or Punjabis, however well led or trained.

The fact that they are nomads is much against their ever becoming real soldiers, since they have not that attachment to the soil that agricultural peoples have, which leads them to get killed in defence of it. All the same, whatever their shortcomings we came to like them a great deal.

The Russians had done much to develop the country in the few years before the war. At Bairam Ali, for instance, a canal had been brought

down from the barrage at Hindu Kush, whose water came from the hills near Kushkinski Post, the fortress over against Herat. This canal irrigated many square miles just east of Merv, and these were considered a private estate of the Tsar Nikolas; hence his palace there. Many of the plots had been given to Hazaras, descendants of Jenghiz Khan's troops. Some of these Hazaras, who were of course Russian subjects and tenants of the Tsar, were serving in the Guides Cavalry, following their fathers and grandfathers, and four of them were now in my detachment, so that the fortunes of war had brought them many score of marches back to their own homes. At the end of March we were relieved by a large force of General Denikin's Volunteer Army, and we marched back into Khurasan, charged with the defence of that province against the Bolsheviks.

One of our commander's first steps was to visit the Emperor Nadir's marvellous natural rock fortress. I accompanied him, with a small patrol of Guides. The Khan, Fatteh-ul-Mulk, a Turkish gentleman, entertained us most hospitably, and we spent a full week inside this marvellous place, where millions of pounds' worth of Nadir's treasure is reputed to be buried. We did not find it. The Kelat is something over 12 miles long, with a maximum breadth of about 5, and girded all round with vertical and inaccessible cliffs. Only three or four gorges allow passage to camels, and there are some goat tracks affording entrance besides. The district with some outlying parishes is held as a Karaul or fief from the Shah of Persia by the Khan, who is the chieftain of a tribe of Turks settled in this place by Shah Abbas, I believe. They live in half a dozen villages inside, growing crops and fruit and keeping numbers of cattle and sheep.

The weather during our stay in the Kelat was very wet; in fact, both my journeys through this part of the Kara Dagh were in surroundings quite unlike the shining East. Slippery clayey mud underfoot, leaden skies overhead, and a constant soaking drizzle in the valleys gave way to snow flurries on the uplands. It was certainly homelike, rather too homelike, but it accentuated our appreciation of the warm billets that we generally found, and of the steaming tea and cheery samovar that my young orderly always managed to conjure up.

The first day was fine, and our climb to Khist hill, one of the peaks of the northern range, was amply repaid. Four thousand feet almost directly below us little puffs of smoke showed where Bolshevik and Loyalist were locked, with their armoured trains, in a not very deadly conflict. We could scarcely have had a better view of the fight from an aeroplane. Northwards from there the inconceivably immense plains of Mid-Asia stretched away to the Arctic Ocean. To the west we could discern Artik, and to the east Dushakh, both on the railway, and the scenes of British battles. Before the rain came we secured a few photographs and made a hasty sketch of the interior.

The sudden outbreak of the Afghan war brought us back swiftly to Meshed, which was to some extent threatened by the Herat Division of the Afghan Army. Several of the detachment under my command were at once employed on the Afghan frontier, and in the intervals of their other duties managed to carry out some topographical work, not to mention securing some excellent little horses from the King's Own Regiment of the enemy's cavalry. Old frontier soldiers will appreciate how early one must rise in the morning to obtain anything from an Afghan regiment unbeknownst.

During June we were able to visit Nishapur, the home of Omar Khayyam, and to map some of the route. Besides this we managed to put in a good deal of topographical work during the summer, mainly with improvised appliances. But in August we had the good fortune to be able to map, mainly with a plane-table, some 700 square miles of quite unexplored and not uninteresting country, which took about twelve days. The party, which was very small, comprising only six officers, N.C.O.'s, and men, furnishing its own escort, moved north from Meshed, crossing into the beautiful well-watered Khaur valley by the aptly named Sanduq Shikan pass. Next day we crossed the main precipitous range of the Kara Dagh by the Gau Kotal, dropping down breakneck gorges into the tree-embowered village of Zao.

Then cool upland country gave way to arid sun-baked downs which in springtime afford grazing to the flocks of Kurd, Hazara, and Turkman. We touched human habitations at the wretched little frontier village of Chacha, meeting a few Tekke Turkman, who favoured us with their unexpurgated opinion of the Bolsheviks. For the next three days we marched up and down over countless small barren ridges covered with a curious alluvial blue clay. The whole country shelved gently down north-eastwards from the vertical scarps of the Kara Dagh range towards the plains of Merv and Tejend. Strangely enough though, at the very foot of the gentle alluvial slopes a vertical cliff wall suddenly springs up to over 500 feet in height and many score miles in length. this wonderful barrier stretches along the Russo-Persian frontier line from Sarakhs right round to Gifan in the Kurd country. Kelat-i-Nadiri is itself what a sapper would call a "horn-work" to this rampart. Here, as in most stretches, the vertical cliffs face inwards towards Persia, the outer slopes being gentle and quite rideable. Not only is this cliff line unbroken except where occasional streams force their way through narrow gorges, but it is quite impassable for anything but trained cragsmen with ropes. Moreover, it is in most places a double line, the main scarps of the mountains being supplemented by an outer wall of much less height but greater impenetrability.

No doubt the unwarlike if convivial Persian owes his continued existence in no little degree to this natural bulwark, which has kept the Turkman and the Mongol and even the Russian from getting at him as effectually as they would like.

Crossing the caravan track joining Meshed to Sarakhs and Merv we came to two interesting landmarks. The first is a little artificial lake called Köl-bibi, "the lake of the lady." The lady is the same that built Pul-i-khatun, the daughter-in-law of Tamerlane. The lake is formed by a dam across the mouth of a little glen, and fed by a spring hidden among rushes at its eastern corner. The lake water is salt, doubtless as a result of the desiccation of this part of Asia, but the spring is fresh and was very welcome, since we had drunk nothing but brackish water for several days and scanty at that. A few miles on, hidden in the folds of the undulating but desolate countryside, is the ruin of a fine fort called Robat-i-Sharaf. Its walls are of red brick of a surpassingly good quality, its gateways adorned with antique blue tiles, and its corner towers are of an unusual shape, semicircular with little clean-cut salients joining them to the curtain-wall on either hand. A dry well and reservoir 100 yards away showed whence water had been obtained in the spacious days of Tamerlane and his dynasty, and certainly this barrier-fort must have been a strong and shapely pile in its prime.

We struck back to the south by the Mazduran pass over the Kara Dagh range into the Kashaf Rud valley, and three days' more marching up this poisonous affluent of the Styx found us back in Meshed. The results of a week's drinking of a nasty solution of Epsom salts and mud locally known as water demanded a few days' recuperation in that city.

During this journey, and subsequently, I had the great advantage of the presence of Subadar Afraz Gul, a young survey officer who has worked for years under Sir Aurel Stein in Central Asia. There are few countries therein that he has not visited, and his topographical skill and knowledge are of a very high order indeed. In fact, for rapid plane-table work in an unknown countryside, I have never seen his equal. A sequel to this piece of topography was the discovery that the latitude of the Russian maps about Sarakhs is incorrect to the extent of 3 miles. This error diminishes towards the Caspian, being some two-thirds of a mile in the longitude of Ashkabad (Poltaratsk).

But we were not left idle for very long. In August, several hundreds of the Armenian rabble in their ranks having turned traitor, the Volunteer Army lost Ashkabad to the Reds, who threatened to invade Persia, or at least, by means of propaganda, to incite the scum of the slums to give trouble. The Persian frontier had to be watched, not only to give due warning to our commander of a regular attack, but also to keep out spies and propagandists. Accordingly, the detachment was moved to a little frontier village named Bajgiran to perform the advanced duties, whilst a company of regular infantry provided the main military force. The detachment had some 160 miles of frontier to watch, and this section was flanked on the right by the territory and levies of the Khan of Darragez, and on the left by the Sardar of Bujnurd and his Kurds.

The work soon split into two sections, the patrolling, or combatant.

and the topographical. The former was helped out by fifty Kurdish levies who were attached, thereby expanding the party to an appreciable fighting unit, whilst the trained surveyor Subadar Afraz Gul, helped by two more jemadars and a couple of N.C.O.'s with some hastily imparted topographical training, devoted themselves to the map work.* During 1919 and early 1920, in spite of many interruptions from blizzards, deep snow, constant rain, actual fighting, and minor disturbances, they dealt with nearly 14,000 square miles of country, of which an appreciable proportion was up till then not only unsurveyed but unexplored. The details of this work would fill an article by themselves, but it may be of interest to show how such a large area was covered by an average of only two to three topographers in the time.

The essence of the matter was mobility. The topographers, assistants, cooks, and escort were all mounted and armed. As the country was unsettled, each party had to include six rifles, and four or five of these were usually Kurdish levies in our pay, armed and clothed by us. were most useful as interpreters, messengers, and especially as foragers for the party, which of course lived on the country, except for tea and sugar. The surveyor's assistant who carried the plane-table, and his cook, were fortunately both Punjabis, so could ride and carry carbines. Hence there were no unarmed mouths to be provided for. The modus operandi was The operator set up his table and made his first fixings from two or three peaks near Meshed which had been fixed by the Afghan boundary commission in 1885. The regular survey section that was employed on the line of communications very kindly went out of their way to fix a few more peaks in the Hazar Masjid range for us. From these the plane-table could be set up with a very fair accuracy, and well enough to fix peaks many miles further afield as points to hang more plane-tabling on.

The plane-table itself was not used for the whole area, of which nearly all was covered by work on cavalry sketching-boards; where there were Russian maps already of an area, the sketching-board was the only tool used for filling in detail. In short we used the plane-table where the regular survey section uses the theodolite, and we used the cavalry board where they would use the plane-table. The accuracy thus obtained was amply sufficient for needs of the fighting troops, since there was nothing remotely approaching static warfare and the consequent squaring of maps for the artillery. In this way most of the valleys were traversed by a mounted N.C.O. with a "cavalry board," at the rate of some five miles an hour. The result of this work was then adjusted by means of the pantagraph to the net made by the plane-table, sometimes with the aid of a pocket sextant. Important heights were obtained clinometrically on the plane-table, but less important ones by aneroid. We were careful, however, not to rely upon the latter instrument except for relative differences.

^{*} As an instance of the natural aptitude of the Pathan for topography, one young Yasafzai was able to make a useful plane-table sketch after ten days' instruction.

Each topographer carried a hypsometer, which he boiled at his night's bivouac. Calculation in correcting boiling-points for air temperature was avoided by employing a graph drawn on squared paper, whereon the ordinates are altitudes, the abscissæ are degrees and tenths, and whereon several lines are provided, of different colours, at convenient differences of air temperature. The hypsometer height thus corrected was plotted on squared paper again, using the back of Army Form C 2121. On this the ordinates are again altitudes and the abscissæ times, i.e. days and hours. The topographer not only plotted his hypsometric heights on this, but also his barometric readings, being careful to read and plot his aneroid whenever he boiled his hypsometer. The resulting curve made it extremely easy to correct the aneroid heights by inspection and a pair of dividers. A little work was done by traversing in narrow valleys on the subtense method, using a pocket sextant and a lance. This instrument was of use in places to replace a theodolite, and is certainly excellent for rapid work where great portability is important.

To reproduce the maps required for the immediate use of the troops we used ferrotype paper in a home-made printing frame. The results were not as satisfactory as we should have liked, since the paper is too fragile for much use in the field, especially as we had to employ the kind giving chocolate lines on a white ground, to admit of roads, etc., being coloured in by hand. This was the best we could do, and we were fortunate enough to be able to prepare and print maps of the area in which fighting soon after occurred in time for issue to troop and company commanders concerned.

Meanwhile the patrolling portion of the detachment, even expanded by our fifty Kurds, had its hands full. Very soon after the capture of Ashkabad, now renamed Poltaratsk, the Bolshevik "Politicheski Oddiel" commenced to send propagandists and agents across the frontier to work amongst the Persian and Caucasian bazaar loafers. Our patrols caught several of these, and before long the Red administration could get no one to take on the job. An interesting poster that we secured, specially designed for Indian consumption, depicted three naked emaciated Dravidians harnessed into a plough, at the tail of which stood a typical John Bull with projecting teeth and ginger whiskers, brandishing an automatic pistol in one hand and a nagaïka in the other.

The winter was characterized by incessant patrolling, which helped us to correct the maps to some extent, and by an influx of refugees and deserters from the Red Army. We entertained a wonderful medley, the bulk being Magyars late of the Austrian Army. Besides many sorts of soldiers—Czech, Austrian, Rumanian, Serb, Italian, Cossack, Lesghian, Turkman, Kurd, Tatar, Armenian, Georgian, Persian, Pole, and Russian—we had many civilian refugees, including women and children. Often in the depths of winter these wretched people arrived, starving and frost-bitten, led by smugglers over mountain goat-tracks. Perhaps our most

remarkable guests were seven Algerian soldiers, still in their "bleu horizon," who had been captured by the Reds at Odessa in 1917, and had made their way viâ Moscow to Tashkent and Ashkabad. Wonderful to relate, the first patrol to find them included two Pathans who had served in the Lahore division when it was brought up to Ypres in April 1915 to counter-attack after the Germans had broken the line with gas. There they had lain with a North African division wherein four of our escapers were serving.

During the spring Bolshevik plans began to crystallize. Emboldened by the success of their protegé Kuchik Khan, on the Caspian coast, they endeavoured to create a second Kuchik in Khurasan. They selected a minor Kurdish chief named Khuda Verdi Sardar, who had, before the arrival in Khurasan of sepoy and cossack, made a comfortable livelihood by brigandage. He had even collected seventeen wives, some not uncomely. The slump in the bandit business had made him discontented and a ready tool for Comrade Paskutski's hand. Accordingly, the other side despatched several convoys of machine guns, rifles, and ammunition to him. We managed to keep touch with all these, but since it was an internal Persian matter could not interfere, at any rate at first. The Persian was quite unequal to competing with the situation, and matters became critical, several hundred Kurds, with good ponies and magazine rifles, joining the standard of revolt.

Open rebellion followed, complicated very much as far as we were concerned by the massing of several thousand Red troops,* with guns and aircraft, 30 miles to our front on the metalled road forming the main line of advance into Persia. This tied our company of infantry down to the outpost line to watch them, whilst the alarums and excursions went on in the Kurd valleys to the west of our headquarters.

Our three standing patrols in this direction managed, after some adventures, to concentrate at a village called Jiristan, 22 miles to the west, and to which a bridle path ran up a rough narrow valley with cliffs on either hand, over a pass of 7400 feet. Jiristan was at once reinforced by two troops of our Kurdish levies and by a company of Persian infantry. Hardly had they arrived than the surrounding hilltops were sangared by the enemy and the place invested. Desultory fighting followed between our piquets and the advanced elements of Khuda Verdi's forces, and one of the Persian infantrymen was slightly wounded, whereupon the whole company were seized with panic and absconded in haste. Meanwhile our own Kurds, kept to it by their Regular instructors, held their ground.

Fortunately, another company of Regular infantry turned up. This eased the situation with regard to the Bolsheviks, and we were able to send out a small column that evening. The commander was an Afridi

^{*} The legend inscribed over the door of the Bolshevik First Army headquarters in Ashkabad ran, "Our mission is to set the East in flames."

jemadar of the Guides, with a havildar as his staff officer. Two sections of Kurdish levies were his cavalry; he had a Lewis gun with Khattak gunners, a section of bombers, Regulars, some being Pathans and some Hazaras, and the infantry of the column were a platoon of Hazara foot levies.

This column pushed out at ten minutes' notice, and fought and marched for forty hours on end. The back of the revolt was broken, Jiristan relieved, Khuda Verdi became a fugitive, the Bolshevik 1st Army command turned him down and withdrew their own troops from the Persian border.

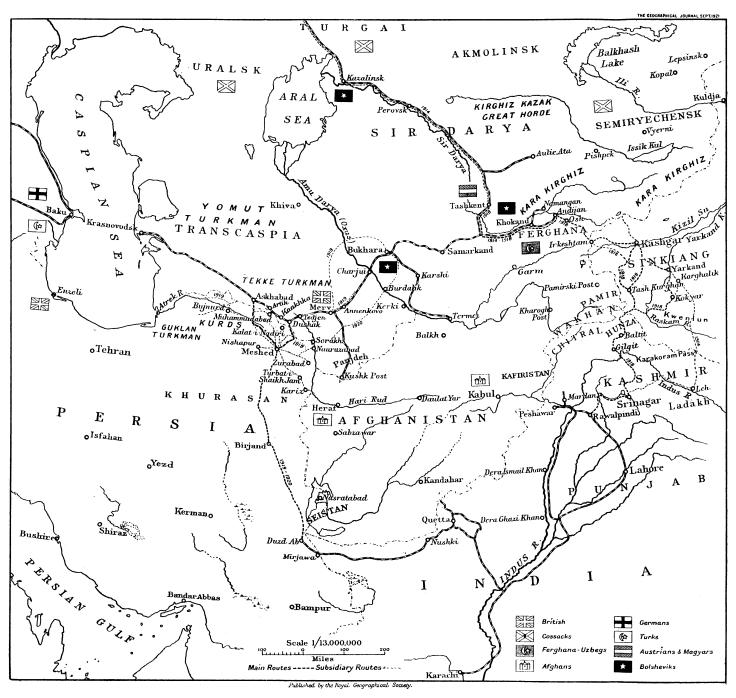
So with a neat exhibition of minor tactics on the part of Jemadar Amal Baz the curtain came down on our three years of toil in Central Asia, and we marched back through 700 miles of hills and deserts to our railhead on the frontiers of Baluchistan.

Before the paper, the PRESIDENT said: Captain Blacker had the advantage of being employed during the war in regions partially or quite unknown. But he had the disadvantage of having to travel so rapidly that he had little opportunity for making and recording observations of geographical interest. We must therefore make allowances for him in listening to the lecture which I now ask him to give us.

Captain Blacker then read the paper printed above, and a discussion followed.

Brig.-General Sir PERCY SYKES: I think Captain Blacker must have made a record for distance with his little party, and I should like him to tell us how many thousand miles he has travelled. I imagine it must be something like 10,000 miles, which must surely constitute a record for a patrol, even in the Great War. I noticed that the Afghans he pursued in Chinese Turkistan had the bad taste to go over the most uncomfortable part of the country, and as he was going extremely light, it is marvellous that he got through all right. There is nothing more unpleasant than sleeping without enough bedding, and nothing more dangerous to health. The Sarikol Valley is very interesting. inhabitants of it talk Persian and are the last people to do so eastwards, and they are, curiously enough, followers of his Highness the Aga Khan. Their leaders go every two or three years over those tremendous passes and make their report to his Highness at Bombay, and it gave me rather an insight into how far the influence of the British Empire stretches. Here was this most God-forsaken place, with winter for ten months of the year, looking steadily to India. When my sister and I went to lunch with the wife of the Russian commandant at Sarikol, she showed us her garden, and there were merely a few little cabbages coming up! It was an extraordinarily cold climate through which Captain Blacker and his party had to travel. It was August when we were there, and I remember on one occasion I woke up to find a couple of feet of snow on the ground. The Pamirs are termed the "Roof of the World," and that is what it means.

I was also deeply interested in hearing about north-east Persia, and I most warmly congratulate Captain Blacker on having added so much to the survey of the country. I used to go about with a solitary surveyor, and managed to do a good deal, but I never had proper resources in the way of men, plane-tables, and theodolites. I think we can see that the war has not been entirely



Sketch-map showing routes of Captain Blacker's Detachment, 1918-20.

destructive in Persia. Here is an instance of it, both in the shape of roads, to which the lecturer referred, and sound geographical information.

Colonel Sir CHARLES YATE: Our lecturer this evening has taken me back to many old scenes and reminiscences, which, I can assure you, has been a great enjoyment to me. He recalled various scenes in Merv. visiting Merv very well, and I thoroughly enjoyed seeing his pictures of all the various places round there. I was astonished to hear that Hazaras were amongst the cultivators there. They are a Shiah tribe who live in the heart of Afghanistan, and when I was at Meshed we had a very large influx of them there from Afghanistan. They were known there by the name of Barbaris. When I was Chief Commissioner at Quetta, Sir Claud Jacob, now Chief of the Staff in India, then commanding the Zhob Levy Corps, was able to raise a fine regiment of these Hazaras. A splendid regiment they made, and I believe they did excellent service throughout the war and proved themselves to be capital pioneers and soldiers. I was very glad to hear that some of these Hazaras in the Guides Cavalry had done such really good service with Captain Blacker in his long journey to Merv. It was an eye-opener to me to hear how Hazaras were spreading all round the country from their original home in the heart of Afghanistan, as in my day it was difficult for them to get out of Afghanistan. Captain Blacker also referred to the guns that were taken from the Afghans at the battle of Panjdeh. That brings back long memories of the time when I was at that battle. I was the British officer there at the time, and I remember I had only nine men with me when the Russian troops marched down. The lecturer told us of Kalat-i-Nadiri. I remember visiting the place. It is one of the most curious natural forts you can have—a large semicircular valley rising gradually to the edges with precipitous cliffs all round it. Who is the man who will find out the treasure that is supposed to be buried there? The Persians in my day were very jealous of admitting strangers into the place, but I was able to get there and so was Captain Blacker, though we had no chance of finding that hidden treasure.

The PRESIDENT: In spite of the disadvantages under which he laboured, Captain Blacker has succeeded in bringing us back some valuable information. Most interesting, perhaps, is that part of his lecture which dealt with that very heart of Asia where not only three empires meet but also three great mountain systems meet-where the Hindu Kush and the Pamir Mountains meet the Kuen Lun. Here the lecturer found a succession of terrific gorges and mountain ridges. To set these down with accuracy, prolonged and careful survey would be required, and for that Captain Blacker obviously had no time. But his experiences are valuable as drawing attention to the topographical interest of this region. He spoke also of the loess deposit on the mountains. The atmosphere in Chinese Turkistan is nearly always dull. This is due to its being surcharged with dust from the Gobi desert and the Takla Makan. And this dust is precipitated on to the mountains—the coating being heavier on the outer ridges and lighter the further away from the desert the ridge is. You will, I know, like me to thank Captain Blacker for his graphic description of adventures in widely separated parts, and to congratulate him upon having come safely through them.