



A SMALL GLACIER EAST OF KAUGERDLUGSUAK.

home. An interesting ethnographical collection was made in the old huts and graves of the Eskimo. Especially interesting is a collection found at $68^{\circ} 10'$ lat., and sixteen skulls from old graves were obtained. No Eskimo lived on the unknown coast from Scoresby sound to $65^{\circ} 45'$ of Angmagsalik. No traces of Andrée or of Blossesville were seen. Hydrographical researches were made occasionally. Astronomical and magnetical determinations were made at many different localities on the coast.

ON THE AFGHAN FRONTIER: A RECONNAISSANCE IN SHUGNAN.*

(NOTES FROM A RUSSIAN OFFICER'S JOURNAL.)

THESE notes are derived from the journal of a Russian officer, Lieut.-Colonel A. Serebrennikov, who was a member of one of two reconnoitring parties, despatched by the Russian Government into the little-known country of Shugnan from the Pamirsky Post during the year 1894.

The first party, of which Mr. Serebrennikov was a member, penetrated through the valley of the Shakh-Dara, whilst the second confined itself to the valley of the Gund river. Both parties ultimately united in the valley of the Kharokh river, near fort Kala-i-Bar-Panja, the capital of the Khanate of Shugnan.

This region is almost virgin ground for the explorer, most of the particulars we have of it at present being derived from hearsay. In view of this fact, and also

* Communicated by Dr. A. Markoff.

of the great probability that this hitherto neglected region may ultimately develop, by the march of political events, into a place of strategical importance, as the narrow belt of land separating two great powers—Russia and England—in Asia, it is to be hoped that the following short descriptive notes may induce some enterprising Englishman to undertake the task of exploration in a thorough and scientific spirit. This is the only excuse for offering these notes here. A military officer, whether English or Russian, on such a reconnoitring expedition has scarcely the means, if he had the will, to effect an exploration in the proper geographical meaning of the term. To get a written account at all, however sparse in detail it may be, from an eye-witness is a step in the right direction.

The first writer to mention Shugnan is the Chinese Buddhist monk Hwen-Thsang (in the seventh century); but every description, commencing with that of the Chinese traveller and ending with those of the English travellers Wood (1836), Forsyth, Trotter (1873) (in the nineteenth century), is largely made up from hearsay accounts. The first European who actually visited Shugnan *in propria persona* was the Russian Dr. Regel (1882–3). He was followed, a little later in 1883, by the mining engineer Ivanov. Neither traveller has published anything important on the country. In 1894, Lieut.-Colonel A. Serebrennikov, in the reconnoitring expedition to which reference has been made above, succeeded in riding along the entire courses of the rivers Shakh-Dara, Gund and Kharokh, and also along a portion of the Panj.*

As to the result of his travels we may now let him speak for himself.

A. M.

Pamirsky Post, Sunday, July 9, 1892.—There is a break in the monotonous run of garrison life at last! General Yonov has arrived with his staff, and after feasting, congratulations, etc., we settle down in earnest to discuss our proposed reconnoissance into Shugnan. There is no time to be lost, as we learn that the Afghans are expected almost daily to cross the river, and we must forestall them.

July 19.—Our two parties, each consisting of three officers, twelve infantry, twenty cossacks, and some guides, set out at eight o'clock this morning in a drizzling mist. We forded the river Murgh-ab after parting from and receiving the good wishes of all our brother-officers remaining behind, and also—last but not least—those of the only lady on the Pamirs, Madame S. G. Skerskaya, who had, in spite of the weather, made one of our honorary escort up to this point. The river is rather high at this season, and the waters rose to our horses' saddle-cloths even at the ford, but in autumn and winter, when its affluents are not fed by the melting of the glaciers, fording at any point is very easy.

How exceedingly monotonous and dreary the scenery on this vast Pamir plateau is! The low mountains, with vague outlines, which bound the broad river valleys, are quite bare and lifeless. In this respect how different from the awesome mightiness of some of the giants in the Alai range! But the fact which should astonish us is the tremendous height above sea-level, at which we are standing in these valleys. This, of course, cannot be seen, but only felt—fever, violent headaches, nose-bleeding, etc., are frequent symptoms here, and tell their own tale as regards altitude. The natives call these symptoms "tutek."

After passing the burial vaults of Shadjan, on the right side of the river, we turned sharply to the left, ascending a small plateau whereon are more graves, but

* The parts of Shugnan within the valley of the Panj have lately been visited by the two Daniah Expeditions under Lieut. Olufsen. On the second of these a reconnoissance east of the river was also made.

without any inscriptions. We then descended into the valley of the Kara-su river (an affluent of the Murgh-ab). In this river there is a kind of "eyot" covered with parched and sickly-looking willows, and it is strange how our eyes would affectionately cling to this anæmic oasis, which represents the sole timber growth in the Pamir highland from Fergana and the Alai to the Koi-tezek pass on the Shugnan frontier, about 240 miles.

The river now washes its way through a thick bed of conglomerate, 45 to 50 feet deep.

After crossing over to the left bank of the stream, we followed the road which brought us almost straight to the "rabat" (Persian inn) at the mouth of the river Boz-Jilga. Here we stopped for the night. More by luck than by foresight, we resisted the temptation, weary as we were, of camping in the open—for the rabat being merely a quadrangular room with a clay dome, could not, of course, accommodate us all—and erected two of our tents outside. It was fortunate we did so for a stiff shower fell during the night.

As a rule, the rainfall is very slight on the Pamir, and rainy days do not average more than 8-10 per annum.

We set out at daybreak next morning and crossed the summit of the Naiza-tash. This latter slopes so gently, that a carriage could easily traverse it. The road now courses between low mountains, with the usual depressing and spiritless "Pamir" perspective, which, however, opens out when we enter the Alichur valley. Here the eye can take a wider sweep, and embraces the whole of the valley, lying there as if in the palm of one's hand, with the Chatyr-tash (the tent-stone) rising in the middle, and looking really like a huge tent in the distance. A strong wind is nearly always blowing along the Alichur valley, and in our case proved very disagreeable, as we had already marched 29 miles, and were feeling tired. We camped shortly afterwards for the night about 2 miles below the Chatyr-tash on a rather marshy plain, covered with fairly good grass. Here we consulted as to our plans for the morrow.

As it was imperative that we should reach Shugnan in time to forestall the designs of the Afghan raiders, we decided to push on 18 miles next day, as quickly as possible and without halting.

Although the Alichur valley is noted for its rich grazing lands, the nomadic tribes have not yet sufficiently got over their natural fear of the Afghans to make general use of them. This warlike, though treacherous race, may be justly termed the banditti of Central Asia, and, so long as they exist, will they be a constant thorn in the sides of both English and Russians. During the summer of 1891 and 1892 they established a small military post on the eastern borders of the Yashilkul, near Sume-tash, whence they raided and blackmailed Russian subjects on the Pamirs. It cost the Russians a very sanguinary encounter before they could be ousted from their ill-famed stronghold.

July 21.—We started at 7.15 a.m., after leaving three cossacks (as we did also at the previous halting-places) to keep up our line of communications. We again followed the road, which from this point skirts the left bank of the Alichur river, winding up and down, in and out, at the base of the mountains. The lower parts of the valley are marshy, and we had to avoid them. We crossed the stream Bash Gumbes, which falls into the Alichur further down, and passed one of the rabats of Abdullah Khan. This rabat is in very good preservation, though over three hundred years old.

A disagreeable head wind was now blowing, and we were all glad when, at four o'clock, we saw in the distance the lately-built rabat near the Mukur-Shegembet river and ravine. It stands on a high bank, and can be clearly seen a good way

off. The soil thereabouts is salt, and vegetation grows scantily only along the banks of the river.

July 22.—We set out again early next morning, after leaving our usual post of three cossacks behind. The road here turns to the left, and soon takes us away from the Alichur valley.

Our most direct route would have been along the Yashil-kul lake, thence following the Gund river, which flows out of its western side. As this road, however, is very hard to traverse, we decided to take the longer but easier route over the summit of the Koi Tezek, and thence through the valley of the Toguz Bulak river.

This we did, and camped for the night by the salt lake Tuz-kul. Here we received a deputation of a hundred Shugnanis, who petitioned us on behalf of the inhabitants of the Shakh-Dara for protection against the Afghans. They were a poor, dispirited-looking body of men, and must have stood to the Afghans as sheep to wolves. Their dress, made from the coarsest stuffs, led us to think that they were all simple peasants; but in this we were mistaken, as we soon perceived, for no less a personage than Azis-Khan, nephew of the last independent ruler of Shakh-Dara, was amongst them. This was the ruler who had been executed in Roahkala by order of the Shugnan ruler (Shah-Abduraim-Khan).

Azis-Khan, our humble petitioner, was a young fellow of about twenty or twenty-two, of medium height, with the typical features of a mountain Tajik, and the customary curly whiskers, like those we see depicted on many of the old Assyrian bas-reliefs. His dress, consisting of a black cotton "khalat," or gown, was mean in the extreme, and neither in bearing nor in apparel did he betray any hint of his princely birth. The "caste" system does not exist in Shugnan, and, owing to the general poverty which prevails throughout the kingdom, there is no visible distinction, generally speaking, between prince and pauper. Of course, there are exceptions. Later on, I met another Shugnan prince, Timur-Shah, nephew of the last Shugnan Khan, Soid-Akhbar-Shah, whose dignified bearing and manners were quite in keeping with his birth. I suppose, though, it must be hard to be dignified on next-to-nothing a year, and an empty belly will certainly humble prince as well as pauper in the long run.

We took advantage of the visit to learn something about the country, state of the roads, etc., and heard pleasant news. In the first place, it appeared, according to Azis-Khan, that the roads up to Shakh-Dara would be found exceedingly good; and, in the second place, that the inhabitants of the latter were waiting our advent with impatience, being in mortal terror of the Afghans. We continued on our way, therefore, in the best of spirits.

On entering the Shakh-Dara territory we soon had practical demonstration that, so far as our welcome was concerned, things were as Azis-Khan had represented them. We were quickly surrounded by smiling helpers, all eager to do something for us—some collecting fuel, others helping to carry the heavy loads, etc. As regards the state of the roads, however, we were disappointed, for though they may have been "exceedingly good" according to the Shugnan standard, to us they seemed exceedingly bad, even in comparison with Pamir roads.

We halted for the night near the Mazar-Kyrk-Sheit, and several of our party, having an hour or so's daylight, took advantage of it to go fishing in the stream emptying itself into the Bulyun-kul lake. Although it was the warmest season of the year (July), our thermometer only registered 10° Réaumur (54½° F.) at 9.30 p.m., and had fallen to 7° (47½° F.) by the morning.

We started at 6.50 a.m. in fine weather. At 9.10 a.m. we reached the top of Mount Koi-Tezek (14,000 feet), which marks the frontier line of Shugnan. During

six months of the year this mountain is covered with snow, and it is then quite impassable; in the summer, however, there is no difficulty. On the very summit the road forks, the right-hand branch leading to the valley of the Toguz-bulak river, a tributary of the Gund, and the left-hand one to the Shakh-Dara valley. Here we halted, and after dividing up our baggage train our party split up, I myself being with the division which pursued the Shakh-Dara route.

We reached the Kok-bai plateau, which is surrounded by snow-capped mountains. We were now at a great altitude, many of our party suffering from incipient headache, and all were glad when the road, after turning to the left, descended along the banks of the stream Kok-bai-Chat, source of the river Shakh-Dara. Here we camped for the night, starting again at 7.15 a.m. As we proceeded, the character of the country gradually changed, and the scenery began to get more diversified. It was indeed time, for we were all heartily sick of the great "monotonous Pamir," which should furnish an ideal country for the pessimist if he is ever in want of such.

Indeed, for an image to express downright, utter melancholy, in the abstract, I cannot think of anything more apt than the picture of a pessimist reading Schopenhauer in the Pamirs. It is the "land of no hope." But although the scenery was now more cheering to the eye, this was an advantage only purchased at the expense of weary limbs, for the roads went from bad to worse. We stumbled on, however, encouraged by the sight of wild-rose bushes and the warmer-tinted vegetation which bordered our route. A wild rose is perhaps not much, in an ordinary way, to make a fuss about, but to any poor wanderer, like ourselves, whose eyes were tired and aching from the monotony of a Pamir landscape, it will appear, as it did to us, as a sign from God in the midst of the wilderness. But we still had to go through some wearisome plodding, for the road hereabouts is most precipitous. My heart knocked apprehensively against my ribs several times when my horse stumbled on the edge of some chasm or slipped in some deep rut on a breakneck descent. The best thing for a man to do in such cases is to trust implicitly to his horse; and not to attempt to control or guide it in any way, for the horse's instinct will be a surer and safer guide out of the danger than the judgment of its rider. Many a life has been lost, of horse and man, through humanity's insufferable conceit in its own prowess, and through its often ignorant contempt for the powers of that noble servant of man, the horse.

After a rough up-and-down scramble, a steep descent brought us to the confluence of the Koi-bai-Chat and the Mats. From this spot we had a truly splendid view of the distant snow-capped Wakhan mountains and the green valley of the Jaushankuz river, the latter being one of the sources of the Shakh-Dara. Of the Wakhan mountain range, two peaks tower pre-eminent, one rising to a height of 23,000 feet, and the other, the Tsaritsa Maria, to 20,000 feet above sea-level. These two majestic mountains stand adjacent and tower above all the others in their impressive majesty and might.

We soon came out into the valley of the Jaushankuz river, and thence to a place called by the Kirghiz Depchi-utun, "the trough-like." The path here became very steep and broken, but afterwards improved greatly. At this point we met ten Tajiks, who, hearing of the approach of the expedition, had come forward several versts* to meet us. Our guide, Azis-Khan, displayed much pleasurable excitement at meeting his compatriots, and when he came upon a second "welcoming party" a mile or so further on, his delight was at its height.

When they saw us, the Tajiks dismounted from their horses and took us quite

* One Russian verst = 0.6 English mile.

by surprise with the fervour of their welcome. On meeting with persons either older or of higher social grade than themselves, the custom is for the younger to take the other's hand and kiss it, to which greeting the elder responds by either kissing him on the forehead or throwing him a kiss, the whole performance being accomplished generally with dignity and grace.

The Tajiks, therefore, on meeting us ran up alongside our horses, took our hands, kissed them, and seemed to expect us to be as demonstrative as they were. It was only later on, when our interpreters had explained to them that we were unfortunate enough to have different customs, that they greeted us with handshakings and by making the "kuldruk," *i.e.* a low reverence, performed with hands on breast.

By midday we had taken up our quarters in the tent prepared for us, and received numerous visits from Tajik-Shugnanis as well as from an influential family of Kirghiz then nomadizing in the district—that of Bai-Kurban-dakhta. In the time of the Khans, Kirghiz nomads, to the number of forty or fifty families, regularly made their homes in the Shugnan district, but now there are only about seven families there, and even those edge as near as possible to the Pamir deserts, so as to have a refuge handy against the Afghans. The latter swoop down on the higher reaches of the Shakh-Dara every now and then from Wakhan, where they garrison the fortress Kala-i-Bar-Panja, the capital of the Khanate of Shugnan.

The intervening country is very precipitous, and is icebound for three to four months in the year. Indeed, it is only the great difficulty of communication which has hitherto protected the Kirghiz from being forced under the sway of the Afghans. As it is, the latter have only thought fit to demand that the Kirghiz shall maintain a post of observation on their behalf, and inform them of everything worthy of notice—especially regarding the actions of the Russians on the Pamir.

As the entire garrison turned out and greeted us with every demonstration of friendship, their faithfulness to their charge, I am afraid, is more assumed than real. We made a halt near by the demolished Kirghiz fortress Butenek-Kurgan on the rivulet Jaushankuz (*Anglice*, "sown barley"), formed by the junction of the Kok-bai-Chat and Mats. The name is appropriate, and not merely poetical, because, as a fact, barley-sowing actually begins here. Most probably this Butenek Kurgan, like all the others of which we have occasion to mention, was a place fortified by the Kirghiz so as to serve as a defence from their Tajik persecutors.

In the times of the khans, or, as they were called, "Shah" (ruler), these Tajik invasions were looked upon as such matter-of-fact enterprises, that even the Shah himself would not scruple to enrich his coffers by the despatch of a marauding party or two. In fact, these raids came to be looked upon as so many legitimate commercial expeditions, combining personal gain with the pleasures of war, without any of its dangers.

The Jaushankuz valley, which widens at this part, is encompassed by low mountains, quite bare, alike of vegetation and of snow. The soil, though rather marshy, is covered with a rich grass, dotted here and there with willow bushes, averaging 6 feet in height.

We started at 9.30 a.m., accompanied by an enthusiastic and increasing crowd of Tajiks and Kirghiz. The road first traversed the plain, but soon led us to a ford across the river. The latter here takes a sharp bend to the right. After crossing the river we entered a large defile, at the mouth of which stand a number of peculiar stone masses bearing a rough resemblance to Kirghiz "kibitkas" (dwelling-tents). Regarding the latter there is a legend which says that they mark the site of a former rich "aul" (village). A holy man wandered in one day craving rest and food, but the rich inhabitants, who had waxed proud in their

prosperity, repulsed him with scornful words. The holy man thereupon, angered at their shameful forgetfulness of the laws of hospitality as enjoined by the prophet on all the faithful, changed their kibitkas into stone.

On the right-hand side, we soon come to a ravine which bears the characteristic name "Duzakh-Dara" (hell's ravine). This is quite a misnomer, if the much-quoted dictum, "Facilis est descensus averni," is right, for the road which leads through this ravine is most difficult. Right opposite the ravine Duzakh-Dara, in the centre of the Jaushankuz valley, may be seen ruins of the old fort: Jaushankuz-kala.

After ascending a small ridge a little further on, the ruins of an old Shugnan village became visible. The road then led us through a small stone ravine, and thence continued along the Jaushankuz valley again, to the junction of the river with the Vrang. From this junction, in reality, commences the river Shakh-Dara. Here we were met by the Shugnan Khudoyar, who acts as "aksakala" (governor) over Shakh-Dara, having been appointed to the office by the Afghans, when they took possession of the country.

Khudoyar is a tall, fine-looking, energetic man, with the characteristic features of the Pamir-Tajiks. Barred from any but casual intercourse with the surrounding countries by almost untraversable mountains and the neighbouring desert, the Tajiks of Shugnan were forced to intermarry among themselves, and thus to keep pure, though debilitated, their original Aryan blood. Another thing to strengthen this isolation was the fact of their being "Shiites," who are heretics, and worse than dogs in the opinion of the surrounding Sunites. Khudoyar was accompanied by a "jiguit," a tall, fine young fellow, dressed in the gray uniform of the Afghans, with bright buttons, carrying a curved Afghan sword. I could not help looking on him with suspicion, and the more I looked, the less satisfaction I got from his cunning, evil-looking face. He disappeared soon—"gone home," we were told—and that was all the information we could glean about him.

Eventually we got quite accustomed to the various uniforms, but at the beginning the sight of them raised rather uncomfortable feelings.

Having passed the ruins of the "kishlag" (encampment) Vrang, we rode along the left side of the Shakh-Dara, sometimes making our way over bare rocks which overhang the water, and sometimes through willow bushes, till we reached the ancient fortress Koi-Kuvat. According to local tradition this fort was erected 700 years ago by the Amir Koi-Kuvat; and its strategical position, built as it is on an almost perpendicular rock, was certainly very well chosen. At the present, the old fortress walls enclose several huts, "saklya," which serve as winter quarters to Kurban-Datkba and his numerous family. The surrounding country is very beautiful. The river valley broadens out, and is rich in vegetation. Here we stopped for the night.

July 24.—A beautiful summer morning. Though still early, the southern sun was so hot, that some of us sought the friendly shade of the willow-clumps, where we could tranquilly lie and gaze our fill at the beautiful landscape before us. The bright emeralds of the valley at our feet, made brilliant by the changing glow of the sunlight, and the outlines of the mountains standing out clean-cut against the blue sky, whilst the river wound its way in between, all combined to make up a picture from which we were loth to move.

When the time fixed for the halt had expired, it was very unwillingly that we rose to our feet and prepared to continue our journey.

A little further on the road passed to the right bank of the Shakh-Dara, and we had to cross a deep ford. Further on, about half a mile from Baba-Abdal-Masar, which was agreed on as our night's halting-place, we had again to ford another

river, the Baba-Abdal, an affluent on the right bank of the Shakh-Dara. This was altogether a disagreeable business, the waters being rather deep, and the current rapid and boisterous. As if these disadvantages were not enough, the bed of the stream, moreover, was strewn with big stones, and we had several narrow escapes from accidents. We stopped on the bank of the Shakh-Dara, in sight of the burial-place of Baba-Abdal. This holy man is so revered by the inhabitants that many of those accompanying our party descended from their horses and walked past the tomb as a sign of respect. The burial-place stands on an elevation, and is visible some distance off. The exterior is quite ordinary in appearance, and the interior consists of two rooms and a terrace. Long poles stick up over the roof, hung with tails of yaks and different-coloured rags—remnants of pious offerings from the faithful.

A little lower down the slope stand the ruins of a "kishlag," by all appearance not long abandoned. We arrived at our night's camp at 11.45 a.m., and prepared for a lengthened rest, as the Tajik guides told us that the next place where we could put our horses to grass was some distance off. As the country was quite unknown to us, we had to rely entirely on the guides, which we could do with the more confidence, because it was as much their interest as ours to lead us as quickly as possible to the confluence of the Shakh-Dara and Gund, the rendezvous where our two reconnoitring expeditions were again to join. The longer they delayed, the more anxiety they would have on account of the Afghans. During the remainder of the day I visited the sepulchre, the ruins of the kishlag, and the ravines of the river Baba-Abdal.

July 25.—We started at 6.45 a.m. on our difficult journey to the first Shugnan kishlag, Seij, on the right bank of the Shakh-Dara. The difficulty and danger lay in the fact that we had to wade four times across the river, which was at rather high water. The road follows first a terrace, slightly sloping towards the river, and after passing a meadow goes through a thicket of willow trees, then ascends a slope, descends to the meadow again, enters a thicket of brushwood, and finally, $2\frac{1}{2}$ miles from Baba-Abdal-Mazar, runs close under high perpendicular rocks, which make it impossible to follow the right side of the river any further. As the ford was difficult, and would take some time, we resolved, after crossing, to wait till all the beasts of burden had arrived, and to see ourselves the most valuable bales and packages transferred safely across. The waiting would have been very dreary but for one incident, which, although rather unpleasant, served to pass the time. A pack-horse, carrying two cases of cartridges and a small barrel of spirits, slipped from the slope into the river. Through the efforts of the Tajiks, amongst whom was Azis-Khan, one case of cartridges was eventually saved, but the other sank in deep water and was lost. As regards the small spirit-barrel, that floated, and ten or twelve Tajiks immediately rushed into the water at the ford. By spreading themselves across the river they caught it, as it came down the stream. We regretted the loss of the cartridges, but the cossacks and soldiers regretted the spirits more, which had leaked out and become diluted with water. This cask was part of the very little we had remaining, hence their sorrowful looks. The crossing of the baggage and of the foot-soldiers took two hours and a half, and it was only at 10 a.m., *i.e.* after three hours and three-quarters, that we were able to continue our journey.

An hour after we had to recross the Shakh-Dara, which divides here into two streams. This made the fording easier, as, although the streams were still deep, the current was not so strong.

We halted once more amongst great thickets, "tugai," of poplars and willows. At 12 o'clock we continued our journey. The path now mounts up to

490 feet above the river, with abrupt descents and ascents, often across transversal gullies. On the left side can be seen the enormous Indich Bashur, hemmed in by precipitous cliffs, from the two clefts of which appear the peaks of the Wakhan mountains, covered with eternal snows; and below the mountains flows a small rivulet which falls into the Shakh-Dara. Right opposite the Indich Bashur, on the right side of the Shakh-Dara, there is a small kishlag, abandoned by its inhabitants, as we were told by the Tajiks, only last year. Having passed the Indich Bashur, we rode out on to a kind of level platform, where we met a fresh party of Tajiks, bearing a letter to us from the inhabitants of the lower kishlaga, praying us to hasten. We now pushed on with all the speed which the difficult path would allow, and at 2 p.m. arrived at the third crossing. This proved to be the deepest, the water reaching to the saddle-cloths of our horses, besides which the bed was rough and stony. The breadth of the river here is about 60 feet. Hardly half a mile further on we had to cross again to the right side of the Shakh-Dara, but this time the ford was the shallowest and most convenient of all, and the bed quite even and firm. After this the road wends its way between enormous masses of stone, or on narrow ledges with walls so close to the rock that our stirrups grated on them as we went along. At last we began to ascend a very steep gradient on the bare rock, so steep and narrow that in some places steps had been hewn out and "balconies" constructed, i.e. widenings of the path by planks laid down and hanging over the precipice. We had been told about the fords, but not a word about this place, which proved to be the most dangerous on the whole road. In one place the rock wall projects so much over the ledge that our horses could not pass through, and we were obliged to carefully alight, take off the loads, and even to unsaddle the horses. Neither my companions nor myself shall ever forget this awful passage. Several Tajiks from Seij met us here, and helped us carry our luggage. Their agility, diligence, and, above all, the stamina they displayed in carrying heavy burdens weighing 144 to 180 pounds, were really wonderful. If it had not been for their help we should have been delayed here for several hours, but as it was we did it all in about half an hour.

A short ride brought us to the mouth of the river Drum, which flows into the Shakh-Dara. We halted here about 5 p.m. on a small spur jutting between these two rivers. Our hazardous journey had tired me thoroughly out, not so much physically, but on account of the strain on the nerves. I therefore postponed my inspection of the neighbourhood till the following day, and went to rest.

We were now approaching the Afghans, and had to be on the *qui vive*, especially when bivouacked, in order to guard against surprises. We had carefully chosen the position for our halt on this account, and having the water on both sides, and above us the perpendicular rocky banks of the river, 50 to 70 feet high, we felt quite safe from any night attack.

The only difficulty we were under was through the absence of green fodder, which put us under the necessity of buying hay from the inhabitants of Seij.

The night was fine and warm, with a light wind blowing up the valley. We had left our cold altitudes now, we hoped, for good. Towards evening, a band of excited Tajiks brought us the disquieting news that the Afghans were advancing in two columns from Kala-i-Bar-Panja, up the Shakh-Dara and Gund, to meet us. We had therefore to prepare for the worst.

July 27.—At 7 a.m. we cautiously set out to continue our journey. After having first crossed a rather well-preserved bridge on the right side of the Drum, and afterwards another bridge on the left side of the Shakh-Dara, the road began to ascend steeply till we at last emerged on to a small stony square place—a platform 120 to 150 feet above the level of the bridges. Higher and higher we

went, till we came out on a second platform. All traces of a road had now disappeared, and even the path was sometimes hard to trace. This was all tiring work, and having rested a few minutes, we began the third and most troublesome part of our ascent. This proved simply cruel, what path there was being covered with needle-pointed flints which were torture to walk on. We had to dismount, as the path crumbled away under the weight of our horses, and many a slip sent rocks and stones and soil rolling down the slopes. In many places the ascent was so steep that steps had been hewn in the cliff, which we walked up as on stairs. The fatigues of this ascent, in fact, transcend description. Really we had to stop every five or ten steps to take breath. In cases like this the best thing to do is to let the horse go in front, and for the man to be half-tugged up, holding on to its tail. This we did. If the ascent was so difficult for a horseman, it is easy to imagine how much more difficult it became when we had to help to drag up all our baggage. We were often obliged to unload the pack-horses and to carry the baggage over the most difficult places parcel by parcel; and even when we could load up the luggage again, the task was more often than not very dangerous on account of the narrowness of the path, bordered by a perpendicular cliff on the left and a precipice on the right. At last (at 9.45) we arrived at the summit, all of us more or less exhausted, with throats parched, and trembling all over from the strain. We could still look back and see the struggles of our companions. In one place a large load had slipped from the back of a horse to its hind quarters, together with the pack-saddle, and the horse was prancing with fright, to the danger of all surrounding it; in another place some loads had fallen down, and the "kerekes" (guides) were struggling, some to put them on the restive horses again, others to drag them forward themselves. It is a miracle to me, however, how we managed to get through without a serious accident.

Having rested a little, we went on again, and were soon descending the slope leading to the Shakh-Dara at the spot where the river Badjan-Dara joins it. The descent is here, if anything, more precipitous than the former ascent, going down no less than 1000 feet; but, being a descent, we accomplished it without much difficulty along a path which had been specially laid out for us by Tajiks sent from Seij the day before, and to whom we had lent our spades and mattocks for the purpose. We rested at the foot amongst the enormous poplars and willows of a great "tugai" (grove), at the bottom of a deep valley surrounded by cliffs, and bearing the name of Kara-Dangue. On two sides we had the Shakh-Dara river and its affluent on the left side, the Badjan-Dara, and on the others there was the rocky declivity we had just descended. The cliffs here almost overhang the stream, and the sombre grandeur and gloom of the scene weighed heavily on all of us, so that we would willingly have chosen a more cheerful resting-place if the choice had been given us.

It was in this gloomy place that we received a letter from the chief of the Afghan detachment, then stopping at the fortress Rosh Kala, a little distance from our bivouac, literally gorgeous with all the flowers of Persian speech. To have read his compliments and the wordy welcome we received, any one unacquainted with Afghan ways would have imagined we were long-lost brethren; but as we knew that the Afghan praises most those whom he means to kill, the letter had no other effect on us than to make us exercise greater vigilance. The reader will see further on that we were right in our interpretation.

Our baggage train had not yet arrived, when darkness settled down on us like a funeral pall. A cool wind fanned us from the snowy heights of the Wakhan mountains, whose outlines were lightly silvered against the purple-black sky by the pale crescent of a young moon. Our tired men had dined hastily, many falling

asleep as they ate, and lay sprawling about in all sorts of ungainly postures. On account of the proximity of the Afghans and the obvious disadvantages of our position, we posted several foot soldiers as sentries on the ridge of the slope, which was the only place by which we could have been surprised.

In spite of my own fatigue, I could not get to sleep. The gloomy genius of the surroundings seemed to weigh on me, and the most hopeless thoughts thronged through my brain, and made me utterly miserable. "Out of the depths have I called unto Thee, O Lord!" The sombre, grand old psalm sank deep into me, and I felt a little perhaps of what our Aryan ancestors felt—fear of the unknown, the vast, illimitable nature surrounding us! Only the rhythmical gurgle of flowing water and the mournful songing of trees rocked by the wind broke the heavy black silence. At last I fell into a troubled sleep, and when I woke again—what a relief! All was noise and bustle, and in the general hurry-scurry of my fellows I soon forgot the terrors of the night.

July 28.—A memorable day. We continued our journey at 7 a.m., and crossed the Badjan-Dara. This was comparatively easy, as the mountain-rivers rarely contain much water in the early morning. We had some more difficult ascents to get over, however. The first half of the one we now faced was not so steep but that the loaded horses and ourselves could ride up; but the second half was like a huge irregular staircase up a slightly slanting cliff. Here we experienced a renewal of our old troubles; but thanks to our men having in a measure gained fresh strength, and to the help afforded us by a number of willing Tajiks who had come to meet us, we made much better progress. We had to be careful also not to overtire our men on account of possible events.

In an old number of the journal *Razvyedchick*, I remember once reading an article on the training of German cavalry. One part described the exercises by which they were taught to ride over different obstacles in the road. Among others, I remember that one exercise was to ride "upstairs" and down. This seemed to me very curious at the time; but now, since I had had my own share of riding "upstairs" and other unpleasantness, I could not help admiring the effectiveness with which the German military code seeks to prepare their cavalry for all sorts of emergencies. It is certainly worthy of imitation by other nations.

We soon rode into a large place, from which could be seen the far-off kishlag Sendip, the residence of our titled companion, Azis-Khan.

This was a glorious day, and the scenery truly delightful after the gloomy grandeurs we had just escaped from. On account of the proximity of the Afghans we had resolved to move forward, massed together, with the baggage in the centre. While our soldiers were making the necessary arrangements I took the opportunity of taking a peep at the kishlag and the surrounding country through my field-glasses. The kishlags of the Shugnanis generally consist of a collection of a few homesteads with fields, but not grouped close together. Each family generally consists of the father, mother, and married brothers. The "saklyas" (huts) of the Tajiks are made of stones, held together with clay, and look like so many rude cowsheds. These huts often have no windows, and the doors are always made very small, several boards being roughly nailed together. Light enters through a quadrangular opening in the ceiling, which can be shut by a shield; and this opening at the same time serves as an outlet for smoke. The fireplace, "rudz," is built against one of the walls of the hut, and the sanitary arrangements are very imperfect. As there are no windows, the huts of the Tajiks are very dark, damp, and foul. Of furniture there is hardly any, and its absence is badly compensated for by wide shelves along the walls. On these shelves the inmates sit, sleep, dine, etc. The majority of Tajiks' dwellings are

very unattractive, although one meets here and there an exception—as, for instance, that of Azis-Khan, of which the woodwork is decorated with clumsy though quaint carvings, and the walls are evenly plastered, with niches for utensils, clothes, etc. The stables, cowhouses, farmyards, barns for seeds, cellars, etc., generally adjoin the huts. We could not help especially noticing the very curious buildings called “topkhana.” These are old quadrangular towers in which the inhabitants of the kishlags used to hide from the attacks of the enemy till relief came, or till the enemy got tired of waiting, or else starved them out. One often notices these “topkhanas” along the Shakh-Dara and Gund rivers. In one place on the latter there is a strong fortress, Chartym, consisting of seven such towers. The topkhanas were built generally on sites selected in the least accessible places. Of course, there was no artillery in those days, and the towers therefore generally answered their purpose very well. An entrance could only be effected through a small opening, made in the wall at such a height above the earth that a ladder had to be used. The defenders were at the top, and could fire at the enemy through embrasures.

At 8 a.m. we started. After leaving kishlag Sendip the road descends abruptly to the banks of the Shakh-Dara, and crosses an immense tugai over rather marshy soil. The trees grow so thickly here that at some places we rode through long vaults of green formed by the interlacing branches. The tugai ends just opposite the kishlag Denkent, and the road then gets bad on account of the small pointed stones with which it is strewn.

A little after one, after passing the kishlag Bar-vo-oz, we approached the kishlag Vez-dara, where it was resolved to put up for the night. As it was still early, we determined to leave the baggage train and the foot soldiers with directions for them to halt near Vez-dara, while we ourselves would go a little further on and have a look at the fortress Rosh-kala. We had been informed by the Tajiks that an Afghan detachment of about 120 to 150 foot soldiers and a few cavalry were stationed here; hence our curiosity. We only got a sight of Rosh-kala at 4 p.m. from a topkhana, after a wearisome ascent, of which we had not dreamt, having been told that the fortress was “not far.”

While we were passing the topkhana we heard the ringing notes of a trumpet from the fortress, sounding quick notes resembling our cavalry signals. This was followed first by a single volley, and then an irregular fusillade from the opposite side of the Shakh-Dara. The significant “ping” of bullets splintering the rocks and stones in our path made us aware of the fact that we were the objects of these little attentions from the Afghans; but it is somewhat incomprehensible that, notwithstanding the short distance and the large target we offered, not one of us was hurt. As we had the strictest orders to refrain from using our arms, we resolved to return. We were joined by our foot soldiers at the bottom of the descent. They had been hastening towards us on hearing the shooting from Vez-Dara, thinking we had fallen into some ambuscade. On the night of July 28, our prospects of bringing our reconnaissance to a successful issue were not brilliant. We were no more than 5 or 6 miles distant from an enemy, numbering five times our men; and of what their sentiments were toward us we had just had proofs. The Pamirsky Post, from which we could obtain reinforcements, was about 180 miles distant, besides which the country was strange to us. We heard all sorts of contradictory rumours as to the Afghans; and lastly, we had not even the means for effectively defending our bivouac in case of attack, as we could only muster twelve foot soldiers and twenty cossacks. However, we did our best, and arranged officers' guard, stationed our outlook posts and despatched cossack patrols, and also parties of Tajiks to reconnoitre. The Tajiks willingly offered their

services, which we were glad to accept. The night passed anxiously for all of us. When day broke we set about doing what we could to fortify our position, and to get reliable information as to the intentions of the Afghans. How serious our position really was, may be judged from the fact that, two days afterwards, the Afghans came to within a mile from us, and several times fired at us.

With July 28 began a series of wearisome days and nights, when we expected an attack at any moment. We had meanwhile received some reinforcements which put us on a more business-like footing, and enabled us to organize a more satisfactory defence of the camp; but, nevertheless, we were not able to breathe freely until August 13, i.e. seventeen days later, when General Yonov arrived with a fresh detachment of infantry and cossacks.

On the following day, early in the morning, the Afghans, having learnt of the arrival of our reinforcements, hastily retreated first to Rosh-kala, and then further back to the left side of the Panj to the fortress Kala-i-Bar-Panja. As they had destroyed in transit the bridge over the Shakh-Dara at Rosh-kala, and the full state of the river rendered fording impossible, our detachment could only move on to rejoin the Gund river reconnoitring party on August 20, by which date the bridge had been roughly repaired by the Tajiks. We were now penetrating into a country more and more under cultivation, but many of the fields had been either burnt or trodden down by the Afghans, to revenge themselves on the proprietors for going over to the Russians.

The fortress Rosh-kala, near which the detachment crossed to the right side of the Shakh-Dara, stands on a steep cliff. The south part of the cliff, which faces the river, rises to 1500 and even 2000 feet above the surrounding country. From this side Rosh-kala is quite inaccessible, but from the east and west sides it is, though with great difficulty, accessible. The north side faces the mountains on the right bank of the river, and is the weakest; but the fortress walls, made of stone, mount here to a great height. This cliff was the scene of the execution of the last independent ruler of Shakh-Dara, Mir Atam Bek, and his numerous followers, who fought for their independence against the Shugnan ruler, Abdurhaim Khan. By order of the latter these unfortunate men were precipitated from the height of the cliff and dashed to pieces on the stones lying at the cliff's base. Rosh-kala has many shelters erected for men and horses. Having taken advantage of these, the Afghans had ensconced themselves to their own comfort and convenience, and we had many bitter regrets for not having arrived before them. An immense vista of surrounding country can be seen from this cliff, and the kishlags, picturesquely scattered on both sides of the Shakh-Dara, viewed from the great eminence, look like small toys.

The nearer we approached the mouth of the Shakh-Dara, the denser grew the population, and the more comfortable the roads. The two rivers, Shakh-Dara and Gund, on joining, form the river Kharokh, which runs its course of about 3 to 4 miles, and then joins the river Wakhan Daria, thus forming the river Panj. The valley of the Kharokh is cultivated in sections belonging to different proprietors, who separate their lands from each other by small stone walls.

To get over to the right side of the Kharokh one has to cross the Gund by a bridge situated a few thousand yards from the place where the Gund joins the Shakh-Dara.

Having joined the Gund reconnoitring expedition here, the whole detachment took up its position in several gardens 2 or 3 miles from the mouth of the Kharokh, and remained here until September 15, waiting for further orders. The interval was spent in reconnoitring the country, also the roads down the Panj to Roshan, and to the locally celebrated ruby-mines; and also in studying the Tajiks,

their ways of life, and the numbers of the population in Shugnan, etc. The position we occupied in the valley of the Kharokh offered many conveniences, and if at some future time we should have to maintain a garrison in Shugnan, and to erect a fortified position there, this place should undoubtedly be chosen.

About 3 miles lower down the Panj, on the left bank of this river, stands the fortress Kala-i-Bar-Panja, the capital of Shugnan, which is also known as Ak-kurgan on account of the white (*ak*) cliff on which the fortress walls stand. These walls, as also the greater part of the interior of the fortress, can be easily seen from the right side of the river, as they stand within rifle-shot of the mountains. This latter fact nullifies the importance of Kala-i-Bar-Panja as a strategic position.

On the right (Russian) side of the Panj are about fourteen kishlaga. The whole country is rather densely populated, and the inhabitants are fairly well-to-do. The climate is so mild that even vines grow here, and are cultivated by the Tajiks. A nearer acquaintance with the Tajiks, and the study of their customs and manners, forces us to sympathize with this persecuted nation, which has gone through so many trials. Indeed, it is a wonder how it is they have not disappeared from the face of the earth. In far-off times this nation turned their eyes towards the north, to the Russians, and waited patiently for the occasion when they might become subjects of the great white Tsar, and thus free themselves from the persecution of the Afghans. This desire to be under Russian government, which was one of the principal reasons why the Afghans persecuted them, did not weaken as time went on, notwithstanding that their hopes were not soon realized. With the appearance of the Russians on the borders of Shugnan in 1894, it seemed that the end of their miseries had come, but fate has once more mocked their hopes, for, as we could not gain permission to leave even a small garrison to winter in Shugnan, we had to return. This we did *viâ* the Gund valley on September 15, followed by a great number of Tajiks and their families. The latter were forced to migrate in anticipation of revengeful reprisals from the Afghans, which would undoubtedly follow their having extended such a friendly welcome to us.

The general character of the road in the Gund river valley is the same as in the Shakh-Dara river valley, but the river is impassable, and the inhabitants have therefore been obliged to erect bridges in several places. Our detachment soon arrived at the summit of Koi-Tezek and re-entered the inhospitable Pamir, and on September 24 reached again the Pamirsky Post from which it had started.

THE MONTHLY RECORD.

EUROPE.

The River System of North Wales.—An attempt has lately been made, in an article contributed by Mr. Philip Lake to the *Geological Magazine* (May and June, 1900), to elucidate the origin of the river system of North Wales, on the lines so successfully followed by Mr. Marr in reference to the English Lake District. The writer begins by a study of Bala lake (sounded by him in 1899) in its relation to the neighbouring valleys, showing that the discharge of the lake into the Dee is not what the general topography of the district would lead us to expect. The lake lies, in fact, not in the valley of the upper Dee, but in the well-defined valley which runs north-east from Barmouth to the town of Bala, and is shut off from the vale of Edeyrnion (the Dee valley between Llandderfel and Corwen) by a ridge of hills traversed by the gorge in which the Dee now flows. That the drainage of the district once flowed continuously from north-east to south-west, past the site