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Progress of the Russian Expedition to Central Asia under Colonel Pievtsoff

Author(s): Vsevolod Roborovsky

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at no small risk and discomfort to themselves, the results of which had been on each occasion most generously given to the British Museum.

The PRESIDENT said that Mr. Theodore Bent's paper proved that it was not necessary for a traveller who desired to give the Society valuable information to go in all cases very far from the ordinary routes of commerce. The members welcomed with delight the intelligence sent to them by those distinguished men who, taking their lives in their hands, crossed great continents and sent back information with regard to regions which were like new worlds; but they had also a warm welcome for others who gave them information without such sacrifices as Mr. Stanley had made. Mr. Bent seemed to have a peculiar liking for the exploration of islands. In the year 1885 he published an excellent work upon the Cyclades. Towards the end of last year he contributed to the 'Nineteenth Century' a very remarkable paper upon the island of Santorin in its connection with the New Testament. Quite recently he had written on the Princes' Islands, in the Sea of Marmora; and to-night he had given them a very instructive paper on the Bahrein group. Perhaps the most valuable portion of his paper was that in which he described his excavations in the mounds which he believed to be of Phœnician origin. Hitherto one of the things which it had been most difficult to believe in Herodotus had been his reiterated statement that the Phœnicians thought they originally came from the Erythræan Sea. It seemed in the present case, as in many others, that with increase of knowledge further confirmation was given to the general truth of the statements of the Father of History. In addition to the archæological information which he had given, Mr. Theodore Bent had communicated to them a great many very interesting observations with regard to the present state of the Bahrein Islands, and he (the President) was sure that he was the faithful interpreter of the meeting when he returned to Mr. Bent the thanks of the Society for his very instructive and agreeable paper.

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*Progress of the Russian Expedition to Central Asia under  
Colonel Piettsoff.\**

THE following is an extract from the first letter of Lieut. Roborovsky, describing the progress of the expedition into Central Asia, which was led at starting by General Prejevalsky and continued after the death of the leader by Colonel Piettsoff. Lieut. Roborovsky had been a companion of Prejevalsky on his former expeditions. This letter was despatched on the 4th August, 1889, from a place to the south of the Yarkand Oasis.†

Our caravan left Prjevalsk on the 13th May for the village of Slivkina, where we were to join it. In the evening, Kozloff and I, in company with General Savrimovitch and Lieutenant-Colonel Korolkoff, who were then on service, went for the last time to the lake to say farewell and greet at the tomb of our beloved and never-to-be-forgotten chief, Nicholas Mikhailovitch Prejevalsky. We stayed there some hour and a half, and returned home much moved.

The 14th, in the morning, we paid some farewell visits, and towards 3 p.m. set

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\* Translated from the 'Russian Invalide,' Oct. 11/23rd, 1889.

† For map vide Prejevalsky in 'Proceedings R.G.S.,' 1887, p. 268, and Carey, *ibid.*, p. 790.

out from Prjevalsk in two post-troikas amidst the warm good wishes of the townsfolk, who had assembled to speed us on our way, and left behind us the dear grave, in the care of worthy people and guarded by the blue waves of the beautiful lake.

It rained hard and the wind blew sharp and cold. Five miles and a half brought us to the river Irdik. Wind and rain increased. Wrapped in dreams and thoughts of the most varied kinds, we did not at first notice our approach to the village of Slivkina, whose gardens we only observed when within three versts. At the commencement of the village, on the right-hand side as you enter it, is a fairly rich farm, built by a German, who collects in the neighbourhood insects and birds for the Berlin Museum, and who has evidently made himself very comfortable in a house of unbaked brick, with a good garden of young trees, a pond in front of the house, cattle, poultry—in short, he lives like a landed proprietor.

The village of Slivkina consists of about 120 houses, well built of unbaked brick, and planted round about with trees, mostly willows. There is a village school for boys and girls, but no church. On church holidays and the evenings before, the old men read the Gospel, and on very important occasions a clergyman comes over from Prjevalsk.

Many of the peasants, besides agriculture, employ themselves in cattle farming and apiculture, whilst gardening, under the encouragement of the Governor-General, already gives good results, and promises still better for the future. The peasants drive their cattle and sheep together with those of the Kirghis to pasture on the plateau of the Tian-Shan named Sirt. The population is composed of emigrants from various governments, the founder of the village, Slivkin, being still alive and apparently 80 years of age. He is from the Government of Tamboff, and settled here a great while ago amongst the Kirghis, who first learned agriculture from him. Twice has he journeyed on foot from Issik-kul to Kief to pray, and on the way looked in at home at Tamboff to greet his relations.

At 1 p.m. next day we commenced loading the camels, the villagers zealously helping, and about 3 p.m. the caravan, fully equipped, set out on its way in eight divisions, each led by one Cossack, with another behind every two divisions to keep order. The divisions marched at sufficient intervals to prevent any accidental stoppage of one throwing into confusion those behind. The rear was brought up by the sheep and our own camels without their burdens, which were carried over the Tian-Shan on camels hired from the Kirghis in order that our own beasts might reserve their powers for the long journey before us. Colonel Pietvsoff, Kozloff, and I did not as yet take up any definite stations, so that we might ride up and down the whole length of the caravan and the more conveniently maintain the good order somewhat difficult for the young soldiers who were making their first essay in travel.

By 6 p.m. we had made about ten miles. The road lay flat over the clay, at first diverging from Issik-kul, and afterwards approaching that lake to within two or three miles. To the left were the lower slopes of the Tian-Shan. We bivouacked on an arik (irrigating canal) as the Kirghis assured us that there was no other water near, and at 7 p.m. were joined by Korolkoff from Prjevalsk, who wished to share our marching life, if only for a time. Clouds gathered, it began to drizzle, and the waves of the lake, which had hardly settled into calm, rose once more. Long we stood gazing at and admiring them and the mountain giants beyond them, whose sunny heads as the clouds drew over to our side of the water, gleamed in the rays of the setting sun.

The next day, accompanied by Korolkoff, we journeyed about eleven miles, and halted at a point where a small river debouched into the lake, which was still teaving though the weather was still and fine, and the long smooth waves lapped with their blue water over the sand on which we stood. Not far from the bivouac Korolkoff and I made a botanical and entomological excursion, finding 25 kinds of plants, amongst which there were, of brushwood, four varieties of acacia (*Caragana* sp.), berberry (*Berberis* sp.), honeysuckle (*Lonicera* sp.), and spiraea

(*Spiræa* sp.); and of flowers:—forget-me-not (*Myosotis* sp.), veronica (*Veronica* sp.), alpine yellow poppy (*Papaver alpinum*), wild hemp (*Cannabis* sp.), besides several grasses.

The 17th May we continued our journey to the ravine leading to the Barskoïnski Pass, by which we were to reach the Sirt. In the morning when the caravan started, Korolkoff took cordial leave of us and our Cossacks. Having said good-bye to him we journeyed seven miles and casting a last glance at the lake, turned into the ravine of Barskoïn. Seeing before us a spruce fir wood, we determined to make our bivouac under the trees. On either side, at first, rose the bare, lofty, and overhanging cliffs of the ravine, of a sadly monotonous muddy grey colour. In the hollow the river Barskoïn coursed over the stones. Further on we came to small pools, and the banks were clad in brushwood, then to a large meadow at the edge of the forest, traversed by springs of clear water, where we halted. A mighty forest of dark spruce (*Abies Schrenkiana*) the lower limit of which lies at an absolute height of 6000 feet, rose from the bottom of the ravine, and climbed its steep sides, far, far upwards. The lowermost trees grew on the fragments fallen from the cliffs which were piled together in vast masses. Through the débris, roaring, foaming, and leaping, the river cuts its way. There are no trees but the spruce in the forest, but there is an undergrowth of bushes which line also its edges, and are seen higher up the mountain beyond the trees. They consist chiefly of the juniper (*Juniperus Sabina*), two kinds of honeysuckle (*Lonicera* sp.), willow (*Salix* sp.), two kinds of dogberry (*Cotoneaster* sp.), mountain ash (*Sorbus aucuparia*), whitethorn (*Rosa* sp.), three or four of acacia (*Caragana* sp.), and *Ephedra* sp. In the meadow there were quantities of forget-me-not, violets, and purple iris.

The mountains here are crystalline, chiefly gneiss and granite, the slopes covered in places with clay and vast fragments of the same rocks fallen from above.

The latter circumstance impeded greatly the progress of the caravan: often the loads strike against these masses and are broken; the camels injure their feet severely. There are no side ravines in the pass, which with its lofty overhanging sides, half covered with dark and speary trees, stretching far up into the blue, and the river dashing and crashing over the rocks below, is wild and savage. The winding path is sometimes edged by fearful precipices. The camel loaded with a yurt (Kirghis tent) slipped down and fell headlong, but thanks to the soft pack of felt, was unharmed, and with great difficulty we pulled him out and up again.

On the 19th we rested in an alpine meadow, not far (eight miles) from the top of the pass. The ground here opens out a little, the mountains recede on either side, and the former wildness disappears. The upper limit of the forest is at 11,000 feet absolute height, but vegetation generally continues to 12,000 feet. Serjeant-major Ivanoff, whom we sent forward to inspect the pass, reported that it was completely choked with snow, and without being cleared was impassable. So we had to halt for the day, and send on eight Cossacks, with 20 camels, that the latter might trample a path. Towards evening the weather underwent a great change; rain fell, passing later into snow, and we had to don our fur coats. At 10 p.m. our men came back and reported that the road was bad, and that by morning, in all probability fresh snow would have filled up completely the path they had trampled out to-day. Next morning therefore, we sent on the Cossack Teleshoff, with Kirghis and shepherds and all the spare camels to renew the work, and started ourselves with the caravan three hours later, up a sufficiently steep and difficult ascent, which, however, we surmounted successfully. Thence the road turned to the left diagonally across a steep slope towards the pass; below, we could hear the river rushing in the depths of a profound abyss, which threatened to swallow us at the first unwary step. At first there was no snow at all, but as we approached the pass the patches became more and more frequent and deeper and deeper, being at the same time

rotten from the burning rays of the spring sun. The weather changed every half-hour; now we had a cold wind with snow coating our faces with ice, then the sun came out and pricked and burnt us. From time to time the snow rose in whirling columns. With great difficulty, towards 7 p.m., after a whole day's labour, we dragged the camels up the pass. To proceed was absolutely out of the question, so there, on the very summit of the pass, we spread the caravan along the path, and at once unpacked. The snow was so deep at the sides that a camel which got off the road was buried in it. We trampled a place on the wet snow, and pitched our tent on it. At 11 p.m. we dined, and wet and tired lay down to sleep. The pass proved to be only moderately high, not much more than 12,000 feet. At other times of the year, viz. in winter and autumn, when the snow is firm and able to bear beasts of burden, it cannot, of course, present much difficulty, and may be accounted quite practicable, and even convenient. In spring, however, when the melting snow becomes rotten, and the animals plunge through and bury themselves, it is difficult. It can be used, of course, but with certain loss of pack-animals.

Next day, the 22nd May, we made six miles between 11 a.m. and 5 p.m., or only one mile per hour; the spare camels treading a path in the deep snow, which gave the appearance of a trench with high snow walls. The people were worn out with fatigue, and the animals no less so, the constant change of temperature acting very unfavourably on our men. At one moment the sun was so hot as to induce perspiration; at another, the cold wind and snow made one shiver and shake. Nearly all fell ill, some with fever, some with coughs, some with sore throats, whilst many were nearly blind with inflammation of the eyes, and all, without exception, had their faces so burnt by the wind that the skin cracked and bled.

On the morning of the 23rd, Colonel Pievtsoff, Kozloff, and I climbed a neighbouring mountain to see how far the snow extended, for it seemed impossible to continue the journey if it remained so deep. The animals must inevitably perish from want of fodder and over-work, and the people break down altogether. Luckily, from the mountain we saw in the direction of our old route of 1885 that the snow diminished; there were bare patches first here and there, and then no snow at all. The line of march was immediately changed: instead of the nearest road directly southward, but all covered in snow to such an extent that deep ravines were completely filled up, we decided to turn to the east, and, in point of fact, this route proved so much better, that after going nearly 11 miles we pitched our camp not on the snow but on the grass! The animals fed eagerly off the old grass of last year, and stilled the pangs of several days' hunger. The Kirghis guides and many of our men were completely blind, and I washed their eyes with lead water. The camels, dogs, and sheep had watery eyes too. But there was now hardly any snow, and eyes would soon recover, only our cracked faces and swollen lips and noses smarted sadly as they excoriated.

The 24th we went eastward across a slope along the left bank of the Ara-bel, and coming to our old route of 1885, followed the river, leaving on our left the passes of Zauke and Kashka, through which in that year we reached Slivkina. We found next an excellent resting-place after an 18-mile march on an affluent of the Ara-bel,—a flat dry spot on the bank of the river. The pasture for the beasts, though last year's grass, was excellent. To the east, or rather south-east, lay the mighty glaciers which in summer feed abundantly the Ara-bel, a river belonging to the Aral system, falling into the Narin, and so into the Sir-Darya. At night, frost. The rest of our march to the Sirt was unadventurous, and there was no more snow.

On May 28th we bivouacked at the foot of the Bedel Pass. The Sirt, over which we had been journeying now for a whole week, is a high plateau (10–11,000



feet), 100 miles wide where we crossed it from north to south, whilst from east to west it is extremely wide. Scattered over it are separate mountain groups and ridges, running east and west, between which glisten the bright glaciers and spring waters of two systems, the Aral and Tarim basins, with the pass of Souak, over a ridge without name as watershed. All the mountains of this plateau are of schist, we found no granite, the soil being of clay and schist near the mountains, clay only in the valleys and on the banks of the rivers. The vegetation consisted of herbaceous plants only, unless we except one kind of honeysuckle, quite hidden in the ground. We found rushes (*Carex*), kipets (*Stipa* sp.), and other grasses, several of the crucifers and of the pea and bean tribe (chiefly *Astragalus* sp.), ranunculus, &c. The fauna is not remarkable for variety, though fairly abundant. Particularly numerous are the wild mountain sheep called by the Kirghese Argal, wolves, foxes, tarabagans (*Bobax* sp.), and hares. There are few birds. The commonest vulture is the black vulture (*Vultur Monachus*), kites, crows, larks, and small mountain finches. There is no constant population, but in summer the Kirghis drive their vast flocks and herds to pasture in the fine alpine meadows of the Sirt, as do likewise the Russian peasants from Slivkina. The rich plains are covered then with cattle, horses, and sheep, and there are no insects injurious to them. The perpetual freshness of the atmosphere, good and abundant water with salt-spots here and there, favoured the rapid fattening of our animals, which enjoyed complete rest and put on flesh in the most marvellous way.

Halting at the foot of the Bedel Pass, we sent Teleshoff on after dinner to reconnoitre it. There proved to be so much deep and rotten snow on the acclivity that there could be no question of surmounting it without first clearing a way, so we had to halt for the day. Early next morning we sent on people and camels to do the necessary work. They worked all day, and stayed for the night, so we sent them food and a tent. On the 30th, at 9 a.m., the caravan started. Colonel Pievtsoff went ahead with the interpreter to take the height of the pass with the barometer, Kozloff and I remaining with the caravan. It was a march of two and three-quarter miles to the snow, and these we covered easily and quickly. Of snow there was only one and a quarter mile, but what heavy marching! The first camel was dragged over the summit only at 5 p.m.!

The whole of the 31st was spent in dragging the loads up the pass—a most exhausting labour for men and beasts. The camels would plunge through the rotten snow all four feet at once; they had to be dragged out again by hand, and for that it was necessary to unload them, then reload them, or carry the packs ourselves. Only on the third day, i. e. 1st June, at 8 a.m., did the last camel and the last load get across, when, gathering all together, we made a fresh start and covered 17 miles by nightfall.

Two couriers met us next day—one from Kashgar, with a packet from the Consul, the other from the Aksakal of Aksu, a Sart by name Khasim, but a Russian subject, who had brought us letters on our previous expedition to Lob-nor from Consul Petrovsky. Both men had been awaiting us some days already in Turfai, and becoming impatient came on to meet us. Not far from here was a Chinese picket station, where in 1885 we had to break down the gates in order to get the laden camels through. This time the Chinese were sufficiently thoughtful to break down the gates themselves. Only one Chinese lives here, and he did not show himself. He has a Mussulman guard of several armed men. From the picket the road left the river and ascended the lower slopes of the mountains covered with black pebbles of porphyries and limestones. The little river Ouitai diverged on our left, and only after six miles did we again reach it and come to a halt in a green meadow amongst willow bushes with abundant springs of fresh, clear

water around us, shadowed by barberry bushes and flowering white rose throwing its sweet scent afar. We stopped a day here, at this very spot, in 1885.

The ravine through which we came these past days from the Bedel Pass is by no means so wild, but also by no means so beautiful as that of Barskoün. Its slopes are covered with limestone and schist formations, with a coating of mud. The river Ouital runs here in a wider bed, frequently dividing into several streams, and at the point where it leaves the mountains runs over a pebbly bottom between banks of conglomerate 300 feet high. Owing to the comparatively soft quality of the rocks, and considerable quantity of mud covering them, the road in this ravine is fairly good; there are no stones to bar the way, nor steep and dangerous precipices, but a soft road without any sharp stones.

Vegetation is only seen in the form of bushes and flowering plants, for there are no trees. On the mountain slopes grow the *Kalidium* sp., *Sympegma Regeli*, *Reaumuria Kashgarica*, and *Ephedra*; near the river and in the hollows of the ravine I noticed three kinds of acacia (*Caragana*), *Lonicera*, *Ephedra*, two kinds of barberry and wild-rose (*Rosa* sp.). Lower down the river we found the white willow, large bushes of white rose as much as 14 feet high, barberry, and poplar. By the springs were primulas, *Trigochyn palustre*, *Glaux maritima*, *Oxytropis Leontodon*, grasses, &c., and along the banks and cliffs *Ephedra*, *Reaumuria Kashgarica*, *Androsace*, *Statice* (two species), *Caragana* (two species), *Kalidium*, and *Sympegma*. The fauna is very poor: wolf, fox, hare, and tarabagan; and of birds—vultures, magpies, klumitsi (mountain crows with red beak and feet—choughs?), kekliki or mountain partridges, ullars, and small birds such as willow warblers, redstart, finches, and larks. No snakes; but below 8000 feet two kinds of lizard occurred, *Erimias* and *Phrynocephalus*. We found no fish.

From the river Ouital we once more bent our way upwards over the flattish mountain slopes as before. These slopes extend along the lower range of the Tian-Shan with a southerly inclination almost to the river Taushkan-Darga. Along this slope, covered with dark, smooth, shining pebbles, are many dry channels where rain-water comes down from the mountains, and up one of these we took our way towards the Taushkan-Darya. On the banks of this channel, owing to the greater frequency of water, there was much *Lasiagrostis splendens* and *Clematis songarica*. We halted eight versts short of the river by the side of a canal (arik), on some ploughed fields belonging to the Kirghis, some of whose yurts stood not far away. We were met here by a Chinese official.

Next day, the 4th June, we had to cross the Taushkan-Darya, an operation not without danger, but we got safely through the seven fairly wide streams of swift muddy water as high as our stirrups and so strong as in places to carry the horses off their legs. On the opposite bank we found a Chinese from Aksu with enquiries after our health from the Amban. We halted a mile distant from the ford, on the banks of the river, under the rock of the mountains Kara-Teke, beside a clear runlet springing from the ground close by and gurgling over smooth pebbles. It was necessary here to stop for the day in order to dismiss the Kirghis with their hired camels. Henceforward all the work is to be done by our own camels, which until now have been unburdened. We now decided to go neither to Utch-Turfan nor Aksu, but across the ridge of the Kara-Teke direct to the Yarkand river. This route has the advantage of novelty: not a single European has traversed these mountains in this part, nor is the road from the mountains to the river known. Besides this, by entering the mountains we saved ourselves at least some days of the heats, which have now assumed all their rights. Next day, the 5th June, it began to be fine and clear, and I set out on an excursion, but it did not last long. I noticed in the west a dark cloud of ominous aspect and returned to camp. The

cloud grew rapidly and advanced towards us; its dark surface was scarred already with lightning and the thunder rolled loudly. We wished to dine before the rain came, but were too late, for in the midst of our meal such a rain-storm burst upon us that in five minutes the ground was covered with water to the depth of 14 inches. The water burst into our yurt and covered our baggage. We abandoned our dinner, and each endeavoured to save his own things, whatever we cherished most. Our felt and bedding strewn on the floor of the yurt were wet through. The storm did not last long; it was over indeed whilst we were still in our first flurry, but great quantities of water had come down. Luckily it was a sloping place, and it ran off speedily without doing any great harm to our packs. No sooner was the storm over than the sun shone out, and with such force that the earth steamed. We spread out all our wet things on the neighbouring rocks, where they soon dried. That day we fished in the Taushkan-Darya for our collections and caught two species.

We left this bivouac the 6th, and went up the Taushkan-darya 8 miles to the turn into the mountains, the whole way being lined with ploughed fields partly sown with wheat, partly lying fallow. Here and there were small farms. Not far from the turn is a whole town of ancient tombs built of unbaked bricks—a silent city of the dead. Turning aside from the mountains we found ourselves in a pretty wide plain, surrounded with mountains and with several separate hills barring its entrance. Into this valley on all sides lead ravines and crevices of all sorts and sizes. I observed on the hills to the east, a wood which gave hope that the vegetation there would be richer, and I was not disappointed, for I added a good deal to my herbarium afterwards. Our road lay through the most western ravine, whose banks, now closing in, now widening out, were formed of limestone with bushes of ephedra and karagana, and in the hollows, barberry, dogberry, honeysuckle, and wild-rose trees. The bottom was a dry stony river-bed, with large round stones brought down from the hills, showing that at times there is a stream here sufficiently strong to dash the stones against each other and round and polish them. The banks of this dried-up stream are thickly covered with bushes of *Lastagrostis splendens* and karagana, around which twines the wild clematis, thrusting out its large yellow cruciform flowers for show. Where the ravines widen out there are ploughed fields sown with barley and wheat—at other points they are narrowed by overhanging limestone rocks that have slipped down. On the second day (the 8th of June) of our journey through this gorge it narrowed to from 3–4 arshins (28 inches) and formed a corridor: the rocky walls rose from 700–1000 feet above it, and approached one another so nearly that the sky was hidden, and the road seemed to be made underground. In many spots the camels had to be taken through one at a time.

In spite of the constant coolness of the air and want of light I found here a fairly rich flora. Along the bottom many yellow violets (pansies), forget-me-nots, saxifrages, hare-cabbage (*Sedum*), campanulas, &c. From the rocky walls hang bushes of currants (*Ribes*), cotoneasters, honeysuckle, barberry, and rose, clustered round with a beautiful clematis, bearing large white odoriferous flowers. Occasionally the large leaves of the rhubarb (*Rheum*) come out of their great pods and cling close to the rock. After travelling about half a mile through this tunnel we issued into the gorge once more, which here widens and leads to the pass Dungaret-ma; the corridor or tunnel now left behind us bears the same name. I now went ahead to inspect the road and make the necessary arrangements. The ascent was not very difficult, but the descent on the other side over the schistose and slippery slopes was straight and dangerous. Each camel was led down separately, the packs being supported on both sides. We got down all right, but many of the camels nevertheless were much scratched and their legs were knocked about sadly, whilst many had sore



backs from the slipping of their loads. The men also suffered a good deal. The absolute height of the pass is about 8000 feet.

From the top we could see a lofty rocky ridge from 10 to 11,000 feet, covered with spruce woods and green meadows, on which were scattered the yurts of the nomad Kirghis. Descending from the pass the road led through a defile which next day brought us to a small river hemmed in by perpendicular mountains: numbers of boulders, torn from their tops by some unknown force, lie heaped at the bottom in the most chaotic confusion. The slow thin stream has to find its way amongst these boulders, and now foams and filters through them. Our paths also lay through these great rocks thrown about in wild disorder. Often we had to avoid it, turning over the great stones on their sides or knocking them over. The camels had again to be taken one by one, and not only they but their loads came to grief. We were three hours doing less than one-third of a mile.

We halted lower down the river on old fields. A mile and a quarter further ahead of us were the mountains, and in them a dark defile, looking a mere crack, but the river wound its way through it, and through it lay our road. We entered this close, dark, stone cavern. Above, the sky was a mere blue ribbon; the river ran over the stony bottom. The gloomy perpendicular walls of rock depressed our spirits, but nearly three miles further on the gorge widened a bit, and our hearts were lightened. The stone walls gave way to slopes of clay, and the gloom of the gorge was lightened by green trees and shrubs. Here for the first time we found the Tograk poplar (*Populus Euphratica*); there were also willows, *Myricaria*, *Nitraria Schoberi*, *Nitraria sphaerocarpa*, *Eurotia*, *Atraphaxis*, *Zygophyllum xanthoxylon*, two kinds of tamarisk, two of barberry, *Clematis orientalis* and another variety, large bushes of the rose (*Rosa sericea*?) twenty feet high, and covered with white sweet-smelling flowers like flakes of snow, magnificent bushes of the *Lasiagrostis splendens*, bright green rushes (*Phragmites communis*), two kinds of *Reaumuria*—*Tridina* and *Kashgarica*, and two of *Caragana*.

At the ninth mile the sides of the defile opened out, and we entered a fine, clear space of ground, formerly cultivated, and having the ruins of dwelling-houses (Sakli). Several dry watercourses from the neighbouring hills meet here. We followed one of them southward which terminated at a pass, whence we descended by a beautiful and original gorge of red sandstone. The strata of the sandstone were so disposed along its depth that its left side presented almost smooth surfaces inclining westward, and on its right the raised, broken, and jagged heads of these strata turned to the east. In the bottom now and then welled up some brackish water, only to disappear again. Before going far we once more came to tograk poplars and other shrubs and flowers, amongst which for the first time we found capers (*Capparis herbacea*), a variety which only grows in salt and desert places. From its pods are obtained capers similar to those of the European variety (*Capparis spinosa*). The sides of the defile opened out more and more, and grew lower and lower, and finally disappeared altogether in a desert plain, about five miles wide, bounded on the west by a range of red sandstone; on the east likewise by a lofty border, but of a greenish-grey colour, and probably of clayey schists. Both ranges have the same direction—from north to south; both are absolutely sterile and bare of vegetation; and both have their strata rising at abrupt slopes of 60 degrees, the highest on the east. The grey desert valley between them, its silence only broken at intervals by the monotonous chirp of the cricket, looked sad and dead, as if burnt up by the rays of the sun. It sloped away southward. Only the dry bed of a rain-stream reminds us that there is sometimes water here.

We had now travelled some distance; the caravan showed signs of fatigue, but marched bravely on. Before us we saw strips of green, and river-pebbles amidst

which now and then water glistened in the sunlight; but before reaching this water we were overtaken by a dust-storm, which came rapidly upon us, and as rapidly disappeared, only touching our flank. A black cloud stood before us, however, across the river, over a lofty isolated hill; across it flashed the lightning, peals of thunder shook the heavy air and were echoed by the mountains. It was hot and stifling; we longed for the rain-storm, even at the cost of getting wet through, but it passed on one side of us. Reaching the river, we halted on a flat piece of ground sown with barley and wheat.

The caravan had now done 27 miles this march. Half a mile below us, where the river, turning eastward, had washed a broad path for itself amongst the hills, is a Chinese picket-post; and there runs the high road from Utch-turfan to the fortress of Maral-Bashi. The commander of the picket sent a ragged soldier to demand our passport. I do not know whether this is the custom, or simply due to the curiosity of an idle Chinaman. Formerly we were never asked for passports anywhere, and in big towns we sent our passports by our own interpreter to the authorities to be viséd. Not more than a verst beyond the guard-house the mountains disappear, and a vast dusty pebble-strewn plain stretches away into the distance. On the horizon, through the dust, we could see the outlines of trees marking the oasis of Kelpen, a village with many huts. The entrance into these mountains was formerly guarded by small forts, the ruins of which are still visible on either side on the grass.

Here we bid these mountains farewell. In the north-west they are almost entirely of limestone formation, but pass into stratified sandstones and clay schists in the south-east. In that portion where the limestone formations predominate, the strata incline downwards from north to south. On the latter half of our route, that of the sandstones and clay schists, they incline downwards from east to west, the inclination sometimes exceeding 70°. The height of these mountains is not less than 11,000 feet, and that of the pass Dungaret-ma 8000 feet above the sea-level. I have never before seen such a number of dried-up channels, which, with their pebbles and rocks rounded and perfectly smoothed by water, bear witness to the terrific rain-storms which water these mountains, evidenced likewise by the worn slopes of the defiles. The comparatively rich flora could not exist without an abundant rainfall, and the flora determines the conditions of existence for man and his domestic animals. On the lofty and fertile meadows of this alpine district wander the Kirghis with their vast herds of sheep, cows, and horses. In winter, some of them descend to their mountain valleys, where in summer they have their fields; others go beyond the Taushkan-Darya. Amongst the wild beasts are wild goats (*Capra sibirica*), wolves, foxes, and tarabagans. Of birds, griffon vultures and bearded vultures circle in the air, ullars whistle over the rocks, jackdaws enliven the mountain gorges with their cries, hill partridges are continually running down to find water, and anxiously calling together their scatter-brained chicks; chattering magpies and ravens are everywhere. Once I heard the homeless cuckoo ever repeating his plain and monotonous song. Redstarts and other small birds curiously fluttering from bush to bush, and seeking insects for their weak infant progeny—this in a few words was all we saw in the mountains of Kara-Teke in the course of a 67-mile march through them.

The small river from which our attention has been temporarily diverted by the Kara-Teke mountains, after leaving them, is distributed through the irrigating canals (*ariks*) to Kelpen and the neighbouring homesteads, whither we now turned our steps.

The village of Kelpen is ten miles from the Chinese post, looking from afar like a beautiful garden amidst the barren desert. The poplars, like pyramids, are visible at a great distance; and, as you approach, several huts come into sight amongst the

fields or in the shade of the apricot and white willow trees. In the gardens are many peach and apple trees. The inhabitants are Sarts, and their only occupation agriculture. They sow wheat, barley, and maize in the fields, and in the gardens melons, water-melons, cucumbers, and other vegetables. A small trade in petty articles in their own bazaar serves more for pleasure than profit. They have few herds and flocks—some sheep, a few asses each, and only the rich, or those who have far to travel, horses. Their clothing is simple: trowsers and long gowns of white Chinese cotton-cloth with strings on the breast, and girt round the waist with a strap of the same material; or, if rich, of the lighter stuff used for the head-dress. For head-gear the flat bonnet of the Bashkirs, a sheepskin hat or felt extinguisher, with brim turned up, and slashed in front and behind; on their feet the boots called *itchiji*, sometimes with goloshes, but most often they go barefoot. The women wear a *chapan*, i. e. a long wide chemise with long sleeves, serving all the purposes of pocket-handkerchiefs, made of white Chinese cotton-cloth, or of shirtings, red being the favourite colour. The rich wear chapans of silk, mostly green or red; the fastenings are metal buttons on the breast for married women, on the shoulders for young girls. The chapan has no girdle; the trowsers, of the same materials, come down to the ankles. The women wear mostly the flat bonnet, sometimes of cloth of gold; not all of them cover their faces, and with those who do, it is chiefly to satisfy their jealous husbands, which does not prevent them from looking out from under their veils on the sly, and, smiling, showing their coal-black eyes and pearly white teeth. The old women and ugly ones carefully hide their faces. Many paint their faces, which spoils them greatly, as does a custom generally prevalent in the East and in Russian Turkistan and Bokhara, and even in Algiers, of joining their fine black eyebrows with blue paint into one straight line. The women wear slippers, or *itchija*, with or without heels; the poor go barefooted. The type shows Aryan descent; and both men and women are decidedly good-looking. They are gentle, not insolent like the Chinese and Mongols, but polite and willing to serve you. When the caravan drew near, whole groups of people came out, showed us the road, and endeavoured to make themselves useful.

Our halt on the outskirts of Kelpen was not altogether favourable; we had to bivouac on a clay field, formerly cultivated, and very dusty. We watered the ground where the tent was to stand, a plan we have had recourse to since; the villagers helped our men to unload the camels and let water into the dry arik near us. Sellers of apricots and apples, some with cakes, &c., made their appearance, and keeping, a respectful distance and squatting on their heels watched with curiosity our bivouac.

Next day, June 11th, our way lay over a good hard road, at first between fields of grain, but these soon gave place to sand and hillock covered with kharmuik and tamarisk, which continued for 13 miles, when we reached the river Chilik, which has cut for itself a channel 50 feet deep and 300 feet wide. In places the banks are still further apart, and here are thick beds of green rushes with single poplars (*tograks*) here and there, and bushes of tamarisk with great clusters of delicate pink flowers. We encamped on one of these islands close to the river-bank.

We met here, for the second time, the Aksakal of Aksu and a Chinese official (Mahometan) of the same place, both sent by the Amban to enquire after our health and our wants, and to arrange for our future journey, chiefly in the matter of finding a good guide. We wanted nothing from them, so after accompanying us to the station and receiving gifts, they rode back, leaving with us a Sart guide. We were from here to make for Yakkakh-khuduk, a station on the high road from Aksu to Maral-bashi and Yarkand.

We reached Yakkakh-khuduk on June 12th, at first traversing the same hilly country

country, with bushes of tamarisk; then came patches of clay, blown up by the wind, and with salt surfaces; the land grew more and more arid, the fresh-flowering tamarisks rarer, their places being taken by dried-up bushes, with their branches twisted by the heat and drought, and here and there the withering trunk of a tograk poplar; the soil became porous, dry, and barren. The wind-blown, frozen tamarisk mounds, with roots sticking out, completed the desolate picture. Amidst these dead hummocks, on the horizon, we saw a yellow band of moving sand, with something green beside it. Coming nearer, we found, on the edge of the sands, high-growing poplars, which, accompanying us along the sands, grew into a thick forest, stretching far away to the east, in which, on an affluent of the river Yarkand, is the station of Yakkakh-khuduk. Coming within a mile of the place, we halted by the river side under the poplars. The high road passed the spot; we did not take it, however, but, passing the night here, and going through Yakkakh-khuduk, we turned through the wood to the left by a little-used path, the whole place being covered by a thick forest of poplars, *P. euphratica* and *P. pruinosa*, into which the sand-desert stretches its arms a little way now and again; whilst here and there are considerable spaces densely covered with green rushes. The river called Pshak-saidi nears the road several times on the right, and again diverges. This kind of scenery lasted all the way to the village of Pshak-saidi, about a mile beyond which we came to a halt.

The village of Pshak-saidi is in the forest, and does not force itself upon you like most of the villages standing in oases in the desert. Only the pyramidal poplars strike one, towering as they do far above the rest of the forest. The fields, watered from the river, are poorly cultivated; they are full of reeds and weeds, which in places quite overwhelm the crops. The village is very scattered, the mud huts far from one another, and almost buried in the green of fruit and other trees, poplars and willows, and djids and apricots, peach-trees, &c. The lake was about 600 yards long by 200 broad, part of the bank covered with reeds and tamarisks or, as the natives say, *djingal*.

Next day, the 15th June, our road lay through a wood of young but thick poplars, and after two miles we came to a glade, which we followed, noticing, on the edge of the wood, small dwellings for the herds who guard the cattle in summer, made of reeds and boughs, and, of the same materials, pens for the cows, sheep, and goats, which the Sarts bring to pasture here from villages even 60 or 70 miles distant.

A few miles further in the distance we saw the blue outline of serrated mountains—the Mazar-tag—to the west of which appeared some other ranges of barren hills. We had to go on to the lake Ak-kul, but the guide not knowing the way, we stopped short, at a small river flowing hidden through tall and thick reed-beds. Amidst these reeds, covering a vast space, are many lakes in which are silver and other fish. Numbers of water-fowl fly past our bivouac, with noisy cries, from one lake to another. Most of the lakes are out of the sportsman's reach, the banks being covered with gigantic reeds through which it is impossible to reach the open water, and in these inaccessible places the birds breed in peace, unless for a cunning fox, who may manage to get up to the sleeping birds by night; or their winged foe the eagle, represented here by many varieties. In the reeds, too, the tiger hunts the wild boar, which to judge from the tracks, are very numerous. The heat of the daytime gave way at sundown to something no less troublesome—the mosquitoes came out and worried us all night, quite preventing sleep.

On the 16th June, at 6 a.m., we continued our journey in this reed-covered plain, stretching out westward on our left with scattered lakes joined together by rivulets and ditches. On the 11th inst. we began to come across huts and farm-houses, the latter

bearing more the appearance of constant habitation. Here were fields with countless watercourses (ariks), planted with fruit and other trees loaded with fruit not yet quite ripe. The houses are built of unbaked bricks or of mud. As we approached the mountains, they stood out ever clearer and sharper, the outlines of separate cliffs and dark gorges growing ever stronger. The last three miles of this day's march were along a deep canal, beside which we finally halted in the neighbourhood of a small hut of plaited reeds. Many sheep and cows feed around; the pheasants crowed from the surrounding tamarisk bushes, and near by were several lakes, but all unapproachable. The morrow's road should bring us to Mazar-tag, and we were warned that on the way was a place called the Five Bridges, difficult for the camels, and in fact at the fifth mile, across our road lay a lake, 100 yards long and 50 broad, very deep and with high crumbly banks. From the north-west side lead deep canals, with quaking bridges  $3\frac{1}{2}$  feet wide thrown across them, of the most primitive construction; three poles are put across the canal, and over them are laid rushes and twigs with earth strewn above them. There are seven of these canals altogether, and as many bridges, the name Besh-kupriouk remaining from a time when there were only five. These ariks carry the water far over the country we had already traversed, and feed all the lakes scattered over it. The water is very abundant and irrigates a vast space called Lai-Moi and comes into the lake through a large affluent of the Yarkand river (?). Leaving behind us Besh-Kupriouk, we went through some gates, as it were, between two separate rocky groups of hills with almost perpendicular sides, absolutely barren, lifeless and wild. The left or eastern group was soon behind us; the right stretched to the south-west and its eastern declivity abutted steeply on our road. Before us to the south-east was the dark Mazar-tag, likewise desert burnt up by the sun and by the winds. To the left a little, some sand-hills scorched by the sun peeped up blown out of the lofty reeds. We journeyed over a dry and dusty tract covered with lank reeds, with an occasional poplar or tamarisk, then entered the Djemgels, and at the 23rd verst, halted on the bank of a big lake with high thick reeds, reminding me of Lob-nor, the same high reeds standing like a wall, the same hollowed-out canoes gliding over the water, and reed huts scattered on the banks. The place is deserted in winter, but in 'spring the Sarts drive hither their cows and sheep to feed on the young reeds; and in order to have better pasture in summer they burn up great tracks of old reeds, which are succeeded by juicy and succulent shoots. For winter use, they cut the reeds before flowering, dry them, tie them in bundles, and stack them.

By day it was hot and dusty, from time to time only came a light breeze bringing quantities of sand into our tent. We bathed and fished; crossed the lake in fragile dug-outs, threatening every moment to overturn. We spent a sleepless night in constant warfare with the mosquitoes. However, we went on as usual in the morning (June 18th) and passing through some reed-beds, came out at a stony footslope of the Mazar-Tag, along which we travelled in a south-east direction. On our right stood the silent mountains, on our left stretched the green reeds, scattered, with mirror-like surfaces of lakes glistening in the sun, and sand-hills amongst them. At the 17th verst we turned to the right into the desert schistose spurs of the Mazar-Tag. Crossing its chief spur we saw the Yarkand river flowing in a broad ribbon amidst green reeds or poplar woods. Beyond the river there was one continuous forest, stretching very far, and beyond it, through the smoke-like dust, a sea of sand, reaching hither from Lob-nor and Tarim, and broken in one place only by the Khoten river.

We made a steep descent by stony steps down into the dark pebbly plain, beyond which was a belt of reeds and the longed-for river Yarkand. Choosing a suitable place on its banks, we laid out our camp according to all the rules of art. The great



river with its muddy water rushes along at an irresistible pace; the reeds are thick, and great trees washed from the banks and entangled together, forming whole rafts, are swung round by the swift current. The undermined banks fall in with a noise and a dust and are swept away. Notwithstanding the muddiness of the water we were thankful to get it, and bathed ourselves and the animals, washed our clothes, and, resting a day, got the whole caravan into order. . . .

On the 19th, I proceeded to make a careful inspection of the camels. They had grown very lank, from the heat, the difficult marches through the passes of the Tian-shan and Kara-teke, and the ceaseless worrying of the mosquitoes and gadflies. The flies are specially unpleasant foes, for in addition to the unrest occasioned by their persistent attacks, they lay eggs in the nostrils and places worn bare, and the little white maggots, breaking from the eggs, bury themselves in the flesh, feeding upon it and causing the poor animals great suffering. The result of the inspection was to give me a clear idea of the bad state of the animals generally; the whole 86 had become very lean, and 44 of these had suffered injury besides, and could not be considered satisfactory. This state of things gave food for reflection, as we had to carry out the whole expedition with these same animals and make our way home besides. Colonel Pievtsoff decided therefore to change our plans a little, and march to the hills south of Yarkand in order to feed up the camels and rest them—spending there the hottest season, which was already exhausting us.

On the 20th June, we left by a road leading, not far from the river, into the hills on the right. On a spur standing out into the river is a burial ground with abandoned half-ruined ancient tombstones upon it; a little farther and our friend the Mazar-tag was left behind; the mountains drew off and the valley widened westward. From this place for a distance of 55 miles, to the village and post of Aksak-Moral, we journeyed, sometimes through reeds, sometimes through woods, frequently crossing affluents of the Yarkand, some of them dry. Vegetation improved and the number of kinds of plants increased to 27. Besides poplars, tamarisks, and reeds, there were whole tracts of *Apocynum Venetum* and *A. pictum* covered with red flowers, the latter being fed on with eagerness by handsome beetles of green metallic lustre of the family *Chrysomelidæ*. Many bushes and trees were overgrown as with ivy by *Cynanchum*, climbing high and hanging down garlands of pale rose-coloured flowers. The modest asparagus hid itself amidst the thick branches of the tamarisk and *Hippophaë Rhamnoides* with its yellow fruit. The *Halostachys caspica* raised its clumsy sappy branches with difficulty from the ground. In the river, besides reeds, I found three sorts of *Typha* proudly raising their dark velvet heads. Several grasses and composite flowers made up the poor flora of this neighbourhood.

This watered strip extends along the left bank of the Yarkand all the way to Aksak-Moral, with a width of 17 miles; beyond, far away to the west, stretch the sands, which now and then push their arms right into this wooded belt. On the right bank is a similar belt, but much thicker and wider, with again beyond it the limitless kingdom of the desert sands, which hide in their bosoms many things curious and unknown. Many cities, once flourishing, happy, and well populated, lie buried there. The dwellers on the desert border sometimes venture themselves amongst the sands in search of valuables they dig up in the ruins of ancient towns buried in sand; but they never go farther than three or four days' journey. The limitless and mysterious nature of the unknown and awful waste that has become the cemetery of a once flourishing country, frightens people; and the time is far off when the daring European will traverse the desert in many directions and discover to the world the secrets hidden by the sandy ocean of the desert of Takla-Maklan, as the natives call it. Wild camels are apparently its only inhabitants. Nearer the river, tigers have trodden paths through the woods and reeds, and mercilessly wage war

against wild boar and morals (deer). There too, on the edge of desert, one meets occasionally the light and timid antelope, besides wolves, foxes, hares, and small rodents, which are found almost everywhere. In the rivers are fish, and snakes that feed upon them. In the evening toads give concerts, and sometimes, carried away by enthusiasm, continue them till morning. Gnats, gadflies, tarantulas, and scorpions are common. To keep the latter from our tents we water them round; but even that did not always serve. Against the mosquitoes we sometimes made smoke by burning tamarisk. Birds are rare, those of prey being most common. The population is very sparse; those who do live here, and they only are shepherds in summer in the reed-huts, are all Sarts, calling themselves Dolons.

On the 22nd, arrived Bogdanovitch, on his return from a geological excursion in the Kashgarian mountains, very well satisfied with the result of his journey.

Next day, the 23rd June, we nearly reached the village of Akak-Moral and halted beside a huge conduit (arik) bringing water from the Yarkand to Moral-Basha to help the Kashgar river which has not water enough to irrigate the lower lands. All its water in fact remains here, not a single rivulet making its way to the Yarkand. From Aksak-Moral along the conduit runs the high road to Moral-Basha, our road to Yarkand crossing the arch by a bridge over which all the camels got safely. Hence for 67 miles our road lay through a somewhat different country from what we had hitherto seen. Probably when the river is full the whole country is flooded, so that in the places most liable to inundation sluices have been constructed, stretching seven to fourteen miles and more, resisting the furious onslaught of the river; this enables the few inhabitants to dwell there, though in constant fear, and raise their sheep and cattle and plough, both in a very small way. The dwellings are partly plaited with boughs, partly built of mud. The ground along our route was much cut up by the dry beds of small rivers strewn with dams. As the streams dried up so the country became less humid and the vegetation began to perish; we came to places where the reeds and poplars and tamarisks were already dead. The withered trunks of the tograks stretched their arms in all directions as if seeking protection from the cruelty of man who deprived them of water. The parched and burnt-up tamarisks and reeds crackle under foot. The soil is porous, deep in dust, but the wooded belt is wider considerably and extends 35-40 miles to the sands. Tigers and wild boars became rarer, antelopes and morals, on the contrary, more frequent.

Sixty miles beyond Aksak-Moral the poplar woods grew thinner, being much cut for firewood, which is carried on donkeys to Yarkand. The population grows denser and a good deal of land is again under cultivation, while trees are planted of useful kinds and the roads are bordered by willows, poplars, and mulberry trees. It is here that, according to my ideas, begins the Yarkand oasis, and indeed, the people are mostly from that town. The wild vegetation is already to a great degree driven out by cultivation, and as we approached Yarkand and only 40 to 60 miles away, the population visibly increased; farms were closer together, the fields became continuous except in places unsuited to agriculture. It was difficult to find a place for our camp, without infringing on fields of wheat or maize. On the road we met many people on donkeys, on horseback, or on foot, both men and women; the majority of the latter, as if ashamed, covered themselves with their white scarves, and leaving a small opening, gazed with curiosity through it at the caravan of strangers. Many take advantage of the wind, allowing it to blow back the scarves altogether, as if by accident, to show themselves and coquet; other tricks they have with the same object in view, but always as if by accident. Whole caravans of donkeys laden with wood, straw, or sacks of produce, journey towards Yarkand, or come back empty, or with goods bought in the town. Alongside

the road, in the fields, harvesting is going on rapidly, with a view to sowing the second crop, generally maize. Most of the people are from Yarkand, some living here permanently in mud houses planted round with poplars and fruit trees, and either standing alone or grouped in villages; others live here only in summer, occupied in agriculture or tending sheep and cattle, living in dwellings of the lightest possible construction, sometimes even in arbours overgrown with vines or hop-bine, and in winter return to Yarkand. All along the road, beginning from Aksak-Moral and right up to Yarkand, the Chinese have placed posts, clay towers taking the place of our verst posts; they are supposed to stand two miles five furlongs apart, but in reality these are sometimes every mile and a half, sometimes every six miles, so that we cannot measure the road by them. At the stations (*langer*) where until the rebellion were established Chinese picquets—then massacred—are also posts according to the number of Chinese killed, but smaller ones, and answering the purpose of tombstones.

We were met on July the 1st by the Aksakal of Yangi-Hissar, sent from Kashgar by Consul Petrovsky with letters and papers. In the morning we caught sight of the vast mass of the Mustag-ata, mountains covered in eternal snow, about 120 miles distant, gilded by the rays of the rising sun—a beautiful picture soon hidden from us by the rising clouds of dust.

On the 2nd, the villages became continuous, the road was thronged with people, and was more like the street of a great town. With difficulty we found space to rest the caravan, all the ground being under cultivation. Our camp always attracted many gazers, for all passers-by, men and women, riders and walkers, stopped to look, while others flocked out of the neighbouring villages; and to do them all justice, notwithstanding their great curiosity to see the foreigners closer, they kept at a respectful distance, and only stared and told one another what they thought. They were always ready to help our men to load and unload the camels, nor did they refuse other services.

The 3rd, a little way from Yarkand we were met by a Russian Aksakal and some Russian subjects (Sarts) trading in the town, to the number of fifteen. We did not enter the town, being so large a caravan, but asked to be led to one side under the walls. These walls are of clay with loopholes, and as much as 28 feet high. We went round the town on the east and south-east; to our left (eastward) were endless rice-fields, stretching, we were told, six to ten miles to the river Yarkand, and there were similar fields to some extent on the south of the town. Rotten exhalations force themselves on the notice even of those whose noses are not over sensitive. Going round through the suburbs we soon came to the house of the Kashmir Aksakal, where we took up our quarters in tolerable comfort and with sufficient room, the horses and packs being with us, the camels not more than 200 yards off on a field already reaped. The house is without the walls of the town on the south-east, and consists of five fairly large rooms and a large balcony leading to a garden. The room next the balcony has a window looking on the garden, the large window, frame presenting a railing of most complicated patterns, the interstices filled with paper instead of glass, notwithstanding which there is plenty of light in the room, as the window occupies nearly the whole width of the wall. There Colonel Pievtsoff took up his quarters. In the other rooms, windows were replaced by holes in the ceilings or a grating in the wall at the very top. We all found room easily enough, and the packs were stored in the garden in front of the balcony, such things as were wanted being brought into the rooms; the horses were lodged in large stables in the courtyard, so that only the camels were separated from us, and Cossacks kept watch over them in turns. There are several conduits in the garden, and a square pond planted with willows and sycamores. From the balcony to the pond is a colonnade of pyramidal poplars, with which also the garden is planted round about along its mud

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walls. There, too, in front of the balcony is an old vine or two with its hanging clusters yet green, and beyond the fruit-garden full of peaches, apricots, pears, apples, and quinces. To the left, across the pond, are the pomegranate trees with their dark leaves from which peer the fruit, and late flowers of bright purple-red, the emblem in the East of female loveliness. Next to the pomegranates is a well-kept kitchen garden.

The Aksakal brought us four men from Ladak who, he said, could tell us something of Tibet. One of them was a handsome, talkative, lively, young fellow; of the rest, two were unsympathetic, owing to their gloomy and mysterious silence; the fourth now lives permanently in Yarkand, a tall man of about fifty years, and evidently from his type belonging to another people, though wearing the white chalma on his head and differing in the rest of his dress no whit from the native inhabitants of Yarkand. He served for sixteen years the Englishman Dalgleish, killed in Kashgaria, and in 1885-6 took part with his master in the Carey Expedition. He is now a trader in Yarkand. He told us much about the part of Tibet which adjoins Ladak, saying, amongst other things, that to the east of Ladak the country is inhabited by a nomad people of shepherds and robbers who have a treaty with Ladak, by virtue of which the people of that country may freely visit them and carry on trade; all others are subject to be attacked and made slaves of. Judging by these accounts the Tibetans of that part are very like the Egraïs, with whom we had an encounter on November 7th, 1879, on the Tan-la. Their appearance seems exactly similar; they wear the same long hair, cut short in front; live in the same black tents; always go armed, and never go far unless in companies. We failed, however, to obtain information as to the country most interesting to us, namely, that lying to the north and east. After the Ladak man came Chinese who, till then, had not put in an appearance. The Amban's deputy, an interpreter, and one or two others quite unceremoniously in their indoor dress came to gather the information they wanted, whence we came, and whither, and why we were going. We satisfied their curiosity, so they went their own way. During the following three days we made some acquaintance with the town. Colonel Pievtssoff went down with the interpreter and one Cossack to visit the Amban. Kozloff, Bogdanovitch, and I were invited by the Aksakal, and were joined by the Colonel on his way back. We stayed there four hours, our host detaining us all that time with true Eastern hospitality—treating us to sweetmeats, tea, and various dishes. The room in which he received us was strewn with Khotan carpets, with the intricate patterns dear to Eastern phantasy. In small niches in the walls were pieces of Chinese porcelain, various chishmas (a kind of pipe), clocks, a broken musical box, and Oriental triads in quantities. In one wall was the entrance door, and beside it, to the left, a stove; to the right, in the other wall, was a door with a padlock, leading to the women's apartment. The ceiling was composed of several beams finely carved in bas-relief, the spaces in between being filled by small planks, close together and crosswise. In the middle was a square hole of 28 inches, to let in the light, there being no other window. In winter this opening is closed, and the burning stove lights the room dimly and fitfully. A large table had been provided for our benefit in the middle of the room, laid with a clean tablecloth, and covered with quantities of Eastern delicacies.

We returned by the same road through the half-dark bazaars, narrow and muddy, covered above with awnings to keep out the sun. The variegated crowd parted to make way for us. Laden asses, people on foot and on horseback, buyers and sellers, mollahs, beggars, Chinamen, women, children, all swarming, shouting, hurrying to and fro. On the stalls in front of the shops were all kinds of goods; there were bakers' shops; smithies in full swing, scattering sparks on the passers-by; taverns and eating-houses, with suffocating smell; samovar-khans (tea-shops),

carpet-covered ; Chinese shops, out of which peeped the Mahometan concubines, of whom the Chinese keep several at once ; barbers' shops where the true believers are having their heads shaved in presence of the passing public ; then the neighing of stallions, braying of donkeys, hum of human voices—all joined in one general roar. In these bazaars throbs the real life of the East. Hither come representatives of all the neighbouring countries ; from India, now comparatively near, from Ladak, Kashmir, Tibet, Badakshan, and Russian Turkistan, not to speak of the Chinese, the lords of the land. Each brings the products of his own country, and they are distributed along the stalls ; each brings his share of gossip and rumour from afar, which under the name of khaber is borne with the speed of the best telegraph to the most distant towns of Kashgaria. The more important natives have their caravanserais here, and chosen representatives—aksakals—who settle their quarrels and mercantile affairs and also communicate with the Chinese authorities in matters of great importances or which concern the whole colony.

I rode into the town with Bogdanovitch and three Cossacks, to get a general view, and took six plates (photographic). For this purpose we mounted a tower in the eastern portion of the lower wall. The turret commands nearly the whole town and a fairly wide horizon. Eastward lies the endless green of the rice-fields cut into regular squares and flooded with water. West, south, and north the town stretches far and wide with its clay houses and gardens. The crenellated battlements of the wall appeared at intervals amongst the green trees. Countless numbers of hovels lie scattered in confusion one behind another or buried in the soft green of willows and apricot-trees. There is as much life on these flat roofs as beneath them. In summer people sleep on them—work on them—clean cotton, dry fruit, receive their friends, drink, play music, and even dance. Many are sheltered from the burning sun by large shady apricot trees growing near and throwing their thick branches tent-wise over them. Many are planted with gardens of Indian pinks, marigolds, and asters, with which the local beauties love to decorate themselves, plaiting them in the tresses of their shining thick black hair.

The town proper of Yarkand consists of two parts, the Mussulman and the Chinese or new town (Yangishari) standing side by side, and touching one another. The walls of the Mahomedan portion, or, as they say here, of the town, contain from 35,000 to 40,000 inhabitants, a great bazaar, several mosques, and with the latter schools—higher, middle, and lower—where Arab and Persian are taught, and where people learn the Koran and the rest of the Mussulman wisdom and knowledge. The streets are muddy, narrow, and evil-smelling. On either side are clay walls of various height, behind which lie the flat-roofed houses ; there are no windows on the street, but only the entrance doors, through which nearly always black eyes shine, and a murmur comes as of whispering and chattering, and at times is seen the end of a coloured chapán, likely enough displayed on purpose to attract the attention of the passer-by. However, by no means all the women and girls hide themselves ; many, whose husbands are not jealous, and who have not a cross old mother, stand freely in the doorways and look with interest at the foreigners, biting the while the ends of their chapáns between their large white teeth. Their glances are sidelong, not bold but sly rather, and certainly not hostile. Little boys, half naked, bother one with their impertinence, following close at the horse's heels, or running just in front with outstretched black hands, asking for money. The whole population of the town consists of Yarkand Sarts, or Yarkandliks, as they call themselves ; they have no idea whatever of any other derivations, and to all questions answer simply that they are Mussulmans and Yarkandliks. In the streets one meets many men and women with large goitres, a malady attributed to the bad quality of the water running in the town conduits, and drunk by the inhabitants in its natural



state. It appears in men at the age of puberty, and in women when they marry. The population of the town is engaged in trade and some few petty manufactures, also in gardening and agriculture in the neighbouring villages. Yarkand is not famous for anything; it produces nothing that cannot be found in other places, such as the carpets and silk of Khotan, and metalwork of Aksu.

Yarkand was built 500 years ago, and formerly was a capital city; it is now the most populous town of Kashgaria, and the centre of all its import trade.

The Chinese town, Yangishari, surrounded by a double wall, was built not long since. In time of popular rebellion it protects the Chinese against the fury of the people, who hate them, and are always dreaming of driving them away. A Chinese Amban resides there, always a governor of the district and other Chinese officials, two *mansi* of soldiers with their officers, and some merchants. There are, besides Sart merchants, who have established themselves here with their trade in the new bazaar. Both towns are surrounded by gardens resembling in general those of the Kashmir Aksakal where we are living. The vegetation of the oasis is fairly rich and varied, and therefore very agreeable to the sight when one comes here direct from the desert. The natives delight in growing in their gardens and on their roofs plants and flowers, roses, marigolds, balms, Indian pinks, asters, &c. In the fields, besides the rice plantations, are wheat, barley, maize, millet, djugar, cotton flax (used only for ropes), hemp, poppies in small quantities and chiefly in the gardens. Near the houses and in the gardens they make arbours overgrown with hopbine and vines. The latter are often grown in whole vineyards; the grapes are of many varieties, and are used for food, fresh and dried, and some are sold. In the kitchen-gardens are quantities of first-rate melons, water melons, cabbages, onions, garlic, cucumbers, and a few potatoes, carrots, parsnips, &c.

We spent five days at Yarkand, and on the sixth (the 8th July) had to continue our journey. Early in the morning, having gathered everything the night before, we began to load the camels; the things had to be carried outside and packed there, which took some time; but soon after 7 a.m. we started, and journeyed nine miles to the river between rice-fields with occasional small villages. We reached the river at 10 a.m., and began the crossing in dug-outs, of which there were only six all told. The river here has a perfectly flat bank, strewn with pebbles; it is about a third of a mile wide, with very swift, muddy waters. Each boat took six camels and one man, the regular ferrymen, nearly naked, using their oars with great skill, so that in three hours the whole of our large caravan was safely across, and a little further on we camped for the night on an affluent of the Yarkand. At this point our good old Sart Lindjak, who had stayed with us all the time at Yarkand, left us, but not for good as he meant to overtake us again at Kargalik, where he had private business. We continued our way to the mountains, there to feed up our worn-out, unhappy beasts who had still to do so much for us in the future.

Here I propose to break off. Our journey to the mountains, the results of our sojourn there, and the road through Khotan and Keria and to Nia I will describe from our winter resting-place.

4th August, 1889.

VSEVOLOD ROBOROVSKY.

Since the above was received a further letter from M. Roborovsky has reached St. Petersburg, announcing the arrival of the expedition at Khotan on the 7th October, and its departure for Nia three days afterwards. At Nia Colonel Pievtsoff intends to winter, and in the spring to search for a route into Tibet, over the lofty Toguz Daban Range, the highest peak of which was estimated by Prejevalsky to reach a height of between 22,000 and 25,000 feet.