

RUSSIA IN CENTRAL ASIA.

HISTORICAL SKETCH OF RUSSIA'S PROGRESS IN THE
EAST UP TO 1873, AND OF THE INCIDENTS WHICH
LED TO THE CAMPAIGN AGAINST KHIVA;

WITH A

DESCRIPTION OF THE MILITARY DISTRICTS

OF

THE CAUCASUS, ORENBURG, AND TURKESTAN.

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WITH MAPS.

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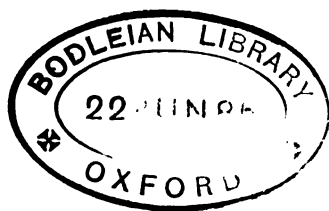
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TRANSLATOR'S PREFACE.

THE interest which has been aroused by the negotiations between the Governments of England and Russia with regard to the frontier of Afghanistan has suggested to the Translators the idea of publishing in this country an English version of the chief German and Russian works, hitherto untranslated, relating to the progress of Russia in Central Asia. They have selected for their first publication, as an introduction to the series, the valuable work of Lieutenant (now Captain) Stumm on the causes which led to the Khiva Expedition of 1873, and the preparations which preceded it. Lieutenant Stumm was an officer of the German army, of great promise and distinguished ability, who obtained permission to accompany the Russian expeditionary force in an official capacity. Apart from a comprehensive summary of the circumstances attending the advance of Russia since the time of Peter the Great, this work contains a most interesting account of the military preparations which preceded the expedition to Khiva, and a full description of the countries through which it passed to reach its destination. The actual account of the expedition and its results are reserved for a future volume.

London,
March 31, 1885.

INTRODUCTION.

As soon as it was rumoured, at the end of the year 1872, that Russia was contemplating another energetic attack upon the Khanate of Khiva, and that, with this intent, extensive and careful preparations were being simultaneously made in three military districts for a campaign on a large scale, public attention was immediately excited in every quarter ; the rapid advance and the extensive development of the Russian Empire in Turkestan, which lies further to the east, and is, perhaps, of far more importance, had created, in comparison, but little sensation.

The interest in the Asiatic desert expeditions thus suddenly awakened in Europe arose, first of all, from the unusual excitement of the English press at the renewed advance of Russia in the East ; but it is chiefly to be explained by the fact that people remembered, from the history of the last centuries, what trouble and efforts Russia had always lavished in her desire to acquire power and influence in that small sovereign State, which, although nearly half surrounded by the Russian frontier, still remained intact in all its Asiatic wildness, and resisted all the influences of civilisation.

Now, this peculiar state of things will appear the more remarkable if we consider the systematic ability with which Russia has treated and solved her frontier questions during the last few hundred years. For, acting on firmly established strategical principles, the Russian dominion has penetrated, by means of its fortified frontier-lines and its elaborate cordon system, to the furthest East, and far into the heart of Asia.

The mountaineers of the Caucasus, strong, brave, fearless of death; had yielded ; the last hiding-place of the obstinate and

powerful Schamyl had long since fallen ; but still one link was wanting in this united chain of Russian conquest, namely, the land of the Oxus, which lies to the south of the Aral Sea and the Turkestan possessions.

To throw some light on these facts, we will now give an account of the events of the year 1873, with an historical sketch of the progress of the Russian Crown in the East during the last centuries, and this, moreover, will directly explain many incidents of the late campaign. This historical survey of Russian frontier affairs brings us to the last events in Eastern Turkestan, and finally, to the preparations for the recent expedition to Khiva, which are already to be sought in the years 1871 and 1872.

For the study of military history and science, of expeditions and campaigns against wild populations, and particularly in the regions of the steppe and the desert, the Russian campaign of the year 1873 will always stand out as a model and prototype of a marvellously planned, practically and energetically executed, and thoroughly successful series of operations in the desert.

The operations of Lieutenant-General Verevkin (pronounced Verovkin), from the 20th of May to the 10th of June, with the combined Orenburg and Caucasus division ; the marching and fighting arrangements ; the skirmishes and forced marches ; and, finally, the attack on the north gate of the capital, Khiva, on the 9th of June, the bombardment of that city on the night of the 9th of June, and the bravely fought capture of the north gate on the morning of the 10th of June ; as well as the battles of General von Kauffmann in the waterless desert, and the brilliant passage by that officer of the broad Amu, in the very face of the enemy, offer most interesting tactical feats, which may well be compared with those of greater campaigns.

The circumstances of the Russian campaign, with its long and almost indescribably difficult marches through the desert, are, however, in every respect so entirely different from those of all ordinary European expeditions, that it would be absurd to attempt to confine a description of them within the narrow

limits of a purely tactical and strategical narrative. The geographical, ethnographical, meteorological, and other conditions—indeed, the whole nature—of this curious strip of land were, from their special characteristics, such very important forces in the execution and success of the Russian operations, that, in comparison with them, the real enemy, the purely tactical war strength of the hostile Khanate, was scarcely to be considered. Here Nature, in her inexorable strength, and gigantic, indescribably unyielding dominion, was always the worst and most obstinate opponent of the Russian columns.

A purely military account of the expedition will be reserved for a future work. The present volume will be devoted to a description of the country, of the peculiar conditions of the land, of its cultivation, vegetation, population, &c., to an historical sketch and to an account of the Russian bases of operations, particularly to that of the three military districts of the Caucasus, Orenburg, and Turkestan. This is justified in the opinion of the author by the circumstance that very little is generally known respecting those regions. Even in Russia, the publication of comprehensive works on the highly interesting Russian provinces has only commenced of late years. Thus a description of these districts, which, indeed, were explored and known years ago, may prove quite as interesting to the reader as that of the hitherto almost entirely unknown Khanate of Khiva itself. And, considering the immense importance in the future of the Russian possessions in Central or Middle Asia, the author has thought that he ought not to pass too superficially over the Russian fighting strength and war resources in those regions, although, on account of the continual remodelling and reforming of the recent military system, which has only just been called into existence, he cannot pretend to any precise accuracy, and must confine himself, through the medium of numerical data, to giving only a general sketch of military matters. Immediately on the termination of the last campaign several changes were introduced into the organization and administration; these, however, the author has intentionally passed by, as he wished to present a

picture of the state of things which prevailed at the beginning of the operations.

In describing the countries of Central Asia peculiar difficulty is found with regard to the orthography, which differs in every country, almost in every book, and on every map. Scientifically speaking, the most correct plan would be to give the names and local designations unchanged in their Turco-Tartaric original form and signification, a principle which has been followed throughout in the Kiepert maps with great clearness and astonishing knowledge. But it is a question whether this system is practically the best, and whether it would not be more useful to adopt throughout the Russian spelling. The Russians do not easily catch the Turkish sounds, but it is even more difficult for them to reproduce them in Russian letters; and so, in Russian, the names in their Turco-Tartaric designation are often dreadfully mangled, which, considering the very simple formation of the Central Asian names of places, consisting as they generally do of a substantive and a qualifying adjective (as Kizil-Bulak, Kizil-Kum = red spring, red sand, &c.), must be unpleasant to any one who knows Turkish well. But when we reflect that Russia has now the greater part of that region entirely under her dominion that she has formed it into provinces, which she has brought under her rule, the Russian mode of designation and orthography may for the future probably become the sole standard, although, as compared with the strictly Turkish original, it can scarcely be called correct. The author might therefore, on principle, have confined himself literally and exclusively to the Russian spelling, and particularly, to the orthography of the maps of the Russian General Staff, and then have given the foreign sounds, carefully avoiding the too complicated double consonants, &c., in the simplest manner, by means of the German method of spelling.

In conclusion, the reader must be reminded that this volume is written from a purely military point of view, and that all political considerations have been studiously avoided.

As but little is known of Russian weights and measures, &c., which will often recur in this book, and cannot always be con-

verted, it has been thought expedient to append the following tables to the text.

I.—LONG MEASURE.

1 Russian inch	..	..	..	2·5399 centimètres
1 Russian foot (12 inches)	..	..	..	0·3047 mètres
1 arschin (2½ feet)	..	..	..	0·7110 „
1 sajen (3 arschins)	..	..	..	2·1330 „
1 verst (500 sajens)	..	..	..	1·0665 kilomètres
7·0304 versts	..	..	..	1 German mile*
104·3387 versts..	..	..	..	1 Equatorial degree.

II.—SURFACE MEASUREMENT.

1 Russian square inch	..	..	..	6·4511 square centimètres
1 Russian square foot	..	..	..	0·0929 square mètres
1 square arschin	..	..	..	0·5058 „
1 square sajen	..	..	..	4·5521 „
1 dessiatine	..	..	..	1·0925 hectares.

III.—CUBIC MEASURE.

1 Russian cubic inch	..	..	..	16·385 cubic centimètres
1 Russian cubic foot	..	..	..	0·0284 cubic mètres
1 cubic arschin	..	..	..	0·3597 „
1 cubic sajen	..	..	..	9·7123 „

IV.—DRY MEASURE.

1. *Corn Measure.*

1 garnetz	..	..	..	3·2797 litres
1 polutschetverik (4 garnetz)	..	..	..	13·1188 „
1 tchetverik (2 polutschetveriks)	..	..	..	26·2376 „
1 osmina (4 tchetveriks)..	..	..	..	1·0495 hectolitres
1 chetvert (2 osminas)	..	..	..	2·099 „
1 okaw (4 tchetverts)	..	..	..	8·396 „

2. *Liquid Measure.*

1 kruschka	..	..	..	1·2299 litres
1 velte (6 kruschkas)	..	..	..	7·3794 „
1 vedro (10 kruschkas)	..	..	..	12·2990 „
1 botschka, or butt (40 vedros)	..	..	..	4·9196 hectolitres.

V.—WEIGHTS.

1 doli	..	..	..	0·0445 grammes
1 solotnik (96 doli)	..	..	..	4·2720 „
1 loth (3 solotniks)	..	..	..	12·816 „
1 pound (32 loth)	..	..	..	410·112 „
1 pood (40 pounds)	..	..	..	1·6404 kilogrammes.

VI.—COINAGE.

1 kopeck	..	..	..	3·239 German pence
1 silver rouble (100 kopecks)	..	..	..	3·239 German marks.

* Now no longer in use.

KHIVA AND CENTRAL ASIA.

HISTORICAL SKETCH FROM THE END OF THE SIXTEENTH CENTURY TO THE PRESENT DAY.

CHAPTER I.

FROM THE END OF THE SIXTEENTH CENTURY TO THE PERIOD 1840-47: THE FIRST RUSSIAN CONQUESTS ON THE SYR-DARYA.

THE Russian invaders of Khiva were greatly astonished, after a weary march through endless and untrodden deserts of sand, in which, for weeks past, the only sign of the existence of human life had been broken tombstones, and bleached, and weather-beaten skeletons, to see suddenly rising before their eyes, amid this barren, sandy waste, a strongly fortified, defiant Russian fort, built in accordance with all the rules of science, and considered nearly impregnable.

These troops formed the Caucasian column of Colonel Lomakin, which, during the recent campaign, encamped for several days at the well of Alan, on the bank of the dried-up Barsa-Kilmas Lake, and at the foot of an old, strong, intrenched fortress, built more than a century and a half before by a Russian General, Prince Bekowitsch Tscherkaski, in his expedition against Khiva. That expedition was begun under the same circumstances as the present one, but it ended with the appalling loss of the whole army, down to the last man.

The brave warriors of the mighty Czar, Peter the Great,

B

had more than 150 years previously penetrated further than the column, which now, in the beginning of May, 1873, exhausted and faint, after a wearisome march, chose as its halting-place the well-preserved, fortified monument of heroes who had long passed away, and pensively looked up at the huge masonry of the ancient edifice, that warningly reminded them of the fate of their predecessors, a fate which might but too easily become their own.

Indeed, the relations between the powerful empire of the Czars and the defiant desert districts, relations always resulting in favour of the little State of Khiva, date actually from two centuries back.

The first hostile collisions between the Russians and the tribes of Central Asia took place at the end of the sixteenth century, when the Yaik-Cossacks, as they were called, settled on the river Yaik, the present Ural. They had previously, like their brethren in race on the banks of the Volga and the Don, led a nomad robber life. This happened about the very time when Anik Strogonoff, the then Governor of that portion of the West Ural region which has been subject to Russia since the reign of Basil Ivanovitch III, called upon the celebrated Cossack Chief Jermak, with his 7,000 horsemen of the steppe, to defend the eastern frontier of Russia against the attacks of the Siberian tribes, namely, the Tartars, the Ostiaks, the Begolutsches, the Samoyeds, &c.; compliance with this invitation being rewarded with a full pardon for all past misdeeds. The new settlers on the Yaik were to be utilised for a similar purpose, and this novel kind of mild deportation may be regarded as the first beginning of the Cossack system, which united the warrior with the peasant, and exercised such a characteristic influence upon Russia. But, just as their brethren in the north-east, of their own accord and under their own elected leaders, penetrated from the frontier districts on the Ob, which had been subjected and held by them since the year 1579, through the vast regions of North Siberia, as far as the Pacific, and, almost within a hundred years, brought them under the dominion of the Czar of Muscovy; so were the Cossacks of

the Yaik to give the first impulse to the extension of Russian dominion in the south, as far as the desert of Turan, or Turkestan, which is relieved by few oases.

Faithful to their old reputation for nomadic knighthood, the Yaik-Cossacks soon knew how to make themselves dreaded by their Kirghiz and Calmuck neighbours. But the poverty-stricken steppe had little charm for them; and thus it came about that, although North Siberia had long been subdued, and Russian rule had also obtained a firm footing in the south-west of Siberia, as far as the Balkash Lake and the highlands of the Djungaria, the broad strips of country lying to the north of the Sea of Aral, between the Balkash Lake and the River Ural, remained the undisturbed habitation of the Kirghiz-Kaïssaks and Calmucks. The Cossacks, however, ventured upon the Caspian Sea, to pursue their trade of piracy, and to plunder the Persian colonies established upon its shores. In one of these *razzias*, which remind us of the expeditions of the Normans, the freebooters heard, from some merchants whom they had captured, of the existence of a rich expanse of country on the further side of the Sea of Aral, called Khiva or Khowarizm, and they immediately resolved upon undertaking an expedition thither. The bold plan was at first crowned with success. Taking with them no more baggage than could be stowed away upon their chargers, the Cossack troop scoured the Kirghiz steppe, attacking Urgensch, the then capital of the country, at a time when it was without Khan or men. The town was given over to destruction, the Cossacks having previously taken good care to possess themselves of a thousand of the youngest and prettiest women for their household requirements, and to remove a thousand waggons full of rich treasures. But their greed was their ruin. Unable, owing to their heavy baggage, to effect a speedy escape, they were pursued and caught by the Khivans, cut off from the water, and surrounded. For several days the Cossacks defended themselves like lions, quenching their burning thirst with the blood of the fallen, until at last they all fell under the blows and darts of their pursuers. Only 100 Cossacks succeeded in cutting their way to the Amu Delta, and in there

concealing themselves in the impenetrable Kamish forests. But even this place of refuge, from which they trusted once more to reach the banks of the Yaik, did not protect the fugitives for more than fourteen days, at the conclusion of which they were discovered and slain to the last man. But their comrades on the Yaik had scarcely recovered from the effects of the dreadful intelligence, when a new expedition to Khiva followed. In this 500 Cossacks, under the Ataman Netschai, took part. The results were precisely the same. Returning with rich booty, the Cossacks, who had already reached the Syr-Darya, were overtaken by the enemy as they were crossing the river, and cut to pieces after a desperate resistance. The third campaign, undertaken by the Ataman Schemai, ended, if possible, still more disastrously. The expedition took a wrong road, and, instead of arriving at Khiva, found itself on the banks of the Sea of Aral. There the winter came upon them; the frost began, hurricanes raged, and the Cossacks had exhausted their provisions. "At first," writes a historian, "the unhappy ones killed each other, in order to have human flesh to eat, but at last, when brought to the very verge of perishing, they summoned the Khivans and voluntarily surrendered themselves as slaves."

The fourth of the expeditions undertaken by the Russians took place as late as in the time of Peter the Great. In the year 1700 the Czar entered, for the first time, into closer relations with the Khivan empire. Several of the great monarch's utterances prove that he laid much stress upon the foundation of a lasting power and of a permanent influence over the populations of Western Turan. He regarded the Turcoman territory as the key to all the Turkestan dominions in the East. But it was, above all, his favourite idea to connect the Amu-Darya with the Caspian Sea, by diverting that river back into its old western bed, the former existence of which in the sandy deserts had been announced to him by travellers (according to the statement of the Turcoman Chodja-Nafs), and thus to open a trade route into Central Asia as far as India itself. He also accepted as reliable information the report that, on the banks of

the Amu River, great and rich gold mines* had been for years worked by the Khivans with the strictest secrecy. In those days Russia was much more of an Oriental Power than she is at present, and she had then scarcely entered the European system. The capital on the Neva was not yet built; Poland was still a sovereign State; and far in the east of Europe lay the centre of gravity of an empire, which is to-day so powerful, but was then almost without any direct communication with the countries of the West. At that time the Emperor received an embassy from the Khan of Khiva, who, in order to rid himself of the Bokharian yoke, offered the Czar tribute and help in war, on condition that Russia would accept the Khan as a vassal, and protect him against his foes. The Khanate of Khiva was in consequence of this recognised as a vassal State by Peter the Great in an Ukase of the 30th of June, 1700. Three years later appeared a Khivan embassy, which recognised the official subjection of the country to Russian suzerainty, by a decree of the Khan dated May, 1703. But as far as one can see, all these treaties had no ulterior result. Khiva never paid the promised tribute, and Russia failed to send any troops to the assistance of the Khan, who was beset by numerous enemies. When, therefore, in the year 1714, an embassy from the ruler of Khowarizm again appeared at St. Petersburg to offer a strong remonstrance, and pray that, in order to hold the arrogant Turcoman hordes in check, fortified posts should be established on the east coast of the Caspian Sea, and particularly on the Balkan Bay, Peter the Great determined to fit out an expedition to Khiva, on a large and adequate scale, entrusting the command to a former Circassian chieftain, Devlet Guirai, who had embraced Christianity under the name of Prince Bekowitsch Tscherkaski. The expedition was decreed by an Ukase of the 29th of May, 1714, in which the aim and object of the enterprise were announced to be the despatch of a congratulatory embassy to the new Khan, which should afterwards proceed from Khiva to Bokhara, so as to form, if possible, advantageous commercial relations with this

* There are no gold mines in Khiva. Gold dust is found in the drift sand of some streams in the basin of the Amu.

powerful country. The embassy was, moreover, to endeavour to ascertain some more precise information respecting the town of Irket, particularly how far it lay from the Caspian Sea, and whether any river flowed from the town to the sea. The expedition now set on foot required greater preparations, inasmuch as it did not start from the Yaik, but from Astrakhan, and it was therefore deemed judicious to have supports on the eastern coasts of the Caspian Sea, from which the troops marching by land might obtain supplies and provisions. The promontory of Tjuk-Karagan* (the west point of the peninsula of Mangishlak) and the entrances to the bays of Kaidak and Balkan were therefore selected as suitable spots. Thus the fortresses of St. Peter-soff, Novo - Alexandrovsk, and Krasnovodsk date from that early time, and although destroyed at a later period, and long abandoned by the Russians, they may be considered as the first step taken by these Romans of the East to subjugate the Trans-Caspian districts, and to encircle Khiva from the western side of attack. Five thousand roubles and 1,500 men were, in the first instance, placed at the disposal of Bekowitsch in Astrakhan, on the Caspian Sea, to make preparations for the campaign. With these troops he embarked at Astrakhan for Gurief, at the mouth of the Ural. But the masses of ice produced by a severe winter obliged Bekowitsch to return. In the following year, 1715, he sailed along the north coast of the Caspian Sea, and landed at the cape of Tjuk-Karagan, already mentioned. Here the Turcoman nomads confirmed the information which Bekowitsch had received from Chodja-Nafs respecting the old dry arm of the Oxus, but in order to obtain more definite intelligence on this matter, he sent two of his staff with Nafs to the south, on a journey of exploration. After a ride of 17 days upon camels, traversing daily from 30 to 35 versts, they found an embankment, and, further south, a cutting, which the Turcomans who accompanied them declared to be the old course of the Oxus. For three days the party followed the supposed course of the stream, and observed on its borders traces of dwellings,

* Sometimes called "Tjup-Karagan."

hamlets, and irrigating canals, all of which bore witness to previous Turcoman settlements. Nafs maintained that the ravine led to the Caspian Sea, but he refused to accompany the envoys of Bekowitsch any further, as he dreaded the predatory hordes of the desert. Bekowitsch then returned to Russia, to make his report to the Emperor, who was well satisfied with the success of the prince, and ordered him to proceed energetically with the preparations for the expedition, and gave him the following instructions relative to his conduct in Khiva:—He was to return to the Trans-Caspian district and erect a fort on the bank of the dry bed of the Oxus, capable of holding a garrison of more than 1,000 men, and to lay in its neighbourhood the foundation of a town. He was also, wherever it was practicable, without the knowledge of the Khivans, carefully to examine the old bed, and to endeavour to divert the stream back again into it. On his arrival in Khiva, he was to encourage the Khan in sentiments of fidelity and obedience, confirm the succession of his dynasty, and, if it were the Khan's wish, to leave in the land a permanent Russian force for his protection. And should Bekowitsch effectively succeed in establishing himself in Khiva, he was to propose to the Khan that he should despatch an expedition, composed of Russians and natives, to the western deserts, for the exploration of the bed of the Oxus. With the help of the Khan, if he could be won over to the Russian interests, it would then be no difficult task for the prince to send a mercantile commission to India, to discover a suitable commercial route from the Caspian Sea to that country. This commission was also to visit the Court of Bokhara, in order to gain the friendship of the Emir, if it could not reduce him to subjection, and also to offer him Russian troops as auxiliaries, since he too was hard pressed by rebels.

The most extensive preparations were now set on foot in Astrakhan for the execution of this important and complicated commission. Kojni, a naval officer, was selected for the journey to India, and more than 200,000 roubles were devoted to the equipment of the expedition. Whilst the preparations were still progressing, Bekowitsch sailed, in the year 1716, once more

to Tjuk-Karagan, whence he despatched an embassy to Khiva and Bokhara. After leaving a regiment to construct a fort, he travelled further south to the Balkan Bay, where he also caused an extensive fortress to be built by the troops on the site of the present Krasnovodsk. But while Bekowitsch was returning to Astrakhan in order to terminate his preparations for the campaign, and the forts on the Caspian Sea were rapidly approaching completion, unfavourable intelligence with regard to the enterprise was received from Khiva. News came from Ujuk, the Calmuck Khan, who had subdued the greater number of the Turcoman races east of the Caspian Sea, had then declared his allegiance to the Russian State, and who now formed the chief support of the expedition, that the roads to Khiva were almost impassable, owing to a scarcity of water and fodder, and that in Khiva itself most energetic preparations for war had been begun. Moreover, the ambassador, who had proceeded from Mangishlak to the Khivan capital, confirmed the report that the Khan was assembling his forces and meditating hostilities against Russia. Bekowitsch, however, did not allow himself to be influenced by this unfavourable intelligence, but took troops from Astrakhan, and embarked with them at the beginning of the year 1717 for Gurief, whence he despatched reinforcements to the newly erected forts on the east coast of the Caspian, vainly endeavouring to secure the friendship and assistance of the neighbouring Turcoman and Kirghiz tribes, who preserved a strict neutrality; for they were cunning enough to wait and see how the Russian campaign against Khiva would turn out. Prince Bekowitsch concentrated his troops in the neighbourhood of Gurief. They consisted of two mounted companies of infantry, one dragoon regiment, and 2,500 irregular troopers, Cossack, Tartar, and Calmuck; forming a total of 3,300 men, with six guns (but according to other authorities, of 4,000 infantry men, 2,000 Cossacks, and 100 dragoons). Provisions were furnished for three months, and for their transport, besides pack-horses, 200 camels and 300 draught-horses and waggons were found. This comparatively large force marched from Gurief, at the beginning of June, 1717, along a by-road to the River Emba, having on its

left the grand caravan route to Khiva, which was ill-supplied with fodder and water. On the eighth day of its journey the column reached the River Emba, and from this point followed the great caravan road to Khiva (which is used to this day by the Khivan merchants on their way to the markets of Astrakhan), and on the fifteenth day reached the plateau of the Ust-Urt. After a march of six weeks through the desert-like plateau, Bekowitsch reached the shore of the dried-up Barsa-Kilmas Lake, at a spot which the accounts of that time state to be Kara-Gatsch, and which, as the expedition of Colonel Lomakin in 1873 demonstrated, is close to the present well of Alan, four days' march from the Khivan frontier. Here Bekowitsch, in accordance with the command of Peter the Great, constructed a large fort, and remained some time, in order that his troops might enjoy the repose so essential to them after the fatigues of the march, and might employ their leisure in establishing some fortified supports along the bank of the Aibugir. Bekowitsch's fort, a spacious square, carefully built of strong blocks of lime-stone, and defended at the four corners by strong bastions, is even now in admirable preservation; and the same may be said of some strong stone towers on the steep declivities of the Ust-Urt, looking out on the Aibugir Lake, as also at the wells of Kara-Kumbet and Cap Urga,* on the northern shore of that lake.

Prince Bekowitsch had hitherto intended to send another division at the same time against Khiva, which was to start from Krasnovodsk, and proceed up the old course of the Amu-Darya. But the sickness which broke out among the garrisons of the forts along the bank, combined with the want—so sorely felt during the last expedition—of beasts of burden, which the nomads refused to furnish, induced the prince to abandon his

* The furthest eastern point of the Tchink or precipitous extremity of the Ust-Urt plateau, on the northern end of the dry lake of Aibugir (Tartaric: "Urgu-Murun"). The troops of General Verevkin found on their march to Kungrat, 70 versts north of Urga, the ruins of a second and larger fort, that up to the present day still bears the name of "Devlet-Guirai," and was constructed of stone as a quadrangular redoubt, similar to that of Alan.

design, and to advance with one column only. He had, it is true, despatched an embassy to the Khan, immediately on his arrival at the Ust-Urt, to inform him of the friendly character of his advance. But matters had in the meantime undergone considerable change in Khiva; for the Khan, who had on a former occasion concluded an alliance with the Muscovite Emperor, had been unable to hold his own, and a new ruler, who was hostile to the Russians, now occupied the throne. This man did not hesitate to give unmistakeable signs of his hatred of the unbelievers, and, without vouchsafing any reply, imprisoned the envoys of Bekowitsch, and marched out his troops, who were already prepared, against the Russian columns.

The march to Alan had been accomplished with great rapidity, owing to the apprehension that the intense heat on the steppe might entirely spoil all the grass which was to serve as fodder. In two months the expedition, which had traversed altogether 900 versts in the hottest season, had, by marching in a great bend around the lake of Aibugir, reached the left bank of the Amu-Darya, about 140 versts from Khiva. Here, in expectation of the Khivans, who were approaching from all sides in numerous bands, Bekowitsch placed his detachment with its rear towards the river, and protected it on the other sides with a barrier formed by waggons, by Russian *telegas* and Kirghiz *arbes*. After a fearful conflict, which lasted three days, the Khivans considered themselves beaten, and entered into negotiations. Clearly perceiving that by force they could not cope with the Russians, they resolved to have recourse to treachery and fraud. They promised to agree to all equitable conditions proposed by the prince, and the negotiations were begun. When peace had been formally concluded in Bekowitsch's camp, the Khan invited the prince to his own, and the latter, accepting the invitation, appeared among the enemy's tents with a retinue of 700 horsemen. Here presents were exchanged in the most friendly and apparently sincere manner, the Khan swearing on the Koran to be faithful and to keep his promises. He then invited the prince to follow him with his troops to his fertile and hospitable land, that he might settle

down quietly there, and recruit himself after the fearful toils of a march through the desert. Bekowitsch, relying upon his treacherous promise, followed the Khan as far as the town of Parsu, where, at the Khan's desire, he distributed his troops in five detachments along the shores of the Parsu Lake, the men being conducted by the Khivans to separate camps, on the pretext that it would be easier in this way to find provisions and fodder for their use. But, no sooner had Bekowitsch taken up his quarters at Parsu, with full confidence in the kindly intentions of the Khivan ruler, than, on a given signal, the Khivan bands fell in the night upon the unsuspecting Russians, and slew them, defenceless as they were, to the very last man. On this Khivan St. Bartholomew's night, Prince Bekowitsch was the very first victim to fall in the city of Parsu. According to Russian historians, his skin was torn from his body, and stretched on a drum, to proclaim the victory over the intruders. The prince's head was sent to the Emir of Bokhara, who seems, however, to have disapproved of the atrocious behaviour of the Khivans. The troops which had remained behind in the fortress on the Caspian Sea, returned immediately to Russia, as soon as they received the news of the annihilation of their fellow-countrymen; and they had all the more reason to do so, as they too had suffered much from want of water, from sickness, and from the attacks of the Turcomans, who were of the same race as the Uzbeks who dwelt in Khiva, and were nominal subjects of the Khan. The rest of the garrison of Tjuk-Karagan reached their native land with the greatest difficulty; whilst the troops quartered at Krasnovodsk were overtaken by a furious storm on their passage to Astrakhan, and perished, with the exception of a fortunate few, amid the waves.*

The expedition had to be regarded as thoroughly disastrous. But still it showed that the march of a numerous detachment through the steppe, even during the most unfavourable season, was no impracticable feat; that in warlike prowess the Khivans were no possible match for the Russians; and that the

* See Potto's "Lectures on the Steppe Campaigns." *Wojenny Sbornik*, No. 5. 1873.

failure of the enterprise, which was caused by the extraordinary imprudence of its leader, must be considered as merely accidental. It was, therefore, only owing to the subsequent preparations for the Persian war and to the campaign which it entailed that the Emperor's attention was diverted from Khiva, and the fearful fate of the brave Bekowitsch and several thousand Russian warriors remained unavenged. At a later period, events at home, and Russia's continued participation in European conflicts, delayed all military operations in Central Asia until the year 1839.

Although at this time all political communication between the two states had entirely ceased, and although Khiva had never really (though she had nominally) surrendered her independence, the social relations of the two neighbours had never been thoroughly interrupted. Commercial transactions between the capital (Khowarizm) and Astrakhan and Orenburg were regularly carried on. Several Russians visited and travelled over the country on the Amu, and thus increased their acquaintance with it. Thus, as early as March, 1718, the clever Italian, Florio Benevini, had been sent to Bokhara, and returned in 1725 by way of Khiva, where the Khan, Schir-Gazi, at that time held his own with great difficulty against his powerful rival in the Aral country, Schah-Temir-Sultan. The journal and reports of the Italian present a most instructive and graphic picture of the state of affairs at that period in the countries of the Oxus. In the year 1731 Colonel Herzenberg travelled to Khiva on behalf of the Russian Government, in order to reopen negotiations in that quarter. But his attempt proved an utter failure; for not only was he distinctly refused admittance into the capital, but he was plundered on his return journey, and barely escaped with his life.

When, in the year 1741, Abdul-Chair, a Kirghiz Sultan, of the Little Horde on the Lower Ural, who was friendly to the Russian Government, was called, after the murder of the reigning Khan, to the throne of Khiva by Nadir-Schah, he was accompanied by three Russian subjects, Lieutenant Gladitscheff, the engineer Murawin, and the surveyor Nazimoff, and by their means Russia

was once more brought into relation with Khiva. Murawin was despatched to the camp of Nadir-Schah, for the purpose of inducing him to make over, in favour of Russia, the city of Khiva to Abdul-Chair, who was a good and faithful subject of the Russian Emperor. Nadir, who entertained the greatest respect for the Russian power, received the ambassador in the most friendly manner, made him rich presents, and told him that Abdul-Chair might come to his camp for a personal interview. But Abdul-Chair, who did not quite trust the Schah, preferred, with his retinue and the Russian officers, to abandon the city of Khiva, and to cede it in favour of the Persian conqueror. Nadir, however, after the occupation of the capital, gave evidence of the sincerity of his intentions, for he made presents to the Russian prisoners whom he found there, and sent them home. Abdul-Chair, now Khan of Khiva, declared himself the vassal of Russia, on condition that he should receive assistance against Persia. But he was not in a position to keep his promises to Russia, as his own son Nur-Ali, averring that his father had become a slave to the infidel, rebelled, and annexed the most important districts of the Khanate to the so-called Aral State, and thus soon became far more powerful than his father, who now remained almost entirely confined to the capital, Khiva. The most interesting details respecting that period are given in the journal of Lieutenant Gladitschhoff, who returned to Russia.

In the year 1770 we once more find a Russian subject, the Kirghiz Khan Haib, occupying the throne of Khiva. But although, in the course of the eighteenth century, no less than five Russian subjects—in 1700 Khan Nias, in 1703 Arab-Muchammed, in 1741 Abdul-Chair, after him Nur-Ali, and lastly, in 1770, Haib-Khan—had acquired the government of Khiva, Russia had never been in a position to obtain the slightest permanent influence with the inhabitants in the neighbourhood of the Oxus. The Russian Government appeared at that time to have even abandoned all idea of advancing to the countries beyond the Caspian. In the year 1745, ambassadors arrived at St. Petersburg from six of the Kirghiz and Turcoman

nomad tribes on the peninsula of Mangishlak, asking to be received as Russian subjects, and praying for the establishment of a Russian station at Mangishlak. The Government sent them back without allowing them to attain the object of their mission. In the year 1767, when similar requests were made by the Ust-Urt Turcomans, we even find a memorandum of the Russian Foreign Office distinctly advising the Government at no time to accede to their solicitations. "The acquisition of such subjects brings no advantage to the State," says the document in question, "but only obliges it to provide them with the means of subsistence. The wild, predatory nature of the Turcomans renders the establishment of commercial relations utterly out of the question; and the only thing which would conduce to the attainment of this object and the practical subjection of these hordes—the foundation of fortified settlements on the Caspian Sea—is, as shown by all the reconnaissances that have been made, quite impracticable, owing to the universal scarcity of water." This advice was followed to the letter. All connection with the Turcomans was discontinued, and a petition sent by the Mangishlak races, in 1798, again received an unfavourable reply. In the year 1802 this request was repeated, and the Mangishlaks proclaimed themselves Russian subjects—a step which induced the Russian Government to publish a decree in 1803, declaring the Turcoman race of Abdallah to be under Russian protection.

At the end of the eighteenth century we hear once more of Khiva, through the Russian physician, Dr. Blankennagel, who was sent to the land of the Oxus in 1793, at the invitation of the Khan of Khiva, whose uncle, Fazil, was suffering from a painful affection of the eyes. When the Doctor reached the capital, he pronounced the case of the Khivan grandee incurable, and expressed a wish to return forthwith to his home; but he was detained by the Khivans. Being informed by Russian prisoners of the sinister intentions of the ruling party, who wanted to get rid of him, for fear that he might talk too much in Russia about the country and its secrets, he quietly fled from the town and sought refuge among the Turcomans, with whose

assistance he reached Mangishlak and subsequently Astrakhan, without misadventure. Blankennagel, on his return, published a work, in which he spoke as favourably of the wealth and productiveness of the gold and silver mines of Khiva, as of the facility with which they could be worked. As for the Asiatic trade, he thought that it depended entirely on the possession of Khiva. And while expressing his conviction that the acquisition of Khiva would entail neither the equipment of a considerable fleet, nor the expenditure of much blood and money, but that, on the contrary, such a proceeding would bring riches to Russia, and repose and peace to the natives, he was of opinion that the entire territory of Khiva might be mastered without difficulty with a force of 5,000 men. Great interest, too, was excited by Blankennagel's assurance that the waters of the Amu might easily be brought back to the old Oxus bed, thus connecting, once and for all, the Aral and Caspian Seas. Very interesting too were the descriptions given by the Doctor of the condition of the country, and particularly of the character and mode of life of the inhabitants, although it would seem that the inhospitable reception with which he met in the capital, Khowarizm, did not allow him to be perfectly impartial in his judgment, for it is often harsh.

The beginning of the nineteenth century brought no change in the hostile attitude of Khiva towards the Russian empire. For although, in the year 1802, the mighty Aral State, so hostile to Russia, came to an end, and fell once more into the hands of the ruler of Khiva, the old sympathies towards Russia had long undergone a change. The new Khan hated the Christians as much as the fanatical Nur-Ali did. If we look back once more at the events of the latter half of the eighteenth century, we shall see that Russia, with the exception of some trifling connections, had gained no influence whatever over the affairs of the Khivan empire. But during this period considerable political changes were progressing in the extensive districts of the steppe inhabited by the Kirghiz races, to the north of the Sea of Aral, which, although only partially favourable to Russia, were destined to exercise great influence upon the future of the

more southern part of Central Asia, and are therefore deserving of more detailed attention.

As early as the year 1696 the Russian Eagle, following the course of the great Siberian streams, winged his flight to the Pacific.* Kamschatka was already occupied by the pioneers of Russian civilisation, represented by bold Cossack chiefs with their horsemen, who were followed in their turn by settlers, peasants, soldiers, and convicts. In the years 1650—1689, the glorious land of the Amu had already been at intervals in the hands of the Russians, and all the North Siberian populations, as far as the Korjaks and the Tschukches, who lived in the extreme east, had, partly of their own free will, partly by conquest, become subject to the supremacy of the White Czar. The Russian frontiers in Eastern Asia were, at that time, almost as now, in the direction of Mongolia.

The period of the Cossack raids was over, and the extension and fortification of the Asiatic frontiers were now directly under the supervision of the Government. It was, however, only in the second half of the reign of Peter the Great, that is to say, at the beginning of the eighteenth century, that the Russians were successful in establishing a firm footing in the southern part of West Siberia; a fact which appears peculiar, but is explained both by the circumstance that this district was more thickly inhabited, and that by more warlike races than East Siberia, as also by the fact that the Russians, from trade interests, had hitherto made greater endeavours to establish themselves towards the eastern sea, and to have intercourse with rich Kitni or China, rather than with their neighbours towards the south. In the year 1715 the Russians ascended the Irtish, and proceeding in the direction of the Altai Mountains, reached the Saisar Lake and the highlands of Djungaria; and an expedition was fitted out for the discovery of the road to Yarkand, a town renowned far and wide for its flourishing trade. The Irtish line was

* Under Peter the Great, in the year 1696, Kamschatka was annexed from the land of Anadyr by Atlassow. Wenzukow: "Allgemeine Uebersicht der allmählichen Erweiterung der russischen Grenzen in Asien." *Wojenny Sbornik*, No. 2. 1872.

brought further south, and the fortresses of Semipalatinsk, Ust-Kamennogorsk, and others, rose along the eastern frontier of the Kirghiz steppe. But the steppe itself still remained free and untrodden by the Russians. There reigned in uncontrolled liberty the Kirghiz, with their flocks and herds, kinsmen of those Tartars, who, in the thirteenth century, overran Europe, and founded in East Russia empires of their own, which lasted to the time of John the Terrible. They, in an earlier age, were the representatives of one great nation, which, ruled by Khans, spoke but one language, and in its wanderings, penetrated south as far as the Amu-Darya, in the Ust-Urt, and to the districts of Khokand, Bokhara, and Khiva. One of their Khans, named Alatsch, divided (so tradition says) his people and his territory into three unequal parts, which he left to his three sons, thus forming the three Ardi or Hordes—the Great, the Middle, and the Little. Being split up into numerous families, they extended themselves from east to west without any accurate frontier-line and became much intermingled, so that the Little Horde occupied the land contiguous to the Russian possessions on the southern Ural, the district of Orenburg; the Great Horde, on the other hand, choosing their pasture-grounds in the neighbourhood of the Balkash Lake, on the west frontier of China and within the territory of the Central Asian Khanate; while the Middle Horde dwelt north and east of the Aral Sea. Then, in the year 1732, the Khans of the Little and the Middle Hordes, Abdul-Chair and Schemjaka, in order to obtain protection against their own subjects, offered their submission to the Empress Anne. The Empress, influenced by her ambitious favourite, Biron von Kurland, accepted this Danaic gift, as it may well be termed, and thus, instead of strengthening the empire, imposed on it a fatal burden, which weighs upon it to this day. For not only had the new subjects to be governed and protected from their enemies, but Russia came into collision with the Central Asian Khanates, owing to the fact that the limits of the Kirghiz territory bordered, in the south, those steppe regions which Khokand, Bokhara, and Khiva, considered to belong to themselves. Thus, owing to the

ill-defined character of the frontier, as well as to the growing jealousy shown by the Khanates of the menacing Muscovite power, much soreness and many complications sprang up, which led Russia, almost against her will, to adopt measures in Central Asia which, though they brought territorial extension and increased authority to the empire of the Czars, have, on the other hand, entailed an immense sacrifice both of money and human life.

In the year 1734 an attempt was made, at the instigation of Münich, who was a decided partisan of the cordon system already in vogue in East Siberia, to fill in the space between the Orenburg and the Irtysh lines—the latter of which was established between 1716 and 1719—by the foundation of the so-called Uisk line, thus further strengthening the northern portion of the Kirghiz steppe, and forming a connection between the districts of Orenburg and Semipalatinsk. But circumstances necessitated a continual advance of the fortified lines towards the south, although no one could possibly accuse the Russians of offensive designs in this respect. The brilliant reign of the Empress Catherine II is of especial interest as regards the settlement of the Russian frontier conditions. For, although diverted by European politics from conquests in Asia, and rather intent upon securing what had been won, the Czarina instructed the Governors of Orenburg and of West Siberia, to avail themselves of the national antagonism of the Bashkirs, Calmucks, and Kirghiz to strengthen the power of Russia, and, remembering the approved maxim, "*Divide et impera*," to hold in check one population by means of the other. This system was advantageously pursued up to the termination of the wars of Napoleon, and it was rarely necessary to despatch Cossacks against her nominal subjects to punish disturbances and robberies.

But when, in the year 1820, Russia was no longer engrossed by European wars, Speranski, the Governor-General of Siberia, deemed it advisable to convert the nominal submission of the Kirghiz in that country into a real and practical one, and with this intent, to construct new fortresses in the administrative centres

which he proposed to establish. These fortresses, which, like forlorn sentries, formed the nucleus of permanent settlements, were usually occupied by Cossacks and infantry taken from the fortified frontier-lines in the rear. But as the maintenance of these troops would entail a heavy outlay, owing to the distance of the frontier-lines, it occurred to the administrative authorities to establish Cossacks, who combined the advantages of soldiers and purveyors, as agriculturists around the forts. Thus the sphere of Russian power in West Siberia extended more and more towards the south. New flying corps had to be sent to the steppe as protection against predatory attacks, and new forts (Aktan and Ulutan) were built further in front; in short, by a process of natural development, the system was inaugurated which led the Russians at a later period to the Balkash Lake, the River Ili, the Tian-Shan Mountains, and, finally, as far as Turkestan.

Though it may appear strange that the fortification of the Russian frontier in the western parts of the steppe, which lay nearer to Orenburg, progressed more slowly than in the east, it may readily be explained; for, although in these districts a number of fortified places—which extended in rows along the rivers further down to the south and east—had been constructed by the Governor-Generals, who had resided at Orenburg since 1735, and colonised by Cossacks, these plenipotentiaries were rather of opinion that they had to lay more stress on establishing peaceful commercial relations with the inhabitants of the steppe, and the Khanates of Central Asia, than on the proper colonisation of the conquered districts.

By sending out flying detachments of Cossacks, they endeavoured to establish peace in the steppe. Such a palliative system, though it partly answered its purpose, gave, however, no chance to the Government to introduce a regular administration in those regions; indeed, its influence became, on the contrary, continually questionable, owing to the risings of the Bashkirs and Calmucks. Great damage was done to the reputation of Russia by the extensive revolution of the Don Cossack Pugatcheff in 1773, who gave himself out for the late Peter III, though, in point of fact, he was caught and executed in 1775.

Even after that time, when commercial relations with Central Asia were already established, the untamed Kirghiz did not give up their predatory inclinations. The principal cause of this unfavourable change of circumstances was to be found in the fact that the district of Orenburg bordered on Khiva, the extent of whose power at that time reached very far towards the north, beyond the River Ust-Urt, and that this country, from old jealousy and enmity, continually excited the only too willing Kirghiz to fall upon isolated Russian frontier-posts, caravans, and settlements of fishermen, and always supported them in their incursions by allowing them a safe retreat into its district, or even by giving them armed assistance. Therefore, in 1809, Russia was compelled to establish the so-called line on the River Ilek, which was intended to protect the district between the Rivers Ural, Ilek, and Berdjanka, and especially the establishments for the working of salt near the River Ilek. The order was given that, in future, caravans were not to enter the steppe, unless accompanied by a military escort. The Kirghiz Sultans and Beys, who were appointed as Mayors, had always to be supported and accompanied by soldiers.

Thus, whilst at the beginning of the nineteenth century, the Russians in the Orenburg districts to the north-east of the Caspian Sea began to protect their borders more and more from the attacks of wild tribes of the steppe by gradually extending their lines of fortifications, nothing was yet done for the establishment of a settlement on the eastern shore of the Caspian Sea. Indeed, Russia had, as we have already seen, received a small tribe of Mangishlak Turcomans under her sovereign protection in 1803. But, till then, no further result had ensued from this merely nominal subjection. In the year 1811 another deputation appeared in Astrakhan, which asked that 2,300 kibitkas (one kibitka counts as a family of five persons) of the Tschandor race might be permitted to migrate into the Volga district. But as the envoys requested that, owing to the insecurity of the caravan route, the families, with their cattle, might be transported in Russian ships to their new habitations, permission was limited to the immigration of a few hundred kibitkas ;

the remainder being obliged to content themselves with being declared to be Russian subjects. In the year 1813, during the Russo-Persian war, envoys of the Turcomans came from the region north of the Atrek to the Russian head-quarters, just as negotiations for a treaty between the two countries were being entered into. They offered Russia their alliance in this war, and informed the General in command, Rtischtschoff, that they had already attacked the enemy's territory of Astrabad. But on the protest of the Persian plenipotentiaries, the ambassadors were dismissed with a refusal, though with rich presents; a measure which is said to have kindled intense animosity against Russia in the hearts of the inhabitants of the steppe. It will be seen from this, that, at the commencement of Russian relations with the nomad populations, it was the Turcomans who endeavoured to obtain by their entreaties, the supremacy, help, and protection of Russia, as a particular favour.

Curious then is the change in these relations which has taken place in the nineteenth century. The Turcomans, on their part, have now offered the most desperate and fanatical resistance to Russia's efforts to obtain a firm footing in the neighbourhood of their pasture-grounds, although the first attempts, which proceeded from the Caucasus in the year 1819, were in the beginning favourably received by these people. General Yermoloff, who commanded there, sent at that time Staff-Captain Muravieff (who, later on, became famous by the capture of Kars) and Major Ponamareff to the east coast of the Caspian Sea, for the purpose of selecting a suitable site for the erection of a fort, which should at the same time serve as a trade-factory. Muravieff was then to travel on to Khiva, that he might become acquainted with the country of the Turcomans, win over the reigning Khan to Russian trade interests, and if possible, divert the commerce of Khiva to the dépôt about to be established. Both officers made accurate surveys along the sea-coast, being assisted in the most friendly and willing manner by the Turcoman nomads there. They found two admirable sites for the intended fortress, one situated near the mouth of the Gurief, the other on the Balkan Bay. Muravieff reached Khiva

in safety with an escort of Turcomans. With a small caravan of 17 camels, and accompanied only by a Russian servant, he had crossed the desert in 18 days, having been everywhere well received by the Turcomans. But on his arrival at the capital, he was confined by the Khan in the fortress of Ilgeldi, and detained there for 48 days. And although he regained his liberty, and even obtained an audience of the Khivan despot, he was quite unable to gain him over to the interests of his Government, but received short and decidedly adverse replies to every proposal which he made; after various adventures he returned to the Caucasus, accompanied, as far as the Caspian Sea, by his faithful Turcomans, leaving his mission unaccomplished. Muravieff, who gave a dreadful account of the misery of the Russian prisoners in Khiva, brought back with him from his bold, though unsuccessful, journey an envoy of the Turcomans, Kiat-Bek, who declared the willingness of his tribe to acknowledge Russian supremacy. In consequence of this, Muravieff was sent, in the year 1821, once more to the East, and 10,000 roubles were allowed him for further reconnaissances, as well as for the establishment of friendly relations. He worked for several years, not without result; but his proposals with reference to the establishment of fortresses on the tongue of land called Krasnovodsk, and on the heights of the Balkan range were never carried into effect, as owing to a change in the command of the army of the Caucasus, no further steps were taken at that time.

But whilst in the south we have no real progress to record, the settlement of the border questions in the north, on the Ural, was steadily advancing, and was assisted by a new regulation or the administration of the nomad populations. The Kirghiz were so distributed that the tribes of the Little Horde came within the circuit of the Government-General of Orenburg, while those of the Middle Horde were included in the circuit of the Government of West Siberia. A new statute for the distribution of the West Siberian Kirghiz was published in the year 1822, but only came into effect in 1824.

According to this statute, the Siberian Kirghiz were

divided into two districts, those of Karkaralinsk and Kokchetawsk. The oldest Sultans of the race were appointed rulers of the districts, which were subdivided into several judicial circuits, and for the maintenance of their authority, a council composed of the elders of the tribe, a so-called Divan, was appointed to co-operate with them. In the same year the Orenburg Kirghiz also received their new organization. The dignity of Khan was abolished, and the whole steppe, from north-west to south-east, portioned out into three sections. A Sultan-elder was entrusted with the control of each section, he being afterwards honoured with the title of Reigning Sultan. The authority of these rulers was unlimited, and they had the right conferred upon them to punish the Kirghiz, subject to them, for predatory raids on the frontier, a detachment of 200 Cossacks being especially told off for this service. This Cossack guard was intended to replace the position of the Divan in the Siberian districts, but the Sultans used it afterwards chiefly for private purposes in their own quarrels, and troubled themselves but little about the defence of the Russian borders, and the establishment of quiet and order in the steppe. In the year 1824, therefore, in spite of all the measures taken, the first caravan despatched to Bokhara was attacked by the Kirghiz, assisted by the Khivans, on the Yani-Darya, and robbed of all its merchandise, which amounted to more than 500,000 roubles ; a piece of luck which so increased the boldness of the Kirghiz, that thenceforth, they not only levied black-mail on the Russians dwelling along the line and on the Caspian Sea, but extended their raids to Orenburg itself. The embassy of Colonel Count Berg, sent to Khiva in the year 1825, made its way over the peninsula of Mangishlak to the Sea of Aral, and, at the expiration of three months, returned to Orenburg without misadventure. It appeared to be attended with no result worth mentioning, for the raids into Russian territory did not cease, many hundreds of Russians being captured on the shores of the Caspian Sea, and sold as slaves in the markets of Khiva. Thus several thousand Russians are said to have been found imprisoned in Khiva in the year 1835. With the object of

preventing the repetition of such calamities, and also of protecting the fishermen, the fortress of New Alexandrovski was founded, in the years 1832-34, on the north-east coast of the Caspian Sea, on the Kaidak Bay. It was afterwards removed to the Cape of Tjuk-Karagan, on the peninsula of Mangishlak, and is now called Fort Alexandrovsk. The situation on the Kaidak Bay was very unhealthy, and the beach there so low, that communication with the ships was unusually difficult and perilous. But for the security of the other unprotected frontiers in the direction of the steppe, General Perovski arrived at the extraordinary idea of constructing a kind of Chinese wall, with trenches in front, along the whole border of the steppe. This work was practically commenced in the year 1836. But the disturbances did not cease—the cause on this occasion being the appropriation of large and fertile strips of land, belonging to the Kirghiz, for the contemplated settlement of Cossacks. These were the Cossacks of the New Line, who had been sent forward into the desert to fortify the south-east frontier, though it was now too late, and was, to a certain extent, making a virtue of necessity. However, the military object—the security of the Upper Ural and Uisk lines, in the rear—was attained, though the injured Kirghiz, as well as the Cossack cultivators, who were placed in a dangerous position, broke out into open revolt. The latter resisted the authorities even by force of arms, and could only with difficulty be quieted. Moreover, a tax of 1 rouble and 50 copecks per kubitka was levied upon the Kirghiz as an experiment; a proceeding which so enraged them, that they assembled, and not only fell upon the Kirghiz devoted to Russia, and upon the line, but even plundered caravans in the neighbourhood of Alexandrovsk. The chief ringleaders were the two deserters from the Bukejewsk tribe, Kaip and Issetai, who had found refuge and protection in Khiva. In order to repress these rebellions by severer measures, divisions of Cossacks penetrated in 1836 to the peninsula of Mangishlak, a chief centre of the disturbances; whilst the hostile bands were pursued in a south-easterly direction, as far as the desert of Barsuk, to the north of the Aral Sea, and there

punished as they deserved. Besides this, all the Khivan merchants, who proposed returning from the markets in Nijni-Novgorod by way of Orenburg and Astrakhan, were detained with their goods, in the same year, by the Russian authorities. At the same time, the Khan of Khiva, whose entire means of subsistence was endangered by the closing of the exports to Russia, was informed that the merchants would not be set at liberty until all the Russian prisoners were surrendered, and all hostilities stopped once and for all. This had the desired effect for a year, but at the conclusion of this period Kaip and Issetai suddenly appeared with new bands, to demand tribute from the Russian Kirghiz, and to make an attack by way of the Ilek and Tobol Rivers upon the real Russian borders. Cossack divisions were once more despatched against them, and one of these succeeded in defeating the principal force of the enemy on the Upper Irgiz River, and also in slaying Issetai; but Kaip fled to Khiva. At last, in the year 1839, as the Kirghiz had clearly found in the Khan of Khiva a grand support for their revolutions, and in Khiva itself, a market always open to their booty in goods and Russian slaves, the Emperor Nicholas, in order to terminate the everlasting feud, gave orders to the Governor-General of Orenburg, General Perovski, to undertake a campaign to the oasis, which had hitherto always escaped unpunished.

CHAPTER II.

FROM THE PERIOD OF THE RUSSIAN SETTLEMENTS ON THE SYR-DARYA IN 1840-47, TO THE BEGINNING OF THE FIRST PREPARATIONS FOR THE CAMPAIGN AGAINST KHIVA IN 1870-73.

THE expedition of General Perovski in the year 1840 may be considered as an important factor in the development of Russian relations in Central Asia, as from that period dates the advent of a new era in the proceedings of the Russian Government on the south-eastern border, which must be especially attributed to his energetic conduct, and judicious and intelligent initiative. But a still more decisive event in the history of the Russian frontier question was the establishment of the first fortified support on the bank of the Syr-Darya, under the direction of General Perovski, in the year 1847; a measure which was destined to lead, in the course of a few years, to the acquisition of the greater portion of Turkestan far beyond Samarkand, and finally, to the subjugation, only very recently, of the virgin and hitherto unconquered territory of Khiva.

When Perovski, who was an acute observer, and thoroughly conversant with every detail of Central Asian affairs, received orders from his Government to prepare energetically for his grand expedition—the first military operation carried on against Khiva since the ill-fated defeat of Prince Bekowitsch in 1717—matters did not then appear so very unfavourable for his bold, and daring enterprise. It seemed that the active measures adopted by the Russian Government, with reference to the Khivan merchants, especially the prohibition of exports, had already begun to diminish by degrees the overweening arrogance of the Khan. Embassies, indeed, arrived at that time at Orenburg with presents and some Russian prisoners; although Russia's demand that all her subjects should be set at liberty was still not complied with. Nothing is known as to whether

the Khan would not surrender the Russian slaves, or whether he was unable to do so altogether, as many of them might have been in the hands of the independent Turcoman tribes. However this may be, the export prohibition struck a fatal blow at Khivan trade and agriculture; poverty and need were rife in the Khanate, and as a result of this the revenues of the Khan diminished so much, that that potentate soon found himself compelled to levy taxes on the Turcomans and Kirghiz in the neighbourhood of his dominions. To the category of all these disasters must be added the dejection of the superstitious Uzbeks, in consequence of an ill-omened sign from heaven, which predicted the subjection of the Khivans by the Russian arms. According to an old saying, the holy city of Khiva was to remain secure from Russian might until the day when the waters of the Amu, returning to the old bed which they had deserted, should once more wash against the walls of Kone-Urgensch.* In point of fact, at this time the Amu-Darya is said to have risen to such an extent as to send its waves right up to the ancient capital of the north. So the terrified inhabitants of the oasis, whose fanatical superstition is renowned, could only await with dismay the accomplishment of the sinister prediction. All these circumstances taken together led Perovski to consider the moment particularly opportune for starting his expedition with the utmost despatch, and the more so, as he relied upon the general discontent existing among the Turcomans, who had been alienated by the taxes imposed upon them; besides, he thought it quite possible that they might even have attacked and plundered the capital, before he could arrive.

So Perovski began his preparations for the equipment of the expedition, and first of all furnished full particulars respecting it to the special commission appointed for this purpose, which consisted of the War Minister, the Foreign Minister, and the Governor-General of Orenburg—that is, himself. In all this Perovski proved his thorough acquaintance with the steppe.

* Usually called by the Russians Kunya-Urgensch = “Old Urgensch” to distinguish it from Yani-Urgensch, “New Urgensch,” east of Khiva.

He was well aware that it was not so much a well-drilled and strong army which he required, as a tolerably small troop, which he could lead surely and rapidly, right into the Khanate. Could this troop once be brought into the oasis, the success of the enterprise might be considered assured.

It was thus, above all, a matter of absolute necessity to guarantee subsistence for the troops, horses, and beasts of burden, by means of a just combination, and an exact estimate of the marches, provisions, and forage. Perovski, then, for the first time, became sensible of the preponderating value of infantry. For, in the first place, that arm needed far less water and forage than the cavalry, and, on the other hand, it could operate with far more ease and efficiency in the Khanate, cut up as it was by thousands of irrigatory canals, by swamps, thick tangled brushwood, and also, by masses of reeds. Perovski, indeed, had already, at this time, a presentiment of the immense moral influence which would be exercised by disciplined and well-armed infantry over the wild, irregular horsemen, who had, as yet, no conception of a close bayonet charge.

Acting in accordance with these notions, Perovski told off for the expedition three and a half battalions of picked men from the 22nd Division, 22 guns, two regiments of Ural Cossacks, and five sotnias of Orenburg Cossacks and Bashkirs, with four rocket apparatus, forming a total of 4,413 men. The train of the column was unusually large, and consisted of 2,012 horses and 10,400 camels, with the care and parking of which 2,000 Kirghiz were entrusted. It was resolved to march from Orenburg, by way of Ilezkaya on the River Ilek, along the road to Khiva, which, running parallel to the Mugadshar mountain chain, touches the Ust-Urt plateau in the neighbourhood of the Chegan stream, and then runs in a southerly course, parallel to the western coast of the Sea of Aral, right on to the Khanate. Perovski determined to use the roads by way of Mangishlak and Saraitschik, to the west of the bay of Kaidak, only as lines of support, and especially for the transport of provisions, though these roads were shorter. The distance from Orenburg to Khiva, along the road already referred to, was

estimated at 1,250 versts, and it was thought, that allowing 25 versts per march, the capital of the Khanate would be reached in 50 *étappes*. In these were included about 18 marches for the expanse of country stretching from the Dongus-Tan (probably Tchink, in the neighbourhood of the stream Chegan) to the bank of the Aibugir Lake, over the dreaded steppes of the Ust-Urt. Colonel Berg, who had been the last to accomplish the journey across the steppe under favourable auspices, had on several occasions remarked that winter* would be the best season for the march of a larger division of troops, as it was then that the two chief difficulties attending the operation—want of water, and scorching heat, with clouds of dust, and above all, the raging sand-storms of midsummer—were lessened by the snow, which falls in great abundance upon the level plateau of the Ust-Urt. General Perovski recognized the justice of this opinion (which, as we shall see later on, was adopted for the prosecution of the campaign of 1873, with the most brilliant success), and therefore resolved upon starting about the end of the month of March, resting quietly in the Khanate during the season of the greatest heat, and commencing the return march about the beginning of September. But this plan of the General's, excellent as it was in itself, was, however, destined to be spoilt by a circumstance which it was quite impossible to foresee, viz., the unusually severe winter and the terrible, exceptionally violent *buran* (ice-storm) of the year 1839-40, which brought about the wreck of the entire campaign.†

Perovski devoted his chief attention to the organization of the commissariat and transport departments; and the sagacious General was not wrong in his opinion, that in these, lay the main

* By "winter" here is meant the second half of winter, and the commencement of spring.

† But here it must be mentioned that the General did not adhere to his first plan, namely, to start at the beginning of March, as intended for the year 1839. This being impossible, he actually started as soon as November, 1839, instead of waiting till March, 1840, and arrived thus at the plateau of Ust-Urt just in the most terrible and severe part of the winter; a movement that cannot but be considered as an important mistake on the part of the General.

point of the whole undertaking. He deemed it impossible to carry with him the entire amount of provender necessary for the whole duration of the campaign, which must last some six months, and to supply the wants of the comparatively very large force of his division, which, including the camel-drivers, numbered over 6,500 souls.

He therefore suggested to the commission the advisability of only distributing to the different columns provisions (provender and forage) for two months, while those required for the other four months should be parcelled out on the line of march, and placed in the halting-stations, for the use of the troops both going and returning. Fortified halting-places were to be built for the reception of the necessary stores at the south end of the Mugadshar chain, about 300 versts from Orenburg, and 300 versts further south, at the foot of the Ust-Urt. In both of these places food, hay, and green fodder for the beasts of burden could be collected, from the direction of Orenburg, in the neighbourhood during the campaign. For this purpose a principal magazine would be established at Ak-Bulak, which would also be properly fortified. And in order to insure the safe arrival of the provisions during the stay of the troops in the Khanate of Khiva, commissariat columns would follow the division along the roads already mentioned from the Caspian Sea, depositing with this object 2,500 chetvert (about 10,000 bushels) of biscuit, and 250 chetvert (about 1,000 bushels) of oatmeal, as a depôt to the newly erected fort of Novo-Alexandrovsk on the Bay of Kaidak. Enormous quantities of provisions were provided for the marching column—amongst other things, 11,889 chetvert of biscuit, 3,223 chetvert of groats, 4,605 chetvert of meal, 16,098 chetvert of oats, making a total of 35,815 chetvert, that is, of 143,260 bushels; 6,511 pounds of salt, 4,199 vedros* of spirit (alcohol), and, besides all this, the largest possible quantity of compressed hay. Peculiar attention was devoted to the personal maintenance of each individual. Pre-

* 1 chetvert = 209,902 litres = about 4 bushels.

1 vedro = 12,298 litres = 10½ quarts.

1 Russian pound = 0.819 kilogrammes.

served meats, bacon, dried and pickled cabbage (*kraut*), radishes, pepper, vinegar, spiced honey, called *sbiten*, and dried cheese, were to be taken with the column for the men's subsistence, and in addition, preserved fruits, to make the bad water drinkable as a precaution against the ravages of scurvy, which was so much dreaded. The supply of meat was to be kept up by flocks of horned cattle, and sheep, which were to be provided by contractors, and were to follow the column at the contractors' own risk. For the transport of this very large train 12,600 camels were requisitioned, from 12 to 15 pood weight (one pood is equal to 40 Russian pounds) being calculated for each camel.

This excellent plan of operations, which provided for everything, and, even in its smallest detail, showed a profound study of difficult matters, was laid by General Perovski before the special commission, for its approbation, at the beginning of the year 1839. At the same time the General asked for instructions, that he might know how to treat the Government of the Khanate, in the event of an occupation of the enemy's territory. He inquired whether he was to content himself with a surrender of the Russian prisoners, and the due punishment of the Khivans, or whether he should introduce an administrative system into the country, so as permanently to establish Russian power and influence, and, above all, order and quiet, in the districts of the Oxus. And, lastly, he asked what he should do in the event of the Khan giving up the Russian slaves, and submitting to all the Russian demands (a contingency which the General considered anything but improbable), before the march through the desert was at an end, and thus, before the column could have reached the borders of the Khanate. The General himself declared to the commission that he thought the most expedient course would be to place one of the reigning Sultans of the Kirghiz hordes, which were thoroughly devoted to Russia, on the throne of Khiva—a measure which would be quite in accordance with the traditions of those people, and would insure for the Government a permanent influence in the Khanate. Should, however, the Khan shrink from actual hostilities, and—at the very commencement of the Russian

operations, and at a time when the troops had not yet begun their trying and dangerous march across the desert—promise submission, and obedience to all their demands, he inquired, whether it would be more advantageous to abandon for the time being the whole enterprise and to return home. But in every other case he considered it a matter of supreme necessity that the country and the capital should be occupied, both in order to prove to the people the might of Russia, and also to give the troops sufficient time to regain their strength for the return march in the autumn.

In March, 1839, the commission arrived at a decision, the result of which was contained in the instructions now given to the chief of the expedition. It declared that it considered an expedition to Khiva as a thing which could not now be avoided, since it was, above all things, necessary to give renewed support to Russian influence in Central Asia. For Russia's power was being threatened with complete collapse, not only by the continued, and always unpunished, offences of the Khivans, but also by the constant exertions of England from the south to get a firm footing in Turkestan, to the injury of Russian trade. It was, however, deemed advisable to postpone the departure of the expedition until the English expedition in Afghanistan against Dost Mahommed had come to an end. When the result of the British undertaking should have become known, it would not be difficult to meet the rivalry of England. By the overthrow of Khiva it would, moreover, be possible to liberate the Turcomans and Kirghiz on the Oxus from the yoke of the Khan, and Bokhara from the incessant predatory incursions and outrages of the Khivans, besides sending back to Persia the many thousands of prisoners and slaves, and thus obtaining the interest and friendship of all the empires of Central Asia.

Bearing these facts in mind, the commission resolved upon making at once every arrangement, so that the preparations for the campaign, and particularly the establishment of the provision stores, might be finished by the autumn of 1839. The details of the equipment of the force were left to General Perovski, who received definite orders to commence operations in the

spring of 1840.* The General was instructed, in the event of an occupation of Khiva, to secure, above all things, the surrender of the prisoners, and then, after deposing the reigning Khan, Allah-Kuli (according to others, Taksir-Khan), as an enduring guarantee of Russian power in the Khanate, to take him back as a prisoner to Russia, and raise the Kirghiz Sultan, Bey-Mohammed-Aichubakow, to the throne of Khiva. The mode of punishing the country, as well as the amount of the penalty to be inflicted, with the choice of the measures to be adopted for the preservation of Russia's commercial interests in Central Asia, were, however, to be left to the discretion of the General. But if the Khan, before the troops had reached the borders of the land, were to make overtures of peace, and promise complete submission, Perovski was not to allow himself to be stopped in his onward march, as such promises as these had often been made before without any result. If it should prove to be impossible to reject the proffered liberation of the captives, the General was to demand, as a punishment, from the Khan the payment of all the expenses of the war, and to allow him, at the same time, a very brief interval for the collection of the amount. The real and complete termination of the campaign, and the occupation of the country must, under any circumstances, be carried into effect. More than a million and a half of roubles was set apart for the expenses of the expedition, 700,000 roubles out of this money being immediately placed at the disposal of the General. The management of these sums, as well as that of all the means and measures hereafter to be adopted, was entrusted without reservation to Perovski; and he was especially directed to keep the preparations as secret as he could, so that the news of the expedition might not reach the ears of the Khivans too soon.

In the course of the summer of 1839, all the preparations were completed in the manner described. The points selected for halting-places were fortified and garrisoned; storehouses and hospitals, containing everything that could possibly be

* See note † on p. 29.

required, were constructed in a few weeks. An attempt was made to conceal the object of the activity, which was especially observable throughout the Orenburg districts, by announcing a scientific expedition as the reason of these preparations, such an expedition being really destined to follow the military one at a later date. In this latter, the German traveller, Alexander Lehmann, was to take part.

Perovski was not, however, successful in keeping his preparations secret. The erection of the fort on the northern slope of the Ust-Urt had aroused the attention of the Khivans, and the Khan, who was not long in seeing through the designs of the Russian Crown, sent, as early as the month of September, eighty Russian prisoners to the General. Although, however, the Khivans officially declared their submission, the predatory incursions of the Turcomans still continued, extending even beyond the shores of the Caspian Sea, whilst the Russian fishermen were actually captured on the water, and carried off into cruel slavery.

But Perovski was not to be influenced in his plans by the promises of the Khivan ambassadors, and continued his preparations without intermission. In order to settle once for all the uncertain condition of affairs in Khiva, he prepared the draft of a treaty, which he was to conclude with the then reigning Khan, and a copy of which, although it never came into force, may not be uninteresting, serving as it does for the illustration of several matters in the year 1873, which had remained almost in the same state as they were in at the time of the first disastrous expedition:—

“ I. All hostilities against Russia, whether open or secret, shall, on the part of Khiva, cease once for all, and, in particular, no further predatory incursions shall be undertaken, nor shall any Russian subjects be any more detained as slaves.

“ II. Khiva shall neither claim sovereignty any more over the Kirghise and Turcomans, who are under Russian protection, nor levy taxes upon them.

“ III. Khiva shall neither protect the fugitive Sultan Kaip-Gali, nor others like him, thereby causing the Kirghiz to revolt.

“ IV. Caravans shall under no pretext whatsoever be compelled to take their road through Khiva; and those which voluntarily enter the country shall not be burdened with duties.

"V. The fortresses on the banks of the Syr, which lie quite outside Khivan territory, and only serve the purpose of obtaining contributions from the neighbouring nomads, and from passing caravans, shall be demolished.

"VI. Merchandise, the property of Russian subjects, shall not be burdened with imposts of three or four times its proper value; but Russian and Khivan traders shall be treated alike in every respect.

"VII. Russia and Khiva may have Consuls in Khiva, and in Orenburg, respectively. The Russian Consul shall be allowed, without any reserve, to keep ships on the Amu-Darya."

All the preparations were completed by the beginning of the month of November, 1839; and on the 26th of November* a general proclamation to the population of the Orenburg district was published, in which once again was shown the necessity that had driven his Majesty the Czar to the prosecution of the campaign. On the same day, the first *échelons* of the column moved from their quarters on the Ural to their first halting-station on the little River Emba; and so certain did the leader of the gallant band seem of the success of the bold undertaking, that he said in his farewell speech at Orenburg: "In two months we shall, by the help of God, have entered the enemy's capital, and there set up the sign of the Cross."

The sanguine speech of the General, who certainly was no boaster, only shows more than ever with what care and completeness all his preparations must have been made. But Perovski could only reckon upon human powers and dispositions; he could not contend against the all-powerful might of Nature's inexorably incalculable laws, and could not foresee that just that very winter of 1839-40 was to be, even for those regions, one almost unparalleled in severity. And here we may observe that the weather of the year 1839, owing to the peculiar violence of several of its blasts, is regarded to this day by the learned as full of rare phenomena. "In the winter of 1839-40," writes Professor Dove, "whilst the equatorial stream so steadily prevailed in South Germany that some wrote from Munich that it was hoped that the story of an old chronicle would come true, and the girls go to church on Christmas Eve with roses in their hair, the icy current of air was seeking an outlet from the

* 14th (26th New Style) November.

north, on the Barabinski steppe, to the Aral and Caspian Seas ; so as to bring, with its *buran*, and heavy falls of snow, the temperature over the low plateau of the Ust-Urt down to -32° R. below freezing point in the latitude of Naples, and to prepare death and destruction for the Russian expedition on the banks of the Emba, in the region which the Kirghiz call the 'Valley of Death.'"* General Perovski, notwithstanding his great prudence, could not have foreseen such a misfortune!

The weather was mild when the march out began. There was still a thaw on the 3rd of December, but in the night of the 4th the thermometer sank to 8.5° R. below zero, and on the following day to -24° R. During the entire march to the Emba post the thermometer only showed on three days -9.8° R. below zero, but on eleven days, as much as 20° R., on twelve, -20° to -25.5° R., and on the last six days, it even reached from -25.8° to -32° R. Regardless of the raging storm and fearful frost, the brave and well-disciplined Russian troops marched forward, without shelter or covering, without road or path, right through the soft snow which rose above their knees, weary and half frozen, making for themselves a way, and searching for the direction of their line of march amid the dark cloud of snow! The almost superhuman exertions of these men, who were tired to death, and particularly of the infantry, must indeed have been terrible, especially, when it is considered, that no bivouac fire ever awaited the benumbed soldiers in the camp, as the scanty supply of wood had to be sparingly dealt out for the preparation of the most indispensable food. And while, at the beginning of the march, in spite of the constant frost, the health of the troops might have been termed comparatively good, as but a few trifling cases of colds occurred, towards the end, even the unparalleled power of endurance of the brave infantry appeared to desert them, and a few days before their arrival at Fort Embensk there were already 650 men on the sick-list, 532 of whom died soon after. Mortality also began, and in even larger numbers, among the camels, a careful selection of which the

* H. W. Dove: "The Nature of Tempests," p. 196. 1973.

brief amount of time at the disposal of Perovski had rendered impossible. Before they reached their first halting-station, upwards of one-fifth of the beasts of burden had already been lost.

But in spite of all this, the column, as full of confidence as ever, had arrived at the River Emba. For it was hoped that matters, as far at least as the immense quantity of snow was concerned, would improve in the steppes on the further side of the river, to which thousands of Kirghiz every year betook themselves during the winter months. But it was afterwards seen that circumstances had changed, and that even the Kirghiz tribes, which had proceeded south into the desert, had, with their flocks, almost entirely succumbed to the unusual frost. The news, moreover, which Perovski received on his arrival at Embensk, was also anything but encouraging. Hostile bands had already fallen upon the storehouse of Ak-Bulak, but had been driven back.

The transport ships, which ought as far back as October to have brought provisions to Novo-Alexandrovsk, had remained embedded in the ice, partly in the neighbourhood of Gurief, partly before the harbour of the fort. The cargoes, it is true, had been saved with a vast amount of trouble, and happily put on shore; but the ships frozen in at the mouth of the Ural fell into the hands of the Khivans, and were burnt by them. Although measures had been taken to send out fresh provisions as soon as the ice broke up, and although the military Governor of Astrakhan made the utmost exertions to support the re-provisioning of the army by means of the fleet, General Perovski regarded the loss of his supplies as most unfortunate, and indeed as well-nigh irretrievable; as, if matters had turned out very badly—for instance, if his camels had fallen victims to the frightful frosts of the Ust-Urt—he would have abandoned his first line of march and proceeded direct to Novo-Alexandrovsk, eventually resuming his road, as soon as the weather should improve, to the Khanate of Khiva. Therefore, the General's reports from Embensk became already less confident in their tone. He began to complain of the enormous difficulties of the

situation, with regard to both men and camels, arising from the unexpectedly large fall of snow. The prolongation and delays of the marches, thus caused, created considerable loss of time and consequently of supplies and camels. He already began to fear that he would have to leave behind him his pontoons, his boats, and all his transport apparatus. But, notwithstanding, Perovski would not seem at that time to have abandoned all hope, and he always trusted, "with God's help," that he would one day reach the destined goal. He gave orders for the march of the division from the Emba post on the 12th of January. But fearful as the march had hitherto been, it was absolutely nothing in comparison with the horrible fatigues which awaited the band, undaunted and fearless of death, on the road, scarcely 160 versts in length, to the northern edge of the Uest-Jurt plateau. The frosts and the storms, instead of diminishing as the troops went south, grew stronger and heavier. The snow was so deep that the camels and horses sank in it up to their knees, often, even up to their bellies; and a firm crust of ice formed over the covering of snow, which was broken through by the hoofs of the animals at every step, so that the fetlocks became galled and covered with blood.

The camels could no longer find even the smallest or poorest green fodder; and in order to save them, the Russians were compelled to throw away the greater part of the loads. Even the Kirghiz, who accompanied the column as camel-drivers, began to despair, and suddenly refused to lead the troops further into the unknown region now covered with snow, and the more so, as the report had spread among them that hostile bands from Khiva and Khokand, in countless numbers, were in their immediate neighbourhood, and had determined to fall upon the exhausted and weakened Russian column on all sides at once. It was only through the exercise of the most energetic measures that Perovski was successful in averting the pressing danger, and in preventing the flight of the drivers, with whose services he could not have dispensed. Two of the ringleaders were punished with death. The Kirghiz, who now regarded death as certain in some shape or another,

remained, and the march was continued. The snow became deeper every day, and the crust of ice so firm, that the cavalry, which marched before the camel-train, to make a little path through the snow, could scarcely move on, and had to be relieved at every two versts. Nothing now remained but for the men to clear a road. But scarcely had the advanced-guard passed on, when the path again became covered by the heavy snow-storms, and had to be opened anew by the troops behind. The camels only moved forward with the greatest difficulty, stumbling and falling to the ground every moment. The transport vehicles, and particularly those of the artillery, consequently came to a continual standstill. It was only by the greatest exertions that the guns could be got along once more by the infantry soldiers, who often sank over their knees into snow when engaged in this work, and wasted their best strength. Men, animals, and the whole baggage were covered with a coating of ice. The fearful snow-storms, which, darkening the heavens, and bearing along with them sharp pins of ice that cut the faces of the men until they bled, compelled the division to halt very often every day, and often destroyed for days all connection between the separate *échelons*. Thus the terrible cold, which no clothing, not even the thickest furs, could ward off, robbed the men of their last strength and energy. Yet, notwithstanding all this, the bulk of the division got over the road to Ak-Bulak, which was 160 versts long, in 18 days. But the rear-guard, which had left the River Emba only on the 29th of January, had not yet reached the halting-station on the 11th of February, by which date Perovski had at first hoped to be already in the Khanate of Khiva.

In Ak-Bulak Perovski had an inspection of the camels, from which it appeared that out of the 8,900 camels which had started with the march from the Emba, only 5,000 were now in a state to go on. Under these circumstances, the General now found himself once more called upon to decide whether he should proceed further or not. The army was now just half-way on the road to the Khivan frontier. The 5,000 camels still remaining could carry provisions and forage for a month, but,

within a month, the force would be quite powerless to reach the frontier, considering the pitiable condition to which it was already reduced, and even had it been able to do so, it would have been without any provisions in a hostile country, where, owing to the miserable state of the roads at the beginning of the year, all rapid transport was an impossibility. And even admitting, a very improbable contingency, that the troops should traverse the second half of their journey with more despatch than the first, and perhaps reach the Khanate in from 40 to 50 days, and that, moreover, one garnetz of oats per day, without hay or green food, should prove sufficient for the horses, thus allowing them to leave behind the greater portion of the forage, and to take with them instead, provisions for two months on the camels at their disposal, the troops, even under the most favourable auspices, would have reached the frontier with the smallest possible quantity of supplies. But the cavalry would, in this case, have been for the most part dismounted, and the condition of the remaining troops would have been so wretched, that they would scarcely have been able to procure the most necessary supplies, not to speak of their incapacity of contending, with any prospect of success, with a foe of a hundred times their strength. The slightest mishap, the least delay on the march, the smallest loss in camels—the last of which might be regarded as inevitable, owing to the want of green fodder, and also to the daily attacks, on the Ust-Urt, of the Kirghiz upon the convoys, and which might be safely anticipated—would upset the whole calculation, and must consign the entire column, in the desert Ust-Urt, to certain destruction. These facts considered, Perovski was of opinion that it would be a bold and culpable undertaking to continue his march, and thus uselessly lead the Russian troops on to certain ruin. Therefore, on the 13th of February, he gave the order to return. The fearful sufferings of this return march, the awful scenes which every moment presented themselves to the almost torpid gaze of the band, which daily grew smaller and smaller, must have far surpassed even the horrors and misery of Napoleon's retreat in the year 1812. The terrible *buran* raged inexorably, and engulfed, unopposed, with the

mighty bulk of its masses of snow and ice, camels, horses, and men, sweeping them thousands of feet from the track, hurling them far into the steppe, and burying them under its deep white covering. After indescribable trials, and after wandering for eight months in the snow, the remains of that splendidly equipped column finally reached Orenburg on the 8th of June (20th, New Style). Ten hundred and fifty-four men lay dead on the steppe, and 609 sick were brought into the Orenburg hospitals. The campaign of General Perovski, in the year 1839-40, thus proved a total failure. The Czar Nicholas, however, was not disposed to consider the settlement of the Khivan question as impossible on account of this first misfortune, but immediately gave orders for the preparation of a second expedition. This, however, was not destined to be carried out.

When the intention of the Czar to send out another expedition became known in Khiva, it was at once decided to yield, and conclude peace with Russia. The Khivans had followed with astonishment the heroic advance of the Russians in the winter of 1839, and the fact that, in spite of the fearful obstacles presented to the enemy, both by nature and climate, they had succeeded in getting half way to the frontier, must have convinced them of the strength, endurance, and energy of the foe, and have filled them with anxiety and dread for the future. They therefore preferred not to await a second and perhaps more successful attempt, and again entered upon the path of negotiation. In the summer of 1840 they despatched an embassy, with more than 400 Russian prisoners, to Orenburg. At the same time the Khan of Khiva issued a decree, by which not only the stealing of Russian subjects, but even their sale, was strictly forbidden once for all within his territory. This friendly overture on the part of the Khan quieted the Government of the Czar, and it was resolved, at the suggestion of Perovski, once more to enter upon a course of peaceful negotiation. In consequence of this, Nikiforoff went as ambassador to Khiva on the 30th of May, 1841, with full power to conclude a treaty of peace with Allah-Kuli-Khan. But although the intentions of the Khivan Government were friendly towards Russia,

Nikiforoff did not succeed in concluding a more lasting treaty with the Khivan ruler. It was not until the following year, after the death of Allah-Kuli, that Lieutenant-Colonel Dainlevski, in the middle of October, 1842, arrived at the Khivan capital, and concluded a lasting treaty with the new Khan. In this instrument Rachim-Kuli-Khan, the reigning Khan of Khiva, bound himself :—

“ I. Never in future to embark in any hostilities, whether overt, or secret, against Russia.

“ II. Predatory expeditions on the steppes, or to the shores of the Caspian Sea, to be neither encouraged nor tolerated; but if criminal proceedings of this kind were undertaken by the Turcomans subject to Khiva, the guilty parties should receive summary and condign punishment, and the stolen property should be immediately restored to the owners.

“ III. No Russians to be kept as slaves in the country, and the Khan to be held answerable for the lives and property of all Russian subjects within his dominions.

“ IV. At the death of a Russian subject, his property to be forwarded to his heirs through the Russian frontier authorities.

“ V. No Russian refugees and rebels to be received in the Khivan territory, but to be delivered up to the Russian frontier authorities.

“ VI. Duties, not higher than 5 per cent. of the real value, to be levied only once a year on articles imported into Khiva by Russian subjects.

“ VII. No duties of any kind whatsoever to be levied upon goods belonging to Russian merchants *en route* to Bokhara, and other countries of Central Asia along the Syr-Darya.

“ VIII. Always, and under all circumstances, to remain a good neighbour and a faithful friend to Russia, and to endeavour to cement still firmer these bonds of friendship with the mighty Russian empire.”

Thus, although the military operations had proved an entire failure, Russia had now attained for a while the object of the campaign. An official peace had been concluded; and although this was never really in force during the following years, as the Khivan rulers very soon again did, and allowed others to do, whatever they thought fit, peaceful relations between both States were for the moment established on the frontiers. But, what was more important than all, knowledge had been acquired, through the numerous expeditions and embassies, of the hitherto almost unknown geographical, topographical, and political conditions of the oasis, as well as of the

surrounding desert tracts and their populations. This knowledge, combined with the sad experience of the last years, may well have induced Perovski—and through him the Russian Government—to change their strategy in future advances against Turan. It was perceived that it would only be by incurring too great difficulties and sacrifices that a military force could cross successfully the waterless steppes without any points of support in the east and west, proceeding due south from Orenburg along the western shore of the Sea of Aral. Accordingly, after the year 1840, the old policy was abandoned, and the Government turned their attention to the east, to the present Turkestan, where nature and geographical conditions seemed to offer fewer difficulties to an advancing force. Later on, they were doubly confirmed in this opinion, when in the year 1849 a frontier expedition of several thousand men, which, for the protection of the Kirghiz tribes, had endeavoured once more to approach the neighbouring Khivan territory, was buried in the snow; a circumstance which made a great impression upon the easily excited fancy of the Asiatics, and increased the arrogance of the desert rulers to an unlimited extent.* General Perovski certainly should have the credit of having first suggested that the cordon system of the Orenburg military district should be extended to the south-east, instead of straight to the south, thus connecting it with the Sea of Aral, and then be carried on along the course of the Syr, which was strategically favourable, so as thus to flank the hostile desert country from the north-east as well. The idea of the conquest of Turkestan was at that time far from the mind of the General. But the oppression by the Khivans of the Kirghiz on the Syr, who were tributary to Russia, and the erection of Khivan forts and citadels for the purpose of bringing into subjection these nomad tribes, first induced him to consider the successful project, which in the course of a few years led to the possession of the entire province of Turkestan, far into Central Asia.

* This episode is thus confirmed by Hellwald, "The Russians in Central Asia" (1873), p. 78; and "Central Asia" (1875), p. 407. I have been unable to find further details from any Russian source.

Although the advance of Russia against Turkestan has nothing directly to do with our observations upon the development of matters connected with Khiva, we cannot refrain from a short description of it, as the acquisition of the Turkestan points of support on the Sea of Aral and the Syr-Darya was decidedly brought about by the Khivan question, and, moreover, this very line became the principal basis of operations in the campaign of 1873. The advances of Russia in Turkestan, on the River Syr, and also on the Sea of Aral, were directed as much against the oasis of Khiva as the Khanates of Central Asia proper, and led to the navigation of both waters, as well as to the erection of a Russian fort in the delta of the Syr, this being the first decided step by which Russia practically approached the solution of the Khivan question for the first time in 150 years. This important step, which rendered a divergence from the beaten track impossible, was caused by the repeated risings of the Kirghiz, and must be regarded as the key-stone of a series of other defensive measures.

A new Kirghiz chieftain, the Sultan Kenissar Kassimow—a man highly gifted, and almost worshipped by his fellow-countrymen—had recommended the war against the Russians begun by Kaip and Issetai, and had fanned the embers of revolution into bright flames, far and wide in the steppe. The Russians, who were only able to offer a comparatively feeble and badly planned resistance to the numerous and well-led armies of the insurgents, were almost helpless, and could scarcely protect themselves from the attacks and brigandage of the enemy. It was only in the year 1844 that Kenissar first found, in Lieutenant-Colonel Lebedeff, of the Orenburg line, a more than ordinary antagonist; for that officer hunted him like a wild beast about the steppe, and knew how to track him in all his hiding-places. Unfortunately his successor, Colonel Dunikovski, was not so energetic. He wished to try fair means, and accordingly assembled the Sultans, Beys, and other notables of the loyal Kirghiz tribes in great numbers about him, so as to form them into a kind of advance-guard, which would quiet and recover the revolted Arals by moral influence, and without recourse to arms. The

calculation, however, proved false. Kenissar gained time to collect new forces, awaited the approach of the expedition on the Upper Tobol, and falling upon the advance-guard with such fury as entirely to overwhelm the panic-stricken Sultans and Beys, almost under the very eyes of the main body, which came up too late, killed them all, regardless of the ties of kinsmanship. Colonel Dunikovski immediately set out in hot pursuit into the steppes, and thus committed a fresh mistake. Kenissar made a flank movement in the night, and, turning against the Russian frontier-line, put everything in disorder, burned several Cossack posts to the ground, and even threatened to demolish the entire line—"erected," so he declared, "unlawfully upon Kirghiz soil"—with fire and sword. Happily for the Russians, the "Kirghiz Schamyl," whose power attained its climax in the year 1845, and whose friendship began to be so eagerly sought by the arrogant rulers of Central Asia, was killed in a campaign which he had undertaken against the frontier of the Chinese empire, hoping thereby to reduce to subjection the nomad Kiptchaks and Kara-Kirghiz of that locality. These risings, which caused much anxiety, recurring as they did with the appearance of a new hero of the steppe, the no less dangerous Isset Kutebar, induced the Russians to extend their cordon of fortifications yet further into the steppe, and in the years 1846-48, at the time when General Obrutscheff was Governor-General of Orenburg, the forts of Orenburgskoye, Uralsk, and Kara-Butak were erected still further in the direction of the Sea of Aral. General Obrutscheff was influenced in this by the idea that, as the district situated further to the south, west, and east was encircled by the almost impassable Hungry Steppe, the long-sought natural boundary was at length reached. But the avalanche of Russian might had still to roll onwards, for to be the real masters of the steppe, the precise object in view was always, everything or nothing. It is true that the steppe districts lying within the new and very extensive line, had been quieted by the construction of the forts. But on the nomad tribes pasturing in the south-west, that is to say, on the Emba and the Ust-Urt, as well as on the Lower Syr, the new

measures had exercised little or no influence. Attacks on the Russian territory and plundering of caravans continued. General Obrutscheff proposed the erection of a new fortress on the Emba, but this plan was rejected at the special instance of the Emperor Nicholas; and the Czar, who scarcely divined the consequences inseparable from this undertaking, despatched an expeditionary corps, under Captain Schultz, across the Hungry Steppe in the year 1847, while the so-called Raimsk fortress was constructed near the mouth of the Syr, on the Sea of Aral, and the foundation of the Aral flotilla laid at the same time. At the beginning of the year 1847, two sailing vessels, the war-ship *Nicholas*, and the trading-ship *Michael*, were built in Orenburg, and were transported in pieces to the Sea of Aral.* They were put together again on the shore of that sea, and were first despatched to explore the coasts and to establish permanent fishing-stations. But on account of the lateness of the season, the *Nicholas* only reached the mouth of the Syr; it explored, however, in the next spring, the whole of the northern shore of the sea. In the meantime a third and larger vessel, the *Constantine*, had made its appearance on the sea, and in it the illustrious Butakoff now made his famous voyages, which resulted, up to the year 1849, in the exploration of the whole sea, with its entire shores and a portion of the delta of the Amu.

Butakoff's surveys and charts form, even to this day, the only material and data for studying the geography of this inland sea. The position of Fort Raimsk (or Aralsk) having proved unfavourable, it was removed in the year 1848 further east, to the site of the present Kasalinsk, more than 800 versts, as the crow flies (more than 1,000 versts by the post route), from Orenburg, and called Fort No. 1. A glance at the map is sufficient to see the exposed position of this fortress, which, far removed from the other Russian citadels, was thrown entirely upon its own resources. All supplies had to be brought down from Orenburg, even the wood for the ships from the Ural. The

* See "Khiva and Turkestan," by Captain H. Spalding. London, 1874.

little garrison was, moreover, so unequal to the police duties imposed upon it, that the caravans going north from Bokhara and Khiva were often plundered by the robbers of the steppe in the immediate neighbourhood of the fort. But still greater was the peril incurred by the new out-posts of the Russian empire from the jealousy of the Central Asian Khanates of Khokand and Khiva. The latter Khanate considered itself several times menaced by the Russian ships, which, crossing the Sea of Aral, had penetrated as far as the mouth of the Amu; and, moreover, it feared that it might lose its influence over the Kirghiz tribes, which had hitherto been nominally tributary to the Khan. The Khivans, therefore, also erected a fort, called Chodshi-Nijas, only about ten miles from the Syr, and from that point began hostilities by repeatedly crossing the Syr, and levying contributions upon the Russian Kirghiz. It was only by means of reinforcements which arrived from the north that the Russians succeeded in dispersing the Khivans, and in pursuing them so far that the Khan considered himself threatened in his capital, and consented not only to discontinue his attacks, but also to demolish the fortress of Chodshi-Nijas. Hostilities with Khiva, and the subject Kirghiz, were thus at an end until about the year 1853, while those with Khokand began in the year 1850.

This, the most north-easterly of the Central Asian Khanates, saw itself threatened at that time, not only on its north-east frontier from the direction of West Siberia—where, in the year 1847, after the subjugation of the great Kirghiz horde, which had previously gravitated to Khiva and Khokand, new towns and forts extending further to the south-west, among which we may especially cite Kopal, had been built—but also on the north-west, after the acquisition of the mouth of the Syr by the Russians. And this was the more evident, as Khokand itself nominally stretched to the very mouth of the Syr, and possessed a string of forts and settlements along that river, which flowed through the richest districts of the country. It was, besides, a matter of importance, for the sake of trade, and of the tribute which they paid, to keep as many as possible of the nomad Kirghiz under its own dominion, a thing which was now

rendered a difficult task, owing to the advance of the Russian frontier-line to the south. Thus hostility, nourished by religious hate, was simply unavoidable, and the more so as Russia, in order that Fort No. 1 might not be altogether a forlorn post, was making efforts to gain more ground up the Syr for the erection of a new line of fortresses. And after the Russians had several times defeated the Khokand troops, who at the start had assumed the offensive, and, on one such occasion, had burnt one of their forts, Kosch-Kurgan, it became evident that the principal centre of the enemy's operations was the fortress of Akmedsched, situated on the Syr, on the very spot now occupied by the fortress of Perovski. This fortress had absolutely to be seized under any circumstances, if the authority of Russia was to be preserved. But the first attempt, undertaken by command of General Perovski, so often alluded to, was not successful. After having even set the town on fire, Colonel Blaramberg had to return with his detachment of 450 men and two guns.

As a concession or a misfortune of any kind is invariably followed by the most disastrous consequences where the Central Asian people are concerned, and by consequences endangering what has already been gained, the expedition was renewed in the spring of 1853, under the personal command of Adjutant-General Perovski, on a larger scale, and turned out most successfully. The captured fortress was restored, armed, garrisoned, and henceforth called, in honour of the conqueror, Fort Perovski. At the same time, two more forts (Nos. 2 and 3) were erected between Kasalinsk (Fort No. 1) and Fort Perovski on the Syr, and in point of fact in the place of the forts of Karmakchi and Kamish-Kurgan, previously constructed by Khokand on the little River Kasaly.

The Syr-Darya line, consisting provisionally of Forts Nos. 1, 2, 3, and Perovski, was thus formed and placed administratively under a special commandant. The expedition of General Perovski was now accompanied for the first time on the Syr by two steam schooners, which were built in Sweden, and reached St. Petersburg in May, 1852. Having been taken to pieces,

they were with immense trouble transported *via* Nijni and Samara to the Sea of Aral. Ship-transport on the river was thus permanently established, and became of considerable importance in maintaining uninterrupted communication between the separate forts of the line of the Syr. Twice again, however, in the year 1853 did the people of Khokand, furious at the loss of Akmedsched, endeavour to surprise the fort with an immensely superior force from Tashkend, but in vain. On the first occasion, in August, the Cossack Chief Borodin put them to flight with a little band of brave men; and on their renewing their attempt in December, and investing the fortress with 19,000 men, the Commandant, Colonel Ogareff, made a sortie, and, although surrounded on every side by the enemy, utterly defeated them. Seventeen guns remained in his hands. Hostilities with Khokand then ceased until the year 1860, and the new line of the Syr served to a certain extent both to ward off predatory attacks from Khiva and Khokand, and to protect the transit trade.

But the line, which was already too far from the other Russian possessions, and could on that account only be supported and provisioned with extraordinary difficulty, was besides entirely destitute of any support or connection on its left east flank. Thus, nothing prevented the people of Khokand and the so-called Kara-Kirghiz, who made common cause with them, from surrounding the line to the east, and cutting them off from the fortresses situated in the rear, on the Rivers Irgiz and Turgai, and thus from Russian territory. The distance between the easterly point of the Syr line, Fort Perovski, and the westerly fortified points of South-Western Siberia, Vernoé and Kostek, was covered with a desert more than 850 versts in breadth, across which the Governors-General of Orenburg and West Siberia were unable to establish any communication.* What then remained, but to try a circuitous course to the south? The people of Khokand, however, determined upon piercing, ere it should be too late, the net which was fast closing around them,

* See some clever articles on "Russia and Khiva," by A. von Drygalski, in the *National Zeitung*.

and in the year 1860 fell with 4,000 men upon the weak West Siberian frontier fortress of Kostek. But Colonel Zimmermann utterly defeated them, and used the advantage which he had gained to attack, on his side, the enemy's territory beyond the River Chu, and annihilate two fortresses, those of Tokmak and Peschpek. In the following year the people of Khokand, not yet subdued, sought to avenge themselves by an attack on the post of Usun-Agatski, situated between Vernoé and Kostek; but they were beaten by Lieutenant-Colonel Kolpakowski more thoroughly than ever before, and the confidence of the Russians in their own superiority had already become so strong, that the infantry charged the enemy's cavalry with the bayonet, and drove them off the field. In the same year Adjutant-General Besak, who succeeded General Perovski as Governor-General of Orenburg, deemed it expedient, for the reasons already given, to weaken the people of Khokand still more by seizing the forts of Julek and Yani-Kurgan, which materially helped to extend the Syr line in a south-easterly direction. And as the campaigns hitherto fought with Khokand had but too clearly proved the weakness of the land, and as the possession of the northern portion of the Khanate was much to be desired—partly as a bridge from the Syr line to South-West Siberia, and partly because of the fertility of the country—the decisive blow was struck in the year 1864, and that, simultaneously, from east and west.

A circular note from the Russian Chancellor, Prince Gortschakoff, issued at the end of the year 1864, and principally directed against the agitation in England, on account of the energetic and systematic advance of Russia in Asia, affords the best picture of the condition of affairs at that time—a picture which, for the most part, is equally true as regards the year 1873 and the present day. The note runs as follows* :—

“(Circulaire.)

“*St. Pétersbourg, le 21 Novembre, 1864.*

“Les journaux Russes ont rendu compte des dernières opérations militaires exécutées par un détachement de nos troupes dans les régions de l'Asie Centrale avec un succès remarquable et des résultats importants.

* Parliamentary Papers “Central Asia No. 2 (1873),” p. 70.

" Il était à prévoir que ces événements exciteraient d'autant plus l'attention du public étranger qu'ils se passent dans des contrées à peine connues.

" Notre auguste Maître m'a ordonné de vous exposer succinctement, mais avec clarté et précision, la position qui nous est faite dans l'Asie Centrale, les intérêts qui servent de mobile à notre action dans ces contrées, et le but final que nous y poursuivons.

" La position de la Russie dans l'Asie Centrale est celle de tous les États civilisés qui se trouvent en contact avec des peuplades à demi-sauvages, errantes, sans organisation sociale fixe.

" Il arrive toujours en pareil cas que l'intérêt de la sécurité des frontières et celui des relations de commerce exigent que l'État plus civilisé exerce un certain ascendant sur des voisins que leurs mœurs nomades et turbulentes rendent fort incommodes.

" On a d'abord des incursions et des pillages à réprimer. Pour y mettre un terme on est forcé de réduire à une soumission plus ou moins directe les peuplades limitrophes.

" Une fois ce résultat atteint, celles-ci prennent des habitudes plus tranquilles, mais elles se trouvent à leur tour exposées aux aggrèsions des tribus plus éloignées.

" L'État est obligé de les défendre contre ces déprédations et de châtier ceux qui les commettent. De là la nécessité d'expéditions lointaines, coûteuses, périodiques, contre un ennemi que son organisation sociale rend insaisissable. Si l'on se borne à châtier les pillards et qu'on se retire, la leçon s'efface bientôt; la retraite est mise sur le compte de la faiblesse; les peuples Asiatiques en particulier ne respectent que la force visible et palpable; la force morale de la raison et des intérêts de la civilisation n'a point encore de prise sur eux. La tâche est donc toujours à recommencer.

" Pour couper à ces désordres permanents ou établir quelques points fortifiés parmi les populations ennemies, on exerce sur elles un ascendant qui peu à peu les réduit à une soumission plus ou moins forcée.

" Mais au delà de cette seconde ligne d'autres peuplades plus éloignées encore viennent bientôt provoquer les mêmes dangers et les mêmes répressions.

" L'État se trouve donc dans l'alternative ou d'abandonner ce travail incessant et de livrer ses frontières à des désordres perpétuels qui y rendent toute prospérité, toute sécurité, toute civilisation impossible, ou bien d'avancer de plus en plus dans la profondeur de contrées sauvages où à chaque pas qu'il accomplit les distances accroissent les difficultés et les charges auxquelles il s'expose.

" Tel a été le sort de tous les pays qui ont été placés dans les mêmes conditions. Les États-Unis en Amérique, la France en Algérie, la Hollande dans ses Colonies, l'Angleterre aux Indes; tous ont été inévitablement entraînés à suivre cette marche progressive où l'ambition a moins de part que l'impérieuse nécessité et où la plus grande difficulté consistait à savoir s'arrêter.

" C'est aussi la raison qui a conduit le Gouvernement Impérial à s'établir d'abord d'un côté sur la Syr-Daria, de l'autre sur le Lac Issik-Kul, et à consolider ces deux lignes par des forts avancés qui peu à peu ont pénétré au cœur

de ces régions lointaines sans cependant parvenir à établir au delà la tranquillité indispensable à la sécurité de nos frontières.

“ La cause de cette instabilité réside d'abord dans le fait qu'entre les points extrêmes de cette double ligne il y a un immense espace inoccupé, où les invasions des tribus pillardes continuent à paralyser toute colonisation et toute commerce par caravanes ; ensuite dans les fluctuations perpétuelles de la situation politique de ces contrées, où le Turkestan et le Khokand tantôt réunis, tantôt séparés, toujours en guerre, soit entre eux, soit avec le Bokhara, n'offraient aucune possibilité de relations fixes ni de transactions régulières quelconques.

“ Le Gouvernement Impérial s'est donc vu placé, malgré lui, dans l'alternative que nous avons indiquée, c'est-à-dire, ou de laisser se perpétuer un état de désordre permanent qui paralyse toute sécurité et tout progrès, ou de se condamner à des expéditions coûteuses et lointaines sans aucun résultat pratique et qu'il faut toujours recommencer, ou enfin d'entrer dans la voie indéfinie de conquêtes et d'annexions qui a conduit l'Angleterre à l'Empire des Indes, en cherchant à soumettre l'un après l'autre, par la force des armes, les petits États indépendants dont les mœurs pillardes et turbulentes et les perpétuelles révoltes ne laissent à leurs voisins ni trêve ni repos.

“ Ni l'une ni l'autre de ces alternatives ne répondait au but que s'est tracé la politique de notre auguste Maître, et qui est non d'étendre hors de toute proportion raisonnable les contrées soumises à son sceptre, mais d'y asseoir sa domination sur des bases solides, d'en garantir la sécurité et d'y développer l'organisation sociale, le commerce, le bien-être et la civilisation.

“ Notre tâche était donc de rechercher un système propre à atteindre ce triple but.

“ A cet effet les principes suivants ont été posés :—

“ 1. Il a été jugé indispensable que les deux lignes fortifiées de nos frontières, l'une partant de la Chine jusqu'au Lac Issik-Kul, l'autre partant de la Mer d'Aral le long de la Syr-Daria, fussent réunies par des points fortifiés de manière à ce que tous nos postes fussent à même de se soutenir mutuellement et ne laissassent aucun intervalle par où pussent s'effectuer impunément les invasions et les déprédations des tribus nomades.

“ 2. Il était essentiel que la ligne ainsi complétée de nos forts avancés fût située dans une contrée assez fertile, non seulement pour assurer leur approvisionnement, mais aussi pour faciliter la colonisation régulière qui seule peut préparer au pays occupé un avenir de stabilité et de prospérité, en gagnant à la vie civilisée les peuplades avoisinantes.

“ Enfin, 3. Il était urgent de fixer cette ligne d'une manière définitive afin d'échapper aux entraînements dangereux et presque inévitables qui de répression en représailles pouvait aboutir à une extension illimitée.

“ Dans ce but il fallait poser les bases d'un système fondé non seulement sur la raison qui peut être élastique, mais sur les conditions géographiques et politiques qui sont fixes et permanentes.

“ Ce système nous était indiqué par un fait très simple, résultant d'une longue expérience, c'est-à-dire, que les tribus nomades, qu'on ne peut saisir ni châtier,

ni contenir efficacement, sont pour nous le voisinage le plus incommode, et que par contre les populations agricoles et commerçantes, fixées au sol et dotées d'un organisme social plus développé, nous offrent la chance d'un voisinage tolérable et de relations perfectibles.

" La ligne de nos frontières devait donc englober les premières, elle devait s'arrêter à la limite des secondes.]

" Ces trois principes donnent l'explication claire, naturelle, et logique des dernières opérations militaires accomplies dans l'Asie Centrale.

" En effet, la ligne primitive de nos frontières le long de la Syr-Daria jusqu'au Fort Perovski d'un côté, et de l'autre jusqu'au Lac Issik-Kul, avait l'inconvénient d'être presque à la limite du désert. Elle était interrompue sur un immense espace entre les deux points extrêmes; elles n'offrait pas assez de ressources à nos troupes et laissait en dehors des tribus sans cohésion avec lesquelles nulle stabilité n'était possible.

" Malgré notre répugnance à donner à nos frontières une plus grande étendue, ces motifs avaient néanmoins été assez puissants pour déterminer le Gouvernement Impérial à établir cette ligne entre le Lac Issik-Kul et la Syr-Daria, en fortifiant la ville de Chemkent, récemment occupée par nous.

" En adoptant cette ligne nous obtenons un double résultat. D'un côté la contrée qu'elle embrasse est fertile, boisée, arrosée par de nombreux cours d'eau; elle est habitée en partie par des tribus Kirghiz qui ont déjà reconnu notre domination; elle offre donc des éléments favorables à la colonisation et à l'approvisionnement de nos garnisons. De l'autre elle nous donne pour voisins immédiats les populations agricoles et commerçantes du Khokand.

" Nous nous trouvons en face d'un milieu social plus solide, plus compact, moins mobile, mieux organisé; et cette considération marque avec une précision géographique la limite où l'intérêt et la raison nous prescrivent d'arriver et nous commandent de nous arrêter, parce que d'une part toute extension ultérieure de notre domination rencontrant désormais non plus des milieux inconstants, comme les tribus nomades, mais des États plus régulièrement constitués, exigerait des efforts considérables et nous entraînerait d'annexion en annexion dans des complications incalculables,—et que d'autre part ayant désormais pour voisins de pareils États malgré leur civilisation arriérée et l'instabilité de leur condition politique, nous pouvons néanmoins espérer que des relations régulières pourront un jour se substituer pour l'avantage commun aux désordres permanents qui ont paralysé jusqu'ici l'essor de ces contrées.

" Tels sont, Monsieur, les intérêts qui servent de mobile à la politique de notre auguste Maître dans l'Asie Centrale; tel est le but final que les ordres de Sa Majesté Impériale ont tracé à l'action de son Cabinet.

" Vous êtes invité à puiser dans ces considérations le sens des explications que vous fournirez au Gouvernement auprès duquel vous êtes accrédité, si vous êtes interpellé ou si vous voyez s'accréditer des suppositions erronées quant à notre action dans ces contrées lointaines.

" Je n'ai pas besoin d'insister sur l'intérêt évident que la Russie a à ne pas agrandir son territoire et surtout à ne pas se créer aux extrémités des complications qui ne peuvent que retarder et paralyser son développement intérieur.

" Le programme que je viens de tracer rentre dans cet ordre d'idées.

" Bien souvent durant ces dernières années, on s'est plu à assigner pour mission à la Russie de civiliser les contrées qui l'avoisinent sur le continent Asiatique.

" Les progrès de la civilisation n'ont pas d'agent plus efficace que les relations commerciales. Celles-ci pour se développer exigent partout l'ordre et la stabilité, mais en Asie elles réclament une transformation profonde dans les mœurs. Il faut avant tout faire comprendre aux peuples Asiatiques qu'il y a plus d'avantage pour eux à favoriser et assurer le commerce des caravanes qu'à les piller.

" Ces notions élémentaires ne peuvent pénétrer dans la conscience publique que là où il y a un public, c'est-à-dire, un organisme social et un Gouvernement qui le dirige et le représente.

" Nous accomplissons la première partie de cette tâche en portant notre frontière à la limite où se rencontrent ces conditions indispensables.

" Nous accomplissons la seconde en nous attachant désormais à prouver aux États voisins par un système de fermeté quant à la répression de leurs méfaits, mais en même temps de modération et de justice dans l'emploi de la force et de respect pour leur indépendance, que la Russie n'est pas leur ennemi, qu'elle ne nourrit à leur égard aucune vue de conquête, et que des relations pacifiques et commerciales avec elle sont plus profitables que le désordre, le pillage, les représailles et la guerre en permanence.

" En se consacrant à cette tâche, le Cabinet Impérial s'inspire des intérêts de la Russie. Il croit servir en même temps les intérêts de la civilisation et de l'humanité. Il a droit de compter sur une appréciation équitable et loyale de la marche qu'il poursuit et des principes qui le guident.

(Signé)

" GORTSCHAKOFF."

From the Ili valley and the basin of the Balkash Lake, Staff-Colonel Tcherniayeff proceeded in a south-westerly direction, and captured the important fortress of Aulie-Ata, which lies on the Talas, to the east of the Kara-tau chain; whilst Colonel Verevkin,* starting from Julek on the Syr, turned to the south-east and took the city of Azret, or Turkestan, which gives the name to the entire region. After these deeds of arms, the two victorious detachments joined company west of the Kara-tau, under the command of Colonel Tcherniayeff, for the purpose of taking by storm the strong fortress of Chemkent, which lies further south, on one of the eastern tributaries of the Syr. At the first glance, it might appear that, with the posses-

* He was Lieutenant-General in 1873 of the Orenburg and Mangishlak divisions, was in command of them, and, for the first time, compelled the capital to surrender.

sion of Azret and Chemkent on the one hand, and of Aulie-Ata on the other, the chain of the Russian southern boundaries, from the Sea of Aral to the Upper Ili and Vernoé, was as firmly welded as it could possibly be, and the more so as the line over the Kara-tau was almost everywhere defined by larger or smaller rivers, which facilitated the passage. But whether it was that the country, favoured by the climate, and particularly fruitful in the neighbourhood of the water-producing mountain chain, appeared to the conquerors, who had hitherto been but poorly rewarded for their toils, to be an oasis worthy of possessing; or that the enemy seemed still too strong and dangerous; or that the expeditionary corps was suffering from temporary want of provisions, it is enough that General Tcherniayeff thought it time to deal another great stroke against the hostile bands who were gathering around him, and to push on, instead of remaining stationary or even retreating. His aim was Tashkend, situated further south on the Chirchik, one of the right-hand tributaries of the Syr—a city, after Khokand itself, the most considerable and flourishing in the Khanate. But the walls of the fortress kept off the assailants, who had no storming-ladders, and the attack of the 2nd of October, undertaken in spite of this want, was so vigorously repelled that the Russians were forced to retire on Chemkent. The courage and assurance of the excitable and sanguine Central Asiatics so increased, owing to the misfortunes of the enemy, that Khan Alim-Kul, going round Chemkent, where the principal Russian force was stationed, dared to advance against the city of Turkestan with 10,000 men. The capture of this weakly garrisoned fortress was, however, frustrated by the heroic valour of the Cossack Jessaul Särow, who, a true Leonidas, with but 112 Cossacks, and a wretched cannon, kept off the army of the enemy for three whole days, and thus compelled Alim-Kul to return to his country. The Russians now considered it advisable to content themselves provisionally with what they had won, and then to make themselves at home there, with that peculiar aptitude acquired after so long a practice. The Turkestan frontier-district was, therefore, formed in the year 1865

was composed of the newly conquered land, with the addition of the Syr line, and placed under the control of a military Governor subordinate to the Governor-General of Orenburg. The new province was named after the town of Turkestan, received a regularly organized administration, and, what was of paramount importance, a properly managed postal service with Orenburg by the forts of the Syr line.

The extension of the Russian boundaries to the south, to the Hindoo Kush, would now perhaps have remained stationary for a time, had not the ruler of the Khanate situated to the south of Khokand, the most mighty of all the Central Asian Khanates—Seid Mosaffar, of Bokhara—sought to make capital out of the momentary weakness and the internal disturbances of Khokand. He came to blows with Khokand on the border; and the Russians, fearing lest he might have in view the acquisition of Tashkend, which was but 15 miles from Russian territory, found themselves compelled to break the peace, and to possess themselves of Fort Nijasbeg, situate further up on the Chirchik, and which was of importance, as from it Tashkend might have been deprived of water. When, therefore, the Bokharians advanced from the south, General Tcherniayeff marched, for the purpose of anticipating them, on the 7th of May, to Tashkend, under the walls of which city he had to fight a warm engagement with the Khokanders under Alim-Kul. Alim-Kul fell in this battle, and some of the advancing Bokharian forces succeeded in getting into Tashkend. The Russians, who had previously captured Fort Chinaz, which lies on the road to Bokhara, now determined to storm Tashkend for the second time, and after a struggle which lasted three days, the attempt succeeded. As the Bokharian troops had made common cause with the Khokanders in the defence of the town, the fate of this Khanate also was sealed. The ruler of Bokhara, who, as the successor of Tamerlane, regarded himself as the suzerain of all the other Khanates, which were for the most part subject to the latter's second empire, and also as the defender of the Mahomedan religion, thought that he might bid defiance to the Russians, and annex that portion of Khokand which had not

been conquered by them. He thus practically possessed himself, in quick succession, of the important cities of Khojend and Khokand, made a new Khan, Khudajar-Khan (who, having been twice deposed, had sought refuge in Bokhara), his Bey or Governor, and sent General Tcherniayeff a despatch, couched in arrogant terms, calling upon him to evacuate Tashkend, as it belonged thenceforth to Bokhara. Tcherniayeff's reply was so clear that Seid Mosaffar condescended to negotiate. In order to arrive at a definite result, an embassy under Colonel von Struve* was sent to the Emir in the November of 1865. The embassy was accompanied by Captain von Gloukhovsky, Lieutenant-Colonel Tatarinoff, and the topographer Kolesnikoff, and had for a long time to experience the most extraordinary adventures in Bokhara. Now followed a peculiar game of intrigue, subterfuge, cunning, and treachery, mixed up with insolence and religious fanaticism, which certainly does no credit to the diplomacy of the depraved Uzbek States, and of which we shall have further instances in later transactions with Khiva. Seid Mosaffar received the Russian emissaries, it is true, but he never let them go again, but kept them in confinement, though he always treated them well. In order to effect the liberation of the prisoners, Tcherniayeff collected, in January, 1869, his troops, comprising 14 companies of infantry, 6 sotnias of Cossacks, and 16 guns—in all about 2,500 men—and marched to Jizak, on the borders of Bokhara. But as he was informed by the Emir that the embassy was already returning, he marched back to Chinaz. Seid Mosaffar, however, still detained the emissaries in Bokhara, and, ridiculing the credulity of the Russians, sent against them bands of cavalry, who almost succeeded in slaughtering them.†

* Colonel von Struve accompanied General von Kauffmann as a diplomatist in the campaign of 1873 against Khiva, and is now envoy to Japan. He must not be confounded with his relative, the distinguished astronomer, Hofrath von Struve. Gloukhovsky published a very interesting account of the mission in the "*Bulletin de la Société de Géographie*" (Paris, September, 1868), under the title "*Captivity in Bokhara*," by M. Gloukhovsky, translated from the Russian by M. P. Woelkel, with notes by M. N. de Khanikoff.

† The Emir of Bokhara, who was at Samarkand at the time, was thrown into

General Tcherniayeff was relieved in the spring of 1866 by General Romanovski, who immediately sent to the Emir, and requested him to release the emissaries at once, and remove his troops from Russian territory. In reply, Bokharian horsemen appeared close under the walls of Tashkend. General Romanovski now commenced in real earnest, and, marching with his detachment up the left bank of the Syr, fought the decisive battle of Irdshar, on the 8th of May. Romanovski, with 14 companies, 5 sotnias of Cossacks, 20 guns, 8 rocket apparatus—in all scarcely 3,600 men—here defeated the army of the Emir, which comprised about 35,000 Kirghiz, 5,000 well-armed Bokharians, and 21 guns, and had taken up, in all the pride and confidence of victory, an intrenched position on a height above the road to Samarkand, scattering his troops on all sides, and entirely dispersing them, besides carrying off a vast amount of booty. The army of the Emir, so numerous and hitherto deemed invincible, fled, panic-stricken and in the utmost disorder, to Samarkand, so that Romanovski was not decided whether to pursue the fugitives to the south-west, or first of all to seize the strong cities of Nau and Khojend, which were situated further up on the Syr, and, although subject to Khokand, had been occupied by the Bokharians, who were anxious to possess them. The latter plan was the one adopted, because, by means of the advance of the Russian boundaries beyond Khojend, the territory of Bokhara to the

no small consternation by the quick and energetic measures taken on the part of Tcherniayeff, and on the first news of the approach of the Russian troops, he ordered the prisoners to be taken to Samarkand from the capital of Bokhara, where they had been up to that time closely confined in a house. He might then have had the intention of liberating them, but when shortly after the cunning Emir got the news, through spies from the Russian camp, that the Russians had to suffer so much from want of food and firewood, being without tents in deep snow, and with a temperature of 17° to 18° (Réaumur) below zero, and that, in consequence, Tcherniayeff found himself compelled to retreat, the Emir not only retained the prisoners, but even redoubled his vigilance over them. As Struve, whose extremely kind and brotherly hospitality at the head-quarters of General Kauffmann the author can hardly praise enough, says, the forsaken prisoners then gave up all hope of escape, and looked with terror to a cruel death, from which escape was impossible.

south-west became separated, as if by a wedge, from the rest of the Khanate of Khokand on the Upper Syr, in a manner strategically most advantageous to Russia. Khojend was taken by storm on the 24th May (6th June, New Style), after a siege of eight days and the bombardment of the town by 2 mortars and 18 field-pieces. Far into the steppe did the Kirghiz messengers of woe bear the news of the fall of Khojend, and of the still more sanguinary defeat of Irdshar. But the pride of the Emir of Bokhara was not yet humbled by these reverses, and the war party prevailed at his court.

However, the Emir set the imprisoned Russian emissaries at liberty on the 14th of June, and addressed a despatch to Romanovski, in which he expressed his sincere (?) wish to live in peace and friendship with Russia. But at the same time, the Russians learned through their spies that preparations for a new campaign were being actively carried on in Bokhara. Romanovski therefore sent an ultimatum to the Emir, in which he clearly stated that he could only reckon on a durable peace, if he would once for all proclaim the equality of the Russian subjects with his own, and give solid guarantees for the security of the trade with Russia.

Seid Mosaffar vouchsafed no reply to the Russian proposals for peace, but, urged on by his fanatical mollahs, proclaimed the *gasawata*, or war of vengeance, throughout the length and breadth of the land. The preparations assumed immense proportions. Under these circumstances the Governor-General of Orenburg, Adjutant-General Kryshanovsky, himself undertook the chief command in Turkestan. The points in view were the two Bokharian border-fortresses of Uratiube and Jizak, which, situated at passes* of the mountain chain which bounds the Zerafshan district to the north, now formed the only stations of support still in the Emir's possession in the district of the Syr. Both of these fortresses had to succumb, one on the 2nd of October, the other on the 18th, to European generalship, and especially to the irresistible heavy cannon, so that at the

* Tamerlane's Gate and the Awtschy Pass.

close of the year 1866, the conquered ring extended south as far as the snow-capped ridge of the Kashgar Dawan,* which stretches to the west. The Russians did not, however, yet feel themselves in a sufficiently strong strategical position; and therefore the operations in the heart of Central Asia were again continued. Yani-Kurgan was taken in the spring of 1867, because it lay not far from Jizak, and enabled the Bokharians, during a possible siege of that border fortress, to cut off the water of the besieged, and thus to compel the latter to surrender a position which was of the utmost importance in retaining possession of the basin of the Syr. Twice did the Bokharians, raised to the most extreme pitch of fury, endeavour, with 45,000 men, to snatch the fort from the little band of Russian conquerors; twice were they obliged by the defender, Colonel Abramoff, to abandon their design with considerable loss.

In consequence of the great territorial extension of the Syr-Darya district, it was at this time, by order of the Czar, separated from the Orenburg, and united with the likewise newly conquered district of Ala-tau or Semirietchensk, which lies to the east of the Kara-tau, thus forming the Government-General of Turkestan, with Tashkend† as capital. The Governor-General, General von Kauffmann, so well known in connection with the campaign of 1873, received full powers to treat quite independently with the monarchs of the Khanates situated east of the Caspian Sea, and in the district of the Syr-Darya. At the same time the administration of the western portion of the Kirghiz steppe was made over to him, while the Governor of Western Siberia was entrusted with the control of the eastern portion, and with the defence of the Russian boundaries to the west of China.‡ General von Kauffmann

* Aksai-tau, Kamanbaran-tau, Fan-tau, &c.

† This happened in July, 1867. In May once more an embassy coming from the Emir with overtures of peace had been received at Orenburg. The negotiations for peace thus commenced were, however, stopped, as meanwhile General von Kauffmann had been appointed Governor-General, and, in consequence of this, the Bokharian plenipotentiary had been recalled from Orenburg, in order to treat with Kauffmann himself.

‡ The fixing of the political limits of the new province and its administration

reached Tashkend in August, 1867, and found, that although Khokand, still partially independent, was seemingly apathetic, the relations with the powerful Khanate of Bokhara left much to be desired. Not only were bands of Kirghiz from Bokhara

were ordered by an Ukase of the 11th (23rd) July, 1867, the main contents of which were as follows:—

“As We consider it expedient to modify the civil and military organizations of the districts bordering China and the Khanates of Central Asia, which constitute a part of the Governments-General of Orenburg and West Siberia, We will and order hereby :

“1. In Turkestan is immediately to be organized a Government-General, which is to be composed of the province of Turkestan, the circuit of Tashkend, the districts lying on the other side of the River Syr-Darya, and occupied in the year 1866, and of that part of the province of Semipalatinsk which lies south of the mountain chain Tarbagatai.

“2. The frontiers of the Government-General of Turkestan shall be : (a.) In the direction of the Government-General of West Siberia, the mountain chain of the Tarbagatai and its spurs up to the present frontier, which separates the province of Semipalatinsk from that of the Siberian Kirghiz; this boundary up to Lake Balkash, further on an arc which runs right through the middle of the lake, and is equidistant from both shores; a straight line to the River Chu, and, finally, the course of this river up to its confluence with the Sary-Su. (b.) In the direction of the Government-General of Orenburg, a line which runs from the middle of the Gulf of Perovski in the Sea of Aral, over the mountain of Termembes, over the place called Terekli, over the mountain Kalmas, the place Musbill, the mountains Akkum and Tschubar-Tubia, over the southern points of the sandy desert Myin-Kum, and the place Myin-Bulak, up to the confluence of the Rivers Sary-Su and Chu.

“3. The new Government-General will be divided into two provinces, that of the Syr-Darya and that of Semirietchensk, and the boundary between them will be formed nearly by the River Kuragaty.

“4. The supreme administration of the country thus formed will be entrusted to a Governor-General, and, under him, the special administrations of the provinces of Syr-Darya and of Semirietchensk to military Governors. As to the administration of the troops and the military establishments, the two provinces together form the military district of Turkestan; and the Governor-General with the title of ‘General of the Troops of the District;’ and the military Governors with the titles ‘Generals of the Troops of the Provinces,’ will have the command over the troops there.

“5. In establishing the provinces of Syr-Darya and Semirietchenak, the civil authorities now there will remain under the command of the respective military Governors as before, until a general regulation concerning the administration of the whole country shall be given.”—“*Journal de St. Pétersbourg*,” 16th July, 1867. See Fr. v. Hellwald, “*Die Russen in Central-Asien*.” 1873.

incessantly attacking the Russian posts along the Syr-Darya, and in many cases carrying away captives with them, but the disposition of the population in the cities taken by the Russians, and particularly in Tashkend, proved that they only regarded the present situation as of a temporary nature, and were convinced that, sooner or later, they would become rid of their oppressors. As peculiar evidence of these hopes of liberty, it is worth mentioning that the Sarts, who had met the Russians in a very lukewarm manner, whenever they could do so without risk, thrashed and plundered the Jews, who always sided with the dominant power, and who received no sympathy from the Mahommedans.

Thus the cries of distress of the ill-treated Jews, who were always on the look-out for protection, served General von Kauffmann as a barometer of public opinion in the country, and induced him to check the increasing excitement by decisive measures; and the avalanche of Russian might rolled further and further to the south, to the splendid valley of the river Zerafshan, to the summer residence of the Emir of Bokhara, Samarkand, to the sacred burial-ground of Tamerlane, whilst Seid Mosaffar, faithful to his old policy, sought to hold back the conquerors by means of crafty agents and deceitful promises.* The rich and flourishing city surrendered, without a blow, on the 13th of May, the Bokharian troops having been fearfully defeated on the preceding day by Kauffmann's army, numbering 3,000 men, on the

* It would not be out of place to mention here an erroneous opinion which Vambéry expresses in his otherwise very clear "Description of the Samarkand Campaign" (*"Monatsschrift für deutsche Litteratur, 1869"*). According to Vambéry the Governor-General von Kauffmann is said to have always put off with empty promises the Emir's embassies that appeared several times during the years 1867-68, only to gain time to prepare a campaign on a large scale, and then to fall upon Samarkand, suddenly and unexpectedly, at the beginning of April, 1868. Such was, however, not the case.

General von Kauffmann had twice made the Emir overtures of peace, and had, at the same time, urgently requested him to communicate his final and definite decisions, as he would be travelling to St. Petersburg at the end of March, 1868, to report to His Majesty the Emperor on his ultimatum. In the ultimatum in question, among other points the following were raised:—

- "1. Equalisation of tradesmen in all towns of Bokhara;

heights which lie before the town. Even the turncoat Sarts begged to be admitted into the Russian administrative system, and prepared sumptuous banquets for the astonished victors. In order to support the position won in the Zerafshan valley, the Russians next took the towns of Urgut and Katta-Kurgan, the latter of which is situated on the direct road to Bokhara, 65 versts from Samarkand.

Notwithstanding these repeated disasters, the resistance of the Bokharians did not diminish, but, on the contrary, the warlike populations of the province of Schehriseb, which, although a vassal of Bokhara, was almost independent, took part in the religious war against Russia, and assembled their forces at Kara-Tube, to the east of Samarkand, whilst the Sarbasses (regular troops) and the cavalry of the Bokharian militia mustered near Katta-Kurgan, on the north-west of Samarkand: and when, in order to resist this double attack, Colonel Abramoff, regardless of many warnings from the sharp-sighted Jews, marched out of Samarkand, with the greater part of the forces at his disposal, to meet the Schehrisebans, the Bokharians threatened Katta-Kurgan. On the receipt of this intelligence, Colonel Abramoff, abandoning all pursuit of the Schehrisebans, annihilated, on the 2nd of July, the last army of the Emir on the Serabulin heights. He was not a moment too soon; for the Russians, after leaving a garrison of only 700 men, with a number of their sick and wounded, in Samarkand, had scarcely

"2. Equalisation of the taxes (2½ per cent. of the value of goods) for Russians as well as for natives;

"3. The permission to establish in Bokhara Russian caravansaries, and to appoint commercial agents;

"4. A war indemnity of 125,000 tillas (500,000 roubles);

"5. The frontier should be formed by the mountains of Nuratanyn;" &c.

No reply whatever had been given on the part of the Emir to these repeated overtures of peace up till the end of March. On the contrary, when at last, at the beginning of April, Kauffmann resolved to travel to St. Petersburg, and when the post-horses were already ordered, the news suddenly arrived that, in the place of any reply, the Emir was collecting troops, with the intention of falling upon Jizak as soon as the Governor-General should have departed. Kauffmann, therefore, immediately gave up his journey, and determined to be beforehand with the Emir in assuming the offensive.

turned their backs upon the town, when the inhabitants, reckoning on the annihilation of the enemy's principal army, hoisted the banner of revolution, and tried to give their town over to a Kirghiz-Bokharian army of 15,000 men, which seemed to have sprung from the very earth. For seven days did the Russians in their citadel, which was strewn with the enemy's balls, and the gates of which they had scarcely had time to close, offer a heroic resistance, under Lieutenant-Colonel Nasaroff and Major von Stempel. Two hundred men were already killed and wounded, provisions and ammunition were running short, and the garrison were utterly exhausted, when the firing of cannon and the flying of rockets announced the approach of the relieving army returning from a victorious contest. Samarkand thus remained in the hands of the Russians, who, as a punishment for their treachery, hanged a number of the guilty inhabitants at the doors of their houses.

Seid Mosaffar was so utterly disheartened by his incessant misfortunes that, at the conclusion of peace, he not only consented to surrender to the White Czar the Zerafshan district (now a special circle of the Government-General of Turkestan), which the Russians had conquered, and to allow the transit-trade in the very considerable territory which he still possessed, but he even asked for permission to abdicate and undertake a pilgrimage to Mecca. It was, however, of importance for Russia to have in Bokhara a ruler who had learned to recognise her supremacy in no unmistakeable manner, and who had lost all taste for further hostilities. Seid Mosaffar was, therefore, not only confirmed as ruler in Bokhara, but was even assisted by the Russians in the suppression of a rising which had broken out among his subjects, and was led by the Emir's ambitious son, Kati Tjura. It was again Major-General Abramoff, the chief of the circle of Samarkand, who marched from Katta-Kurgan to the south to encounter the rebels, taking the town of Karschi and dispersing the enemy. As the Beys of Schehriseb had given the fugitives shelter in their mountains, and wanted to take advantage of the weakness of the Emir to revolt, Russian troops proceeded in August, 1870, under most difficult circum-

stances, to the mountain country, which seemed given up to continual disturbance, took the towns of Schari and Kitab, drove out the rebel Beys, and invited Seid Mosaffar, in the politest manner, to resume the government over this portion of his territory also. The Emir, once so proud, although nominally independent, has now been for years an obedient vassal of Russia, who deems it more profitable to entrust the guardianship of her southern boundaries, which are not far from the upper course of the Oxus and the Hindoo Kush, to a responsible satrap, than to lavish money and men upon them.

The same state of things exists with regard to Khokand, which is of great advantage to Russian trade, and the independent existence of which is only due to the fact that it forms a most useful bulwark against Kashgar, which is governed by Yakub Bey. Among the latest territorial acquisitions on the eastern border of Turkestan is the Upper Zerafshan district, called Kohistan, which was annexed by General Abramoff in 1870, and the final conquest in 1871 of the Khanate of Kuldja on the Ili, formerly tributary to China, which satisfactorily secured the frontier of the Semirietchensk district to the east.

After this account of the advance which embraced the Kirghiz steppe, and the Kizil-Kum desert on the east, and which was effected on the base of attack in a southerly direction, extending from the River Ural to the Balkash Lake, we shall now turn once more to the central position marked by the Sea of Aral, and to the right flank lying between the Caspian and Aral Seas. We thus arrive at the third section of the historical sketch, which includes the most recent events, but, more particularly, those which directly prepared and led to the conquest of Khiva in the summer of 1873.

CHAPTER III.

FROM THE BEGINNING OF THE PREPARATIONS FOR THE CAMPAIGN
AGAINST KHIVA, TO THE BEGINNING OF THE YEAR 1873.

THE territorial extension of the Russian dominion in the districts of the Caspian Sea, on the western side of the Khivan empire, has not kept pace at all with the comparatively rapid conquests in the east, along the course of the Syr to the south-east, for reasons, indeed, which are directly to be attributed to the character of the deserts, that offer no points of support, as well as to the disposition of their roving inhabitants. In the whole broad tract to the east of the Caspian Sea, as far as the foot of the Tian-Shan and the Pamir plateau, travelling from the southern Urals up to the mountains of Khorassan, one does not find a single oasis, except Khiva, which is worth possessing for other than merely political or strategical reasons. The entire eastern coast of the Caspian Sea is, with a few exceptions, almost destitute of any kind of vegetation, and offers scarcely any other means of existence than that which is provided by fishing; harbours, owing to the shallowness of the shore, are few and bad, and the climate is in many parts unhealthy. The interior, as far as the oasis of Khiva, has nowhere any settled inhabitants, and is only visited at regular seasons by the nomad Kirghiz and Turcoman tribes with their flocks and herds. The whole country which lies between the Syr and Amu-Darya is nothing but a barren desert, right up to the Sea of Aral, and its scant vegetation hardly affords sufficient nourishment to the easily satisfied camels and steppe horses of the Kirghiz, travelling northward or southward, according to the season of the year. The cattle often succumb in large numbers to hunger and thirst, and yet only a few nomads are induced, from necessity, to spend the whole twelvemonth on the same spot, and increase their means of existence by agriculture. Indeed, even

the few Kirghiz who are settled in the neighbourhood of the Russian frontier, on the Emba, the Ural, in the Orenburg Government, and on the Syr, are, at particular seasons of the year, seized, like birds of passage, with the old instinct for wandering, and journey with their flocks either northward to the plains of West Siberia, so rich in grass, or to the steppes which skirt the southern spurs of the Ural, or to the Ust-Urt.

As these unsettled habits of her subjects, which led to all kinds of disturbances, revolts, and robberies, were a source of the greatest inconvenience to Russia, the entire administrative activity of the Government-General of Orenburg has been directed, during the last ten years, to confining these nomads within fixed limits, and to extend as far as possible the area of territory subject to tribute. These costly exertions would undoubtedly have already been attended with greater success, had not Khiva, lurking like a spider in her web, and from time immemorial hostile to the Russians, after the conclusion of peace in 1842, continually endeavoured to paralyse the influence of Russia in the steppe districts, to the east and west of the Sea of Aral, and especially, to excite the Kirghiz dwelling on the Ust-Urt, on the peninsula of Mangishlak, and in the steppes on the Emba, to constant risings and to predatory raids into Russian territory. Khiva was always a market for the goods taken from Russian caravans, and for the prisoners, who were captured by the nomads from the detachments sent out on police duty into the steppe, and were there sold as slaves. Thus Isset Kutebar, the rebel of whom mention has already been made, a son of the Isset who escaped to Khiva somewhere between 1830 and 1840, enjoyed the staunch protection of the Khan of Khiva, and, after his temporary subjection in the year 1857, began his robberies anew. This state of things lasted, with the support of Khiva, until the year 1859, when the then Governor-General of Orenburg, Adjutant-General Katemin, succeeded, by the gift of an official post, in attaching him to Russian interests. The steppe is now for some time in a state of perfect repose, and even Khiva

displayed at least no open hostility, so that in the year 1859 an embassy, under the Aide-de-Camp Colonel Ignatieff, was despatched thither for the purpose of establishing commercial relations. This embassy, which could, perhaps, in addition, have turned its attention to military matters, was supported by one of the steamers of the Aral flotilla, which plied to the mouth of the Amu-Darya. Adjutant-General Katemin was determined on affording the expedition material and moral support by means of a reconnaissance detachment of some strength, which he himself led into the steppe. That Khiva, notwithstanding her apparent tranquillity, entertained no friendly disposition towards Russia, and had supported at least with her sympathies, the Khanates of Khokand and Bokhara in their defence, is proved by the fact that, in the year 1868, she gave refuge on her own soil to the son of the Emir of Bokhara, Kati-Tjura, who was dissatisfied with the yielding disposition of his father. In the year 1863, under the command of the extraordinarily active General Besak, a new station of support was established in the north-west steppes. This was the Emba fortification, which contributed materially to the pacification of the district, and to the protection of the caravan road leading from the River Ural to the northern coasts of the Sea of Aral.

The latest events in the western steppe districts which preceded, and led to the campaign against Khiva, took place under Governor-General Kryshanovsky, who is at the present moment still resident in Orenburg, and who, as is known, played a prominent part in this capacity in the campaigns against Khokand and Bokhara, from the year 1865 until the arrival of General von Kauffmann. After the termination of the campaign against Bokhara in the year 1868, Adjutant-General Kryshanovsky deemed it in accordance with the spirit of the age to subject the Kirghiz who belonged to his Government-General, and who, since their annexation with Russia, had been ruled in almost the old patriarchal fashion by their own Sultans and Beys, to an administration which was analogous to that in force with the rural population of Russia, and was divided into

circuits and *volosts*. But as by these innovations the life of the Kirghiz was brusquely altered, and the prerogatives of Sultans, Beys, and priests were abolished; and as, in particular, every nomad family was called upon to contribute a yearly tax of 3 roubles 50 copecks, the steppe was soon in open rebellion, and this rising was all the more difficult to put down, as a large proportion of the line battalions and Cossack regiments, which had previously been quartered in the Orenburg Government, had been transferred to the newly formed Government-General of Turkestan, and a new division of troops was only just in process of formation. Reinforcements from the interior of Russia could only be despatched to the scene of action after a lapse of some months. Nevertheless, thanks to the unprecedented energy of the Commander-in-chief, backed by the valour and skill of the leaders of the detachments sent into the steppe, and, moreover, to the erection of new fortresses on the Upper Ilel and on the Middle Kil, tranquillity was finally restored, although the difficulties were almost insurmountable. That in these disturbances Khiva not only had a secret hand in the game, but even openly supported the insurgents, may be proved by the presence of Khivan bands in the desert of Barsuk, and even to the north of the Ust-Urt.

As, however, the Chiklinsk Kirghiz, a powerful race, who lived in the desert of Barsuk, and who were ruled by Isset-Kutebar, refused to make common cause with the hereditary enemy of Russia, and as, moreover, the Russian expedition under the chief command of Major-General von Ballusek quickly hastened to its relief, the Khivans could not carry out their plan of taking the Emba fortress, and betook themselves homewards; thus materially improving the situation as regards Russia, and limiting the revolt to the Ural district, which, owing to its proximity to the Ust-Urt places of retreat, and to the continual excitement fomented by the Khivan emissaries, was only pacified late in the autumn of 1869.

In anticipation of the renewal of the disturbances in the following year, the Russians planned the construction of a line of forts along the northern margin of the Ust-Urt, to

bar the approach of the Khivans; but, after further deliberation, General Kryshanovsky contented himself for the moment with erecting, in the spring of 1871, at the mouth of the Emba and near Tschuschka-Kul, on the steppe River Chegan to the north of the Ust-Urt, two independent posts, whose duty it was to quell disorder, and to find sites for the building of forts, but especially to collect as much news as possible respecting Khiva and the designs of its Government.

Thus, while in the east, along the Syr, warlike operations were carried on with considerable energy, resulting in the circumvention of the Khivan empire from that quarter, military operations on the north and west were almost at a standstill. The Russian movements were confined to preparing for an energetic advance, by means of scientific investigation, and military reconnaissances. Thus, in the years 1854-55, Staff-Captain Antipoff undertook a survey of the south-eastern portion of the Government of Orenburg. Borszoff and Säwerzoff travelled in 1857-58 in the districts bounded by the Ural and Irgiz Rivers, between the Aral and Caspian Seas, and gave important information respecting the Mugadshar mountains and the Ust-Urt plateau. In 1858 an expedition under Nicholas von Khanikoff went to Persia, and in 1858-60 accurate surveys were made of the eastern shore of the Caspian Sea, and on the Ust-Urt, along the Karabugas as far as the Balkan Bay. The coasts were at the same period explored by Captain Iwaschintzoff, and the peninsula of Mangishlak by Dandeville. Many other explorations and expeditions in the various districts of Turan made at this time might also be mentioned, all of which, apart from their scientific object, aimed at discovering as much as possible about the unknown regions which enclosed the enemy's country, and had always rendered it unapproachable, so as to be prepared for future eventualities, and thoroughly acquainted with the topography.* The majority of the expeditions had

* The famous journeys of the bold and fearless Hungarian Orientalist, Professor Vambéry, whose traces Colonel Markosoff, as well as the author of the present work, have found in many places during the campaign of 1873, are well known. Though they essentially contributed towards the knowledge of the little-

started from the Orenburg Government ; only a few from the Caspian Sea and the Caucasus. As we have already seen, since 1832-34 the little fort of Novo-Alexandrovsk had existed on the Kaidak Bay, but at that time it still belonged to the administration of the Governor-General of Orenburg. When, in the years immediately preceding 1830, Russia came, by a treaty with Persia, into possession of all the islands of the Caspian Sea, they began to lay more stress upon the enlargement of the flotilla ; it was increased by several fighting and transport ships, and now served as a means of communication with the eastern shores of the sea, although to a limited extent. In order to put this naval force in some degree upon a firm footing, a small naval station had been originally formed at the Island of Sara, but in the year 1842 the sanction of Persia was obtained to the establishment of a station at Aschurade, in the Persian peninsula of Miun-Kale. Thus Russia became to a certain extent able to protect the Russian fishermen, who were still in constant jeopardy from the predatory Khivans, as well as those Turcomans who had repeatedly, between the years 1813 and 1856, declared their allegiance to the Czar. And although the sea, at a later period, cut off the extreme point of the peninsula on which Aschurade was situated, separating it from the Persian continent, and thus, by the terms of the former treaty, Aschurade was now to be considered as an island of the Caspian Sea, and therefore in Russian possession, the plan of the Government to build a fort there was never carried out, as Persia, notwithstanding, still claimed the island. An extensive naval depôt was, however, established, and a small fleet of from two to three ships stationed there, which was necessary

known Khanates, yet they were, as a matter of course, totally unconnected with the Russian advance. The very attractive and fascinating descriptions given by Vambéry, represent a highly intelligible and partly true picture of the conditions of the country. It is astonishing that he, a foreigner, disguised as a Mullah, watched and distrusted on all sides, should have succeeded in collecting such exhaustive news and notes in so short a time, and in spite of the most indescribable and most extraordinary hardships. His comprehensive note-book of travel was during the entire campaign never out of the author's saddle-bag, and was of the utmost service to him in his topographical researches.

and useful for defence against the continual incursions of the Turcomans, as Persia, according to the terms of the treaty, could keep no fleet on the Caspian Sea. Since the establishment of the station only one Russian subject, a sailor belonging to the navy, is said to have fallen into the hands of the Khivans.

Since Muravieff's journeys to the Balkan Bay in the year 1821, no expedition had ever started eastward from the Caucasus, which was the natural and real basis of all such undertakings. Communication between the east shore of the Caspian Sea and the western or Caucasian west shore was first reopened in the year 1846, when the fort of Novo-Alexandrovsk was removed to the peninsula of Mangishlak, under the name of Alexandrovsk, in the neighbourhood of Nikolayevskaya, of which mention has been made before, in reference to Cherkaski.* The old fort on the Kaiduk Bay was completely abandoned, as the climate there was so unhealthy that the mortality of the garrison, for example in the years 1835-36, amounted to about 20 per cent., while the administration of the post had almost become impracticable, on account of the impossibility of keeping up any communication during the winter with Orenburg. The new fortress of Alexandrovsk came subsequently under the control of the Caucasian military district, and was kept by the flotilla in regular communication with the Caucasus and the Volga. But the situation of Alexandrovsk always remained a very isolated one, and it was comparatively far removed from the centre of the enemy's country, the capital Khiva, as well as from that of the Caucasus, Tiflis. Muravieff's old plan of establishing a Russian settlement on the Balkan Bay was therefore again revived, when the energetic and decisive subjugation of the Caucasian population had restored order and tranquillity in the province. On that account, in the year 1859 Colonel Dandeville was despatched with an expedition to the Balkan Bay, to come to terms with the Turcomans, and, above

* The fort newly erected in 1846 was first called Novo-Petrovsk, but it was only in the year 1858 that the old name of Alexandrovsk was again given to it.

all, to survey the coasts of the Balkan range and the old bed of the Oxus, with a view to the selection of spots suitable for settlements. All Dandeville's efforts were unsuccessful, as, at the instigation of the Khan of Khiva, the coast nomads, with their flocks and all their possessions, were removed, before the arrival of the Colonel, into the interior of the country, and the expedition was thus deprived of every means of transport, and found itself unable to move away from the sea.

The incessant attacks and incursions of the Khivans, directed as they were against Russian shipping, which, owing to the growth of the fisheries on the eastern coasts, and to the richness of the naphtha wells on the island of Tscheleken, had acquired greater importance, at length compelled the Tiflis Government, in the year 1868, to proceed energetically with the execution of the earlier plan. This had become all the more necessary as Fort Alexandrovsk, situated high up in the north on the peninsula of Mangishlak, had really proved entirely useless, having gained, as yet, not a single foot of ground to the east. Up to the years 1869 and 1870 the Russian influence over the nomad races of Mangishlak was therefore merely nominal. The range of power exercised by the garrison extended only to a very short distance from Fort Alexandrovsk, the administrative centre of the country, and although the Mangishlak-Kirghiz (and especially those of the Adai race) were considered as Russian subjects, in consequence of their free communication with Khiva and unsettled mode of life, their allegiance had really become of very doubtful value. This fact was illustrated, at the end of the year 1869, by a number of small risings among the Adai, who declined to pay the kubitka tax levied upon them. The year 1870 brought a general rising of the Kirghiz tribes on the peninsula, in consequence of which bands of Kirghiz, with hostile intentions, ventured even up to the walls of the little fort. The then Commandant of Alexandrovsk, Lieutenant-Colonel Rukin, marched with a detachment against the insurgents, into the steppes of the Ust-Urt, which lie to the east; but he was surprised by Khivans, and the whole division destroyed or borne away into slavery. The Commandant,

having ascertained that there was no chance of escape, blew out his brains.

A commercial company having expressed a desire to occupy Krasnovodsk for the establishment of a factory, and a trade-route between Russia and Central Asia, Colonel Stal yetoff was sent with this object, in the year 1869, with one battalion, 4 guns, and about 50 Cossacks, to the bay of Krasnovodsk, a spot where Russia had been unable to gain a permanent footing since the unsuccessful attempts of Prince Bekowitsch, in the time of Peter the Great.

The year 1869 became one of great importance in the history of these events, as it gave rise to the schemes which may be considered as directly leading to the conquest of the Khanate of Khiva in the year 1873. Although the general interests of trade, and the protection of the Turcoman tribes subject to Russia might, at first sight, appear to be the causes of that first advance from the Caucasus, the Government was always fully aware that Khiva must ever remain the door of all commercial routes into the interior of Asia. But the history of the previous campaigns had already taught them that this door was not to be opened by peaceful negotiations, but only by force. Therefore the real object of the expedition in the year 1869 was to establish a fortified settlement on the coast, and then to advance energetically, with this station as a base, towards Khiva, after the routes leading thither had been as accurately and completely surveyed as was then possible, and had been freed from all removable obstacles. But, to effect this, *razzias* were, with the help of the tribes well affected towards the Russians, to be undertaken against their neighbours and most bitter enemies, the Yomud and Tekke Turcomans; the former inhabiting the districts lying parallel to the coast, the latter the oasis-like northern foot of the Küren-Tau range (Kioren-Dagh).

Colonel Stal yetoff landed without misadventure in the Bay of Krasnovodsk, the western portion of the Balkan Bay and only separated from the sea by a long, narrow peninsula, and laid the foundation of the present fort of the same name, close to the coast. As the environs of Krasnovodsk were destitute of

vegetation, and without good drinking water, the party soon began to run short of food, especially as new reinforcements of 2 companies and 2 guns had arrived from Baku. Stalyetoff therefore determined, after having planted a small fort in Krasnovodsk, to look for a second and more suitable point of support. Leaving the reinforcements from the Caucasus as a garrison in Krasnovodsk, he proceeded further eastward with his detachment, following the northern shore of the Balkan Bay, and began to occupy and to strengthen the point of Tash-Arvat-Kala, at the foot of the western slope of the Great Balkan. The Colonel considered this spot favourable as an outpost for Krasnovodsk, as owing both to the greater fertility and the comparative abundant supply of water of the Balkans, it gave promise of more abundant supplies for the troops than did Krasnovodsk, and he was also of opinion, that he would have from there a firmer hold on the Yomuds, who, he had heard from the Turcomans, paid a visit to the Balkan with their flocks every summer. But Stalyetoff had, in these calculations, made a twofold mistake. The Turcomans had meant by the designation of Balkan, not the isolated groups of mountains at the east end of the bay of the same name, but the high pasture-grounds of the Ust-Urt. The Yomuds and Tekkes journey every summer to the northern Ust-Urt, but they traverse on their road the plains to the east of the Balkan, which are more than 100 versts in breadth, without touching this highland, so that Tash-Arvat, which lay on the western slope of the chain, remained without any special importance. Moreover, the Colonel did not find that abundance of drinking water and food which he had hoped to procure in the mountains, but, on the contrary, he soon experienced such a want of these necessities that he was obliged to establish communication with Krasnovodsk; and, as transport by land would have been too lengthy and tedious an operation, a naval station and dépôt was formed in the bay of Michailovsk, by means of which the garrison at the first start received its supplies by ship from Krasnovodsk. But this point was also found to be extremely unfavourable, as it was so absolutely destitute of drinking water,

that all the water for the depôt garrison, which numbered 100 men, had to be procured from Krasnovodsk, and a bucket is said to have cost upwards of three roubles. Therefore a second intermediate station, that of Molla-Kari, was very soon formed not far from the mouth of the Usboi, or old bed of the Oxus, in the Balkan Bay, which subsequently, thanks only to its good drinking water, played an important part in connexion with the operations of Colonel Markosoff.

As early as the spring of 1870 the Government-General at Tiflis received from St. Petersburg express and unmistakeable instructions to pay more attention to the Alexandrovsk-Krasnovodsk line, in order to select suitable points of support for the formation of a fortified line along the Caspian Sea, as such a line would soon become of great value as a base for operations which it was decided to prosecute on the east, simultaneously with an advance from the Turkestan territory on the west.

Prince Mirsky, who was at this time entrusted with the direction of affairs in the Caucasus, ordered Stalyetoff to turn Krasnovodsk into an extensive fortress as a permanent support-point, and to adopt energetic measures towards the Turcomans of the Yomud and the Tekke tribes. A very good excuse for this was afforded by an attack of the Tekkes from the oasis of Kioren-Dagh upon Michailovsk at the beginning of the year—an attempt which was happily frustrated by the garrison. Stalyetoff marched with his detachment from the Balkan to the northern slope of the Kioren-Dagh, and along it as far as the Head Tekke fort of Kizil-Arvat (*Anglicè*, “Red woman”). The enemy had, however, deserted this fort and the entire country through which they were marching, and had carried off all their goods and chattels. The Colonel had to return to the Balkan Bay, after having marched more than 250 versts, without having achieved any result whatsoever.

The miscarriage of this undertaking, as well as the unfavourable condition of the newly erected forts on the Balkan, probably led to the arrival of a commission of experts from Tiflis, consisting of General Swistunoff and Colonel Markosoff, whose investigations decided the authorities at Tiflis, in the year 1873, to

give up the lately formed *étappe*, and send the troops back to Krasnovodsk.

More important in its results was a reconnaissance made by a few Cossacks under the leadership of Lieutenant-Colonel Skobelev. This is the same officer of whom mention is repeatedly made in connection with reconnaissances of great value undertaken in the following years, and who played a prominent part in the campaign of 1873 in the camp of Verevkin, and was the first to scale, sword in hand, the walls of Khiva. Skobelev had to discover the best road to the Khanate of Khiva, which, as was at that time believed, ought to lead directly from Krasnovodsk in a north-easterly line over the Ust-Urt plateau, and over the Betendal-Göl (lake) to Köne-Urgensch, on the south of the Aibugir Lake. The undaunted staff officer arrived, after a most trying and adventurous journey by Usun-Kuya and Sary-Kamish, at the lake already mentioned, whence, accompanied by three Cossacks and all disguised as Uzbek merchants, he was bold enough to pass through the hostile nomads, who guarded their flocks here, and to ride past the springs of Dektscha right on to the borders of the cultivated oasis of Khiva. Skobelev returned in the summer, without misadventure, to Tiflis, and added considerably to the small stock of knowledge respecting these regions, by exhibiting an accurate sketch of his routes.*

In the spring of 1871, Stalyetoff was succeeded by Colonel Markosoff, who was commissioned to carry out the new plans of the Government-General. But in order that the Tekkes might not think that the withdrawal of the garrison from Tash-Arvat-Kala was in consequence of the unlucky campaign, and therefore had proceeded from fear—which is always the first thought

* Colonel Skobelev, who was rewarded for his merits in the campaign of 1873 by the Russian Cross of St. George, and the Second Class of the Prussian Red Eagle with Swords, as well as by being appointed Aide-de-Camp to His Majesty the Emperor of Russia, must be considered as a true and perfect type of a bold, fearless, and enterprising steppe officer of the Middle Asian Army, such a type as has been produced by the abnormal conditions of the countries and tribes of Central Asia, and by the bold and quick manner in which the Russians, with few resources, are accustomed to proceed there.

Skobelev was staff officer at the head-quarters of General Lomakin in the

of Asiatics—at the very time that the movement of the troops took place, an expedition to the east was set on foot, to mask the retreat of the detachment. Markosoff therefore received orders to go from Tiflis with an expedition to Tuar, a spring lying north-east of Krasnovodsk, and 48 versts to the east of Karabugas Bay, there to make a survey of the eastern portion of the country.

With this commission Markosoff now commenced the list of his extensive and successful expeditions, which, independently of the rich gains which accrued to science by the exertions of Colonel Stebintzky, who accompanied the party, led this officer, two years before the real campaign of 1873, right up to the frontiers of Khiva, which he was not afterwards, at a more important moment, permitted to reach.

The marches of Markosoff, in the years 1871 and 1872, possess therefore very great interest with reference to our subsequent observations, because they introduce us to the system by which henceforth, taught by experience and by the discoveries of science, the Russian staff officers conducted their operations in the desert. The reconnaissances of Markosoff thus offer, to a certain extent, a direct clue to the campaign of 1873, and the experience, which had been daily acquired on the spot, contributed greatly to the success of the last campaign.

A more detailed description may, therefore, not be out of place here as an introduction to the campaign of 1873.

Astonishing are the results which the Colonel achieved, in spite of the ignorance of the state of the country which at that time prevailed, and of the scanty supply of men, provisions, and beasts of burden at his disposal, and notwithstanding the

Mangishlak detachment (see my Reports "From Khiva," 1873), with which friendly staff I had the pleasure of passing through the most tedious fatigues and privations of a desert march. Colonel Skobelev was the only officer of the column who could speak German. He also possessed a rare knowledge of the mode of war in Middle Asia, which he had practised in campaigns of the most varied kinds. I had, at the time, much to thank him for, in his brotherly reception and friendship during the frequently critical episodes of our march in the desert on the Ust-Urt, and for his good advice founded on many years' experience and knowledge of the nature of Middle Asia.

condition of the strategical points of support, and of communication with the rear. His sole base of operations was Krasnovodsk, a place which had just been founded, and which, owing to the small flotilla in the Caspian Sea, was barely able to keep up communication with Tiflis, which lay far to the west, beyond Baku and the barren steppe country of the plain of the Kur. Thus, whilst a real basis of operations was not yet formed, or at least completed, Markosoff commenced his operations thousands of versts away in the steppe and desert. As the mariner sails out upon a voyage of discovery in an unknown sea, taking with him in his ship sustenance for months, perhaps for years, cutting himself off completely from all communication with the port he leaves behind him, so did Markosoff proceed with his column, which during the entire expedition had not the slightest prospect of finding the necessaries of life—hardly even the most indispensable drinking water—on the road, but had to carry with it, upon camels, into the unknown desert, the rations for each day. In effecting this, he was, moreover, only guided by his compass, and a few ill-defined instructions, furnished by untrustworthy and perhaps treacherous Djigite or Turcoman guides. The system, if one may so term it, of flying fortified *étappe* posts, which only served as temporary quarters, and had to be abandoned on the return march, was now for the first time adopted in the desert by Markosoff, and not without result; for he thus performed, with a minimum of provisions and stores, what in the year 1873 had only been rendered possible by the accumulation of immense dépôts, the establishment of larger steppe forts, and large transport trains.

In the beginning of September Markosoff assembled his troops, comprising 4 companies of Caucasian field infantry,* each of 100 men, 2 guns (light rifled 4-pounders), and about 50 Cossacks, in all scarcely 500 men, in Molla-Kari, and

* The term "field infantry" is here used for the usual expression "infantry of the line," since in Russia "troops of the line" means "frontier troops, battalions of a cordon or line," which had been formed formerly for the purpose of garrisoning the so-called fortified lines (cordons) near the Asiatic frontiers (see Chapters IV, V, and VI).

departed on the 13th (25th) of September, along the Gösly-Ata (*Anglicè*, "Father-eye") road for Tuar. He reached Gösly-Ata without accident, after having crossed the spurs of the Great Balkan and the flat expanse of the Mahmed-Kum desert, the deep quicksand-like soil of which, intersected by innumerable sand-hills, made his onward progress a matter of extreme difficulty. The wells here were generally filled with sweet drinkable water, and in the neighbourhood of Gösly-Ata there was even some scant vegetation, camel fodder, and tufts of grass every here and there. The Colonel therefore erected here, in the neighbourhood of a small Turcoman fort and of a ruined mosque, a fortified post for from 40 to 50 men, where he could leave behind a portion of his provisions, and such of his troops as were unable to march. The column then went on to Tuar in two *échelons*. The road, which passed through broken ground cut up by deep fissures, through salt swamps at Budmudsir, and by wells sometimes filled with rain water, but often with only bitter water, had not been particularly good. In Tschagyl, however, springs were found in the sandy soil, which, at a depth of from 12 to 14 feet, contained excellent water of a pleasant taste, and not far from this lay a plain overgrown with grass and shrubs, so that Markosoff deemed it expedient to erect here (19 versts from Tuar) a little fort for a garrison of about 40 men. The Colonel himself reached, on the 21st of September (3rd of October, New Style), Tuar, which is situated in a trough-like depression at the foot of a precipitous mountain chain, stretching right up to Aglamisch, and here also he erected a fortress.

The actual instructions to proceed with reconnaissances to Tuar, which Markosoff had received from Tiflis, were thus carried out. But the Colonel, taking into consideration the good health of the troops, who in eight days had got over about 160 versts, as well as the climate and the quantity of water—circumstances which he regarded as peculiarly favourable—determined, on his own responsibility, "*L'appétit vient en mangeant*," to push his reconnaissances still further eastward, and take the Sara-Kamish road to Khiva, which Skobeleff discovered in the

previous year. After having laden the camels with 10 casks of drinking water of five to seven vedros (each containing 17 bottles) for each company, he marched on the 23rd of September (5th of October), with three companies, 50 Cossacks, and the two 4-pounders, further in the direction of Kum-Sebschen (53 versts). The wells of Kum-Sebschen, lying in a cavity of brackish sand of an elliptical form, in ancient days probably the bed of a lake, and bordered on the south by the Begendshali-Kyr, and on the north by the Kaplan-Kyr, or Tchink, which skirts the Ust-Urt plateau (according to Skobelev's computation 1,000 feet), were reached after a four days' march on the 27th of September (9th of October), and here a short halt was again made for the purpose of constructing a fortress, expressly erected for the reception of 50 infantry soldiers and 20 Cossacks, and a gun, with a large store of provisions, as it was desired to deposit here a large portion of the food, so as to lessen the difficult transport on the rest of the march. Here, as well as in the other little forts, the provision dépôt was supplied with food for two months for the garrison left behind, and in addition, with the necessary rations for the main body of the expedition on their return march, allowance being made for two days' rest, and for the journey to the next fortress.

The time devoted to these preparations was spent by Markosoff in a reconnaissance with the cavalry to the springs of Depme and Dirin ($4\frac{1}{2}$ versts), situated 29 versts further north, and between which, according to his own statement, the frontier-line dividing the pasture-grounds of the Kirghise and the Turcomans must lie. Muravieff, who in the year 1819, when passing along the shore of the Karabugas Bay, on the road to Khiva, had been attacked at the two sister springs by Turcomans, and almost killed, mentions them in his memoirs.

Returning thence with 250 men, 1 gun, and 30 Cossacks, Markosoff reached Kasakly ($34\frac{1}{2}$ versts), which is situated on the north end of the lake-like depression already mentioned, in one day, without encountering any opposition. From this point he let the detachment march forward alone to the spring of Uzun-Kuya (53 versts), over the bare and naked

plateau of the Ust-Urt, and rode himself, accompanied by a few Cossacks, to the spring of Dakly on the south, which Vambéry passed on his journey to Khiva, and the position of which was to be compared with Vambéry's accounts. Markosoff overtook the detachment, still on the march to the well of Uzun-Kuya (*Anglicè*, "Too deep well"), which was reached after great exertions, as on the road the party suffered terribly from the want of water. The shafts of the well measured 25 fathoms, and contained good water to a depth of two fathoms. The lack of water during the last march had warned the leader to be prudent, and, as on the road to Sara-Kamish scarcely any was likely to be found, they built here another fortified fort, and left behind in it all the horses with their riders, and a small force of 50 infantry soldiers besides.

With only 200 foot soldiers, a gun, and 6 horses—the officers were mounted on camels—the march to the Betendal-Göl (65 versts) was continued. The road, which runs on from the Uzun-Kuya, situated on a peninsula-like projection of the Tchink, for 25 versts on the Ust-Urt, now entered the broad hilly desert of Khiva, which is totally devoid of vegetation or drinking water as far as the great salt lake of Betendal-Göl, and its yielding, deep, and hot sand, sadly impeded the march. Before going into this barren, inhospitable district, the column halted at a pool on the declivity of the Tchink. Here, however, no water was to be found, and Markosoff thought at first that, under such difficult circumstances, it would be impossible to proceed further. But when he examined the provision carried by the camels, and found that there was still an unexpectedly large quantity of drinking water, the temperature besides being very favourable—4°* at eight o'clock in the morning—he resolved to venture forward. On the 16th (28th) of October, a strong cooling wind blew, and it was thanks to this that the column, dreadfully fatigued, but in good health, arrived, on the 17th (29th) of October, at Hadshi-Kujussy (73 versts), on the western shore of the lake of Betendal-Göl. The water of the lake was very salt, and was therefore of no use to refresh the

* 41° Fahrenheit.

thirsty and worn-out troops. In the neighbourhood of the lake, however, some recently dug pits yielded a kind of filtered sea water, which could be used with tea and soup. The soldiers, now thoroughly invigorated, reached on the second day, without mishap, the well of Sara-Kamish, situated on the bank of an old dried-up river-bed that had once flowed into the southern lake (called the old Oxus-course, Uru-Darya, or Sarkrank), and the goal of the expedition.

The Colonel had thus arrived at the bank of the dried-up arm of the Amu, the very spot which Skobeleff had explored the year before, and which was to have been, in the year 1873, the destination of the scientific expedition under Gloukhovsky. The country round Sara-Kamish was sandy, covered with countless fragments of mica (probably remains of gypsum crystals, which are met with all over the Ust-Urt heights), and grown over in many places, in the dry river-bed especially, with *saksaul* bushes and even with leafy trees up to 21 feet in height and six to eight inches in diameter.* The water in the wells was very bitter, but could be used for cooking purposes.

As Markosoff had learned that the bed of the Uru-Darya further to the north-east was richer in vegetation and good drinking water, and that the western extremities of the cultivated oasis were quite near, he resolved to make one more little reconnaissance beyond the Dektscha well. Accordingly, he left the bulk of the detachment behind at Sara-Kamish, giving orders that it should remain in close order in camp, and neglect no precaution for its safety, since news had been received that the Khan of Khiva was hunting in the neighbourhood with a large retinue of Turcomans, and that he had heard of the presence of the Russians, and had sent 600 troopers to attack them. The Colonel started on the 18th (30th) of October, with only 50 men, all his camels (400 in number), and all the water-casks, for Dektscha, in the dry bed of the Uru-Darya, which he reached after a march of 18 versts, having left at Sara-Kamish the valley of the Uru-Darya, and then ascending the sandy declivity of the left bank, marched direct across the desert. At Dektscha

* See F. Marthe's "Russische Recognoscirungen in der Turkmenensteppe."

the party again found the banks clothed with verdure, and quite near to the brackish water of the dry bed were several pools of fresh water, in which the Djigites stated that there were fish. The skeleton of a huge fish was, indeed, discovered in the sand of the bank. Markosoff thus found here a confirmation of the testimony of Lieutenant-Colonel Skobeleff, traces of whom he had already discovered. He had even picked up, at the well of Tschagyl, a silver tea-spoon, with the initials of the officer, who had rested here more than a year before, inscribed thereon !

It was Markosoff's intention to press on still further beyond Dektscha ; but an unimportant attack by Turcomans, probably a portion of the band despatched by the Khan, which he had to resist shortly after his arrival at the well, and which he successfully opposed, induced the Colonel, although his men were wonderfully refreshed and invigorated by the good water, to march back to Sara-Kamish, with his small force exposed to a superior enemy, and over an entirely unknown country. He reached his destination on the 19th (31st) of October, pursued, or rather followed, by Khivan cavalry, who appeared to entertain great respect for the Russian arms, and always kept at a reasonable distance from the troops. Markosoff, who had completely attained the actual object of his expedition, now resolved, after gradually concentrating the soldiers, who were dispersed among the different small forts, to return to Krasnovodsk, as soon as he had made one more little reconnaissance, this time to the Usboi and the Atrek Valley.

On the 19th (31st) of October the whole detachment left Sara-Kamish, in order to proceed direct to the well of Dakly (155½ versts) on a new route—the same, in fact, as that traversed by Vambéry in 1863. At the pool not far from Uzun-Kuya, of which mention has already been made, part of the cavalry of the detachment diverged to the right, on the road to Uzun-Kuya and Kum-Sebschen, to warn the garrisons of the two fortified posts that the return march was determined on, and that they were to prepare to go back to Dakly, and for that purpose were only to await the arrival of camels,

which the Colonel would send to them from that place. In Dakly a temporary fortification was speedily erected, as the Khan's troops were still on the track of the column. The detachment remained here three days, until the camels, despatched to Kum-Sebschen and Uzun-Kuya, had brought back the garrisons of both these places.

The concentration of the troops was finished on the third day, and the column, once more united, returned to Tschagyl ($85\frac{1}{2}$ versts) three days later. Here the Colonel received a report from Tash-Arvat-Kala, informing him that the 100 Cossacks, who had remained behind at that spot, had not yet begun their return march to Krasnovodsk. He, therefore, without loss of time, sent orders that, instead of going to the Caspian Sea, they should come at once to Gösly-Ata, and himself marched along the road which had already been traversed to Fort Tuar, whence Captain Witzel was sent back with a gun and one company, on a new road, by way of Partokup (28 versts) and Jangy-Su (22 versts), to Krasnovodsk, to learn the condition of the roads and country in the peninsula between the Balkan and Karabugas Bays. In order to investigate the *locale* of Lake Karabugas, Markosoff, with 50 infantry soldiers and all his cavalry, made one more excursion to the salt-springs of Kulmughyr (48 versts), on the shore of the lake, the state of which, as well as its depth of water, had hitherto remained completely unknown; after which he returned, with the rest of the column, from Tuar to Gösly-Ata. A detachment, comprising the 100 Cossacks who had arrived from Tash-Arvat-Kala, left under the command of Captain Malama, for Krasnovodsk, which it reached on the 4th (16th) of November, after a reconnaissance of more than 135 versts, in the course of which it descended the steep declivity of the Kuwa-Dag.

With the remainder of the column, consisting now of only 3 companies, 1 gun, and 50 Cossacks, Markosoff marched to the well of Topiatan (*Anglicè*, "The place up to which a cannon has been brought"), for the purpose of examining the old bed of the Oxus, here called Usboi. The name of the well is, in fact, justified by history, for a Khivan Chief is said once

on a time to have dragged a gun even to this spot, for the purpose of resisting the advance of the Russians. No one, however, knows what has since become of this murderous Asiatic weapon.

The Khan's troopers had already abandoned the pursuit on arriving at the well of Tschagyl, but at Topiatan the Russian party again came across some Turcoman soldiers, who were returning southwards with their flocks from the pasture-grounds of the Ust-Urt, and with whom they engaged in several little skirmishes. The road to the Usboi, which led along the north-east edge of the desert of Mahmed-Kum, previously mentioned, lay at first over deep quicksands, and then over sand-hills and salt marshes as far as the well of Kemal ($32\frac{1}{2}$ versts), which contained abundance of good drinking water.

About 50 versts to the north of the bank of the Usboi, the sandy soil already exhibited patches of grass, bushes, and trees (which attained a height of up to 20 feet). The bed of the Usboi possessed a number of wells, and often extensive ponds and pools filled with good sweet drinking water, which was also the case with the wells of Seid-Kujussy and Dakly. At the latter point the Russians crossed the great caravan route, which leads from Khiva to Chikislar and the pasture-grounds of the Tekke. The road along the Usboi having been found to be everywhere very good, and exceptionally well provided with drinking water and fodder for the camels, the column again descended the Usboi as far as Bugradshy (25 versts). A company, with a topographer, started from this place to examine the Balkan mountains, taking a northerly route to Molla-Kari; while Markosoff, with the bulk of the detachment, following the road down the Usboi, reached the said *étappe* (about 40 versts) from the south, on the 13th (25th) of November, by way of Alty-Kuju (19 versts), Tenderly ($12\frac{1}{2}$ versts), and Kara-Ischan (20 versts).

After a short halt Markosoff proceeded further as early as the 17th (29th) of November in a southerly direction, to undertake his famous expedition to the Atrek, and found the fortress of Chikislar.

The road thither, 249½ versts in length, was now trodden for the first time by the Colonel. As it was often used in the following years, it may not be uninteresting to say a little more about it. There are on the whole route about 20 wells, the shafts of which are carefully lined with brushwood, and partly with baked bricks; they generally contain good drinking water at a depth of from two to eight feet. The greatest distance which had to be traversed without water was to Schairdy, 90½ versts from Molla-Kari; from this point to Bogdaili, 49½ versts; from the last well, that of Tschychyryk, to Chikislar, 42 versts. The road crosses the Usboi at Balu Ischan, not far from Kara-Ischan, runs partly over wastes of quicksand, partly over salt marshes, some of which are as much as 11 versts in breadth, their margins bordered by hills of sand, and passes beyond the western edge of the Buga-Dagh mountain, then crossing the small and shallow brook Graur, which in many places is as much as 14 feet broad. This brook rises in the Kioren-Dagh mountains, and, before reaching the sea, terminates in an extensive salt marsh, in the midst of which lies the village of Schairdy. In this neighbourhood bushes and shrubs are here and there still to be found; but further south, at the "White Hills," past a huge mud volcano, the route boasts absolutely no more vegetation until it reaches Chikislar, about 30 versts to the north of the mouth of the Atrek.

Here Markosoff arrived on the 1st (13th) of December, after a fourteen days' march, and at once began to build a fort, when he had dispersed some hostile Turcoman bands in a slight engagement. On the following night the camp was attacked on all sides, and it seems that special attempts were made on the life of the Colonel, whose bold and enterprising spirit the nomads might well dread most of all. A small band burst into Markosoff's tent, and cut down the guards, but were compelled to retreat without accomplishing their object, as the Colonel had accidentally left his camp to visit the posts.

After the lapse of a few days the column proceeded on to the Atrek, with the intention of crossing it about eight versts from the mouth. The river was, however, so swollen by heavy rains

that even horses could hardly swim over it. The Djigites led Markosoff to another spot, where a narrow bridge connected the two banks, which lay as much as 150 feet apart; but here too it was impossible to effect a crossing, as the bridge had been carried away by the torrent. The party had, therefore, to return to Chikislar, across the peninsula of Hassan-Kuli, situated on the bank of the bay of the same name. Two companies and two guns remained here as a garrison, and with the remainder Markosoff embarked for Krasnovodsk, after having, in the course of the entire expedition, traversed a tract of 2,007 versts, as measured with the surveying chain, which was fastened to a gun-carriage on the march.

Immediately after his return, the Colonel set out on a mission to Persia, and arrived on the 26th of December (7th of January, 1872) at Teheran, where he concluded a treaty with the Persian Government respecting the Atrek frontier-line. On the 20th of January (1st of February), 1872, he was again in Tiflis, to receive fresh instructions for the operations of the new year.

The northern *étappe* of the Russian occupation on the eastern shore of the Caspian Sea, Fort Alexandrovsk, had meanwhile made no particular progress. After the rising of the Mangishlak-Kirghiz and the death of Lieutenant-Colonel Rukin, that officer was succeeded in the supreme command by Major-General Komaroff, and later, by Colonel Lomakin. The rebellion of the year 1870, although quickly put down, had given rise here to the order to introduce among the nomad races a particular administration for each family and tribe, so as to insure a more careful and influential supervision over the unsettled inhabitants. With this object several small expeditions to the steppes of the peninsula were successfully undertaken between the years 1870 and 1872, both by Komaroff and Lomakin (autumn, 1871). The best means of preserving peace was the repeated appearance of Russian military columns among the Kirghiz *auls*. The advance of the Russian troops to the most remote pasture-grounds gradually convinced the nomad tribes that they were now no longer nominally, but practically, subject to Russian dominion, and removed the suspicion which

they had hitherto always displayed towards the administration and arrangements of the Government. The reconnaissances of the two Commanders just mentioned brought information respecting the hitherto almost unknown Mangishlak districts, which afterwards proved exceedingly useful, particularly to the Mangishlak division, in the campaign of 1873.

The plans of the Russian Government for the year 1872 would appear to have undergone no change of any importance. The necessity of adopting energetic measures against Khiva had become more and more pressing, and the only reason why the Russians did not begin the campaign in earnest after the conclusion of the peace of Samarkand in 1869, was that they were too much occupied in the north with the revolts of the Kirghiz, supported by the Khivans, to prepare for a protracted series of operations. In Turkestan, too, they had lately been taken up with the intervention of Colonel Abramoff in Bokhara, and a lasting impression upon Khiva was thus only to be made from the Caspian Sea. To effect this and to get a firmer footing in the Hyrcanian Steppe, but above all to secure the districts of the Yomud and Tekke races to the north of the Atrek as a base of operations, and an open right flank, in the event of a possible campaign against Khiva at no very distant period, were matters of particular importance; and these must have been the primary inducements which led the authorities at Tiflis to again despatch Colonel Markosoff, in the spring of 1872, provided with extensive means of subsistence, to the districts beyond the Caspian. And though the instructions given to Markosoff in no wise officially prescribed an expedition to the capital, Khiva, it yet appears that Prince Mirsky specially impressed on the Colonel the necessity of penetrating as far as he could to the east; the limits therefore of his commission were not accurately defined, and the appearance of the Russian troops before the walls of the city was not directly forbidden. The extent of the moral impression created by such expeditions in Khiva was proved by the embassies which at the beginning of the year were several times sent to the Russian frontiers by the Khan, whose inoffensive hunting tastes would seem to have been some-

what disturbed by the disagreeable proximity of the Russian soldiers on the Sara-Kamish Lake during the previous autumn. As the Russians well knew how little trust was to be placed in embassies and promises from Khiva, the envoys had been already sent back when they reached the frontier. It appears that they had also made up their minds that it would be useless to deal any longer in a friendly spirit with Khiva, and that Russia's demands must be enforced by arms and a campaign. But at the commencement of the year 1872 it was not apparently settled when this decisive campaign should take place. The Russians would seem to have been desirous of first awaiting the result of Markosoff's expedition, whose energetic and circumspect conduct in the previous autumn promised very well for this year, and then of coming to a final decision. Could it not also be possible that Markosoff might succeed in penetrating as far as Khiva, and in forcing the Khan to comply with the demands of Russia? The preparation of the campaign, which was projected on a very large scale, would then, perhaps, be completely superfluous.

The operations of the Colonel were thus directed to two principal points. Availing himself of all the means and forces at his command, he wished to proceed, along the road which he had discovered in the previous year to be not altogether impracticable, to Khiva, and thus to put, once for all, an end to all the struggles with that hostile country. But should he be unsuccessful in this enterprise, he would at any rate establish an open and solid basis for his field of operations, which would enable him with more certainty to reach Khiva in the proposed campaign, which was to be final, general, and converging from all sides.* The chief obstacles to such a success arose, indeed, from the extremely difficult conditions of the road across the arid and inhospitable Hyrcanian Steppe, both as regarded temperature and the march; but these were considerably enhanced by the hostile attitude of the Turcomans, Tekkes, and Yomuds, who far surpass all the other races of Central Asia in

* The author spent some time with Colonel Markosoff on his journey through the Caucasus. The account here given is from the Colonel's own mouth.

courage, spirit of enterprise, and warlike capabilities, and who, in a war against Khiva, form by far the most formidable enemy Markosoff had hoped, during his stay in Teheran, to be able to bring about a movement of the Persian Government against the Turcomans, who carried their predatory excursions right into the province of Khorassan, bearing away yearly into slavery thousands of Persian subjects, with their wives and children, under circumstances of fearful cruelty, and against whom the Persian troops had hitherto always been powerless. But this attempt had not been successful, as the Persians considered it impossible to pursue the hardy robbers into the fearful deserts to the north. Thus Markosoff had no choice but to show fight, and overcome with his small band alone the bold tribes of the Tekke, who had planted a long row of small fortresses on the northern spur of the Kioren-Dagh chain ; for it was just the districts on the north of the Atrek which were of particular value in the event of a great expedition against Khiva, were it only owing to the fact that in them the beasts of burden, provisions, and forage were alone to be procured.

Markosoff returned to Chikislar in the spring of 1872, with the intention of letting the spring and summer pass by quietly, on account of the intolerable heat and the difficulty of finding water, and of resuming energetic operations in autumn. The interval from September to December was considered by Markosoff to be the only season at all fit for undertaking a journey through the desert south of the Hyrcanian Steppe, the climate of which, owing to its more southerly position, is very different to that of the Ust-Urt and the Kirghiz steppes on the Sea of Aral. He attributed his ill-luck in the year 1873 entirely to the earliness of the season, in which he had to march from the Caspian Sea to reach Khiva at the same time as the column, which advanced from the north, and for which the spring, and not the autumn, was the best season. The Colonel wished the troops to march out in the autumn simultaneously from Krasnovodsk and Chikislar, to unite at Topiatan, and afterwards from there, following the Usboi, to proceed, by way of Igdy and Orta-Kuju, to Khiva.

The summer was devoted to an examination of the coasts situated on the north of Chikislar, and to the collection of camels. With this object Markosoff landed in June, with 60 men and 10 Cossacks, at the Bay of Chiwinski, which lies nearly half-way between Krasnovodsk and Chikislar. Here about 300 camels were found, with which they made some further reconnaissances in the neighbourhood of the bay, and then returned to Chikislar.

Whilst the preparations for the expedition to the east were being actively carried on in the south of the Trans-Caspian district, steps were also being taken in the north, in the district of Fort Alexandrovsk, with a similar object. The reconnaissances of Colonel Lomakin, of which mention has already been made, ended in the autumn with an extensive expedition to the steppes on the east of the Russian settlement. Considerable addition was, on the one hand, made to what was already known of the strategical position and the means of operation, especially as regarded wells, fuel, forage, and, in particular, the productive capabilities of the country for military purposes, while, on the other hand, the tranquillity and friendship of the Kirghiz races, whose attitude had not yet been to be depended on, were partially assured for some time to come.

A detachment of two sotnias of Cossacks and two rifled guns, provided with rations for ten days, under the command of Colonel Lomakin, left Fort Alexandrovsk on the 20th of September, 1872, and went by road to the Bay of Kinderli, which lies about 290 versts to the south, while the war-schooner *Bokhara* at the same time transported one rifle company of the Apscheronski regiment and all the food required for the march across the steppe. After a march of ten days, Colonel Lomakin reached Kinderli in safety, and was there received in the most friendly and respectful manner by the nomad Turcomans (about 280 families), who furnished his men liberally with nourishment and refreshment, while he found the schooner already occupied in landing the troops and provisions. The Bay of Kinderli proved a most convenient and favourable anchorage, while in addition to this advantage, a large number of fresh-water wells

were discovered very unexpectedly quite close to the seashore, on a tongue of land hardly 50 to 60 paces in breadth. The Colonel intended to proceed hence, in a north-easterly direction, to the wells of Bisch-Akti, returning after a short visit to the Bay of Kaidak, by the peninsula of Busatschi and the Bay of Kaschak, to Alexandrovsk. Therefore, after the schooner had disembarked her cargo, she was ordered back to the fort, to take in more provisions and bring them to the Bay of Kaschak, where a dépôt was to be established for the return of the expedition.

After a two days' rest, Colonel Lomakin proceeded with his detachment to the well of Bisch-Akti. An arid steppe of 70 to 80 versts had to be traversed, as far as the wells of Senek. The cavalry did this safely in one day; the infantry in two, being helped, in the most friendly manner, by native Kirghiz, who brought good fresh water in leathern pouches to the troops, who were suffering during the march from the heat and thirst. In spite of the difficulties of the route, and the sudden changes of temperature from -4° R. in the night to $+30^{\circ}$ R. about noon, and in spite of the scarcity and saltiness of the well water, the column reached Bisch-Akti in good health and spirits. Here wells of good water were found, and in their neighbourhood there were even scanty meadows and small spots which, being overgrown with bushes and *saksaul*, formed in many places little woods, and yielded a large amount of fuel. Some hundreds of Kirghiz families were here discovered on the pasture-grounds of the valley-like hollow in which the wells are situated. After a short rest Colonel Lomakin proceeded along the foot of the Tchink mountain, further north, to the wells of Terentsche and Dshangidsha, where he arrived after a two days' march. The column remained here another two days, in order to await the arrival of a small division of 25 camels, which, escorted by nine Cossacks, had already been sent on to Kaschak (120 versts) to get provisions. On the 12th of October the Colonel, with the two sotnias of Cossacks, made a small excursion to the Bay of Kaidak, after despatching the infantry, with the two guns, to the place where the *Bokhara* was anchored, there to await his return. After a ride of seven days through regions and districts

which had hitherto remained partially unexplored, Colonel Lomakin arrived, on the 18th of October, at the Bay of Kaschak, where the infantry meanwhile, with the help of the schooner's crew, had formed a camp in the vicinity of the place where Colonel Rukin was buried, with 14 Cossacks, slain in the year 1870.* The men had erected a huge pyramid of stones over the grave, which, surmounted by a cross, has now become a lasting monument to the brave warriors, who perished in the service of their country. The native Kirghiz, although there were among them many who were present at the attack upon Rukin's division, voluntarily took part in the honourable work, being anxious thus to give to the Chief of the detachment a signal proof of their regret of what had passed and of the spirit of sincere friendship by which they were now animated.

On the 19th of October the infantry and artillery were embarked on board the war-schooner. They reached their garrison, Alexandrovsk, on the 20th of October. Colonel Lomakin returned on the following day, with the cavalry, to the fort by road. The expedition might thus be regarded as a complete success, as a march of 1,005 versts (144 miles) across the steppe, by no means an easy undertaking, had been performed in 32 days, without any loss whatever, either of men or horses. The result of the expedition, comprising, on the one hand, a detailed sketch of the country traversed, and ample material for the study of a region but little known, and, on the other, leading to the quieting of the population, which had everywhere received the Russian troops in the most friendly and respectful manner, was in every respect satisfactory. The fact that Colonel Lomakin's column had penetrated right into the furthest district of Bisch-Akti, one of the best-situated winter camping-grounds of the nomads, had made a visible impression upon them. The troops of the Alexandrovsk garrison had, moreover, enjoyed the opportunity (not to be underrated) of preparing themselves for the approaching campaign against Khiva, by accustoming themselves to the abnormal and unfavourable circumstances of a march through the desert.

* See death of Lieutenant-Colonel Rukin, p. 73.

While this was taking place on the peninsula of Mangishlak, the works and preparations entrusted to Markosoff in the south had progressed with rapidity. In the mean time troops had been concentrated for the autumn expedition both in Chikislar and in Belek, on the Balkan Bay, nearly half-way between Krasnovodsk and Molla-Kari. The Krasnovodsk column—seven companies of Caucasian field infantry, each of 100 men, 80 Cossacks (irregular) and 10 guns, under the command of Colonel von Klugen, who was accompanied by Dr. Sievers, so well known as a geographer and a naturalist—started from Belek on the 29th of August (10th of September) along the explored route, and proceeded by way of Bugradshy, north of the Great Balkan, to Topiatan, the rendezvous agreed upon. The other column, under the personal leadership of Markosoff, and comprising five companies of infantry, 20 Cossacks, and four guns, left Chikislar on the 11th (23rd) of September, by the Aidin and Alty-Kuju road, which had been traversed in the previous year. Fifty men of each company, comprising the least serviceable and the sick, and forming a total of 600, remained behind to garrison Krasnovodsk. Tents of the French pattern (*tentes d'abri*), as well as a small field hospital, accompanied the troops on camels. Twelve guns, small 3-pounder mountain cannon of the same pattern as those formerly used in the Caucasian mountain wars, were also transported on camels. The other two, 4-pounder breech-loaders (Krupp), were drawn by horses. The total strength of the troops thus amounted to something like 1,450 men, without counting camel-drivers and guides.

COLUMN I. Colonel von Klugen left Belek 29th August (10th September).	7 companies infantry.	80 Cossacks.	10 guns.	= about 850 men.
COLUMN II. Colonel Markosoff left Tschikyschlar 11th (23rd) September.	5 companies infantry.	20 Cossacks.	4 guns.	= about 600 men.
TOTAL. United in Topiatan on 25th September (7th October).	12 companies infantry, each of 100 men.	100 Cossacks.	14 guns.	= about 1,450 men.

On the 25th of September (7th of October), the column assembled at Topiatan, and just as Markosoff was on the point of beginning his advance upon Khiva with the united detachment, an Adjutant of the Grand Duke arrived from Tiflis, bringing the Colonel strict injunctions under no circumstances to undertake any expedition against Khiva that year. The first part of Markosoff's plan was thus suspended; he could only proceed with the second part, the subjugation of the Tekke on the Kioren-Dagh. Markosoff resolved not to march direct to Kizil-Arvat, but first to follow the course of the River Usboi further in an easterly direction, so as to reconnoitre, in the first place, the road to Khiva by Orta-Kuju, and, in the second, to carry on war against a division of Tekke-Turcomans, who, as he had learned from spies, had received news of his design, and had formed an ambuscade at the spring of Dshamala, with the intention of suddenly attacking from all sides the column, which would be worn out by its toilsome march.

On the 4th (16th) of October the troops left Topiatan in order to reach Dshamala on the 5th. They had scarcely begun to erect a small fort here, when the Russian camp was assailed on all sides, on the 8th (20th) of October, by a band of Tekkes, some 2,000 in number. The Turcomans were particularly eager to capture the camels and the luggage train of the column, in accordance with the usual, and undoubtedly profitable, tactics of the Asiatics; tactics, indeed, which we find constantly repeated in every campaign in Asia. In point of fact, they succeeded in carrying off a few camels. Hotly pursued by the Cossacks, the Tekkes were, however, compelled to abandon their horses and take refuge in a wood, from which they opened a heavy fire on the enemy. The infantry now came into action and drove the enemy out of the thicket at the point of the bayonet, putting them utterly to flight, and, besides other booty, recovering the lost camels. Thirteen of the Tekkes were taken prisoners by the Russians, while 43 more remained dead upon the field, the fugitives carrying away with them a good many of the slain and wounded. On the Russian side only one man was killed and two wounded, one of the latter being an officer.

After leaving 80 men and 3 guns in the newly built fort, the march was continued to the well of Igdy, which was reached on the 16th (28th) of October. The Tekkes here had in the mean time presumably received information of the defeat of their kinsmen at Dshamala. They did not attack the advancing column, but sent their elders peaceably to the Colonel, to assure him of the friendship of their tribe, asking him at the same time to give up the prisoners, and promising, on their side, to furnish every assistance in their power. The ambassadors on this occasion gave Colonel Markosoff a very original excuse for the hostile attitude of their tribes, declaring that they had hitherto always erroneously supposed that the Russian soldiers were not one whit better than the Persian!

The Colonel, who wished to make one last attempt to win over the Turcomans by kind treatment and confidence, gave up the prisoners captured at Dshamala (who, moreover, would only have been a hindrance to him upon the march, as they would have required strict watching, and water, which was scarce), and promised to spare their district and their *auls** provided that within three days they made over to him 300 camels, as the great mortality among these animals had already sadly reduced their numbers. Markosoff had two reasons for discontinuing his march in the direction of Khiva. As he had received strict injunctions not to make any attempt upon it, he could not have advanced as far as the frontier, close up to which the desert extended, but he would have had to turn back half-way in the midst of barren steppes, which would have been a daring undertaking, owing to the small number and the inferior quality of his camels; while, moreover, there was nothing to be gained by this beyond the exploration of the one small portion of the hitherto unknown route. To counterbalance these comparatively trifling advantages was the fact that a sudden return when close to the enemy's frontier would also have had a bad moral effect, as the Khivans, according to their wont, would not be slow in

* Camps of *kibitkas* or felt-tents, of which to a certain degree the nomad villages are composed.

attributing the retreat of the Russian column to fright, and consequently in becoming more insolent.

Markosoff therefore waited three days more in Igdy for the Tekkes and the promised camels. As might have been expected, these not appearing on the third day, he marched with his division, on the 19th (31st) of October, to Kizil-Arvat, to seek out the faithless and perfidious Turcomans in their own nooks and crannies on the northern range of the Kioren-Dagh. The small mud forts of the Tekkes, with their warlike garrisons, were considered so terrible and impregnable throughout the whole country, that the Yomuds who accompanied the Colonel as guides, on learning the intention of their Chief, naïvely besought him on no account to begin hostilities against the invincible Tekkes. But the division proceeded on its march, and arrived at the well of Dinar, after a march of $43\frac{1}{4}$ versts over a perfectly arid tract; reaching from here on the 25th of October (6th of November) the Turcoman fort of Kizil-Arvat ($36\frac{1}{4}$ versts), along a road with but few springs, and those containing but little and bad water. The small mud fortress lies in a valley bordered by the spurs of the Kioren-Dagh, and watered by a brook rich in water. It forms a square, composed entirely of mud walls. The place possesses no fortified works; and the Turcoman tents and *kibitkas* are ranged inside the fortification as well as around it. After that, the *auls*, fortified dwellings, and small mud fortresses of the Tekkes, extend from Kizil-Arvat for more than 400 versts along the mountain chain, which runs south-east. Of these there are 59, the most considerable of which are the two towns of Kizil-Arvat and Aschabad. The inhabitants, although essentially nomads both in character and habits, are at the same time devoted to agricultural pursuits, and grow vegetables, grain, and cotton, on the oasis-like northern slopes of the Kioren-Dagh, the ground of which is poorly watered by little brooks running down from the mountains, and protected by their small forts.

On the approach of Markosoff the Tekkes again resorted to their old tactics, which they had already successfully employed against Stalyetoff. With their herds, their goods, and posses-

sions, they hastily left their homes and disappeared into the steppe. Markosoff thus found Kizil-Arvat deserted by all its inhabitants. Without remaining here any longer, he continued his march to the fortress-line of the Tekkes on the south-east, and, proceeding by way of the forts of Kara-Singer, Kodscha, Sau, Kizil-Tscheschme, and Dshengi, reached the larger mud fort of Bami on the 26th of October (7th of November), after having had some successful engagements, both on a large and small scale, with bands of Tekkes. The inhabitants had fled from all these places, and the still smouldering ashes on the hearths bore witness to the panic which possessed them. All the *kibitkas* having been burned down, over 1,000 of them in Bami alone, the Russians appeared on the night of the 27th of October (8th of November) before the fortress of Beurma (1,000 *kibitkas*), which, of all their strongholds, was the one most valued by the Tekkes. The inhabitants, owing to the speedy advance of the Russian troops, had not had time to escape, and had thus remained in their *kibitkas*. But the darkness of night prevented the Russians from surrounding the *kibitkas*, and on the following morning all the inhabitants had vanished, and could not even be overtaken after a sharp pursuit far into the mountains. The *auls* within reach were also burnt here, which spread a fearful panic among the Turcomans.

On the 28th of October (9th of November), the Russians went from Beurma to Kizil-Arvat, where they arrived on the following day, after traversing 60 versts on the old route. Markosoff had now attained his object, the punishment of the Tekkes, and could undisturbed develop and carry out his other plans on the River Atrek. But, first of all, the garrison left behind in Fort Dshamala had to be united with the main body. Colonel von Klugen, with this object, proceeded thither with a small detachment and 1,000 camels by way of the wells of Gjaur and Emir-Ali-Adshi. He arrived on the 5th (17th) of November, just in time to liberate the small garrison of only 80 men and three guns, which had been attacked by more than 1,500 Tekkes, and had been for several days in a state of siege and hard pressed. As the road through the sandy desert had

proved exceedingly bad, Colonel von Klugen selected another road for his return march by way of Topiatan, Eschan, and Kasandshik, so as to unite with the main body of Markosoff's division, which was marching towards the Atrek, and he met them a few versts to the west of Kizil-Arvat, at the foot of the Kioren-Dagh.

Markosoff had in the meanwhile made another *détour* into the southern range, and there stormed the fortress of Kara-Kir. He had hoped to find here a good road to the Atrek through the mountain valleys; but the route was so bad, so stony and uneven, as to prove totally impracticable for troops, and especially for the transport of cannon. The Colonel, therefore, returned to the plain, with a view, after uniting with Colonel von Klugen, to following a narrow valley running in a south-westerly direction, and to come to the upper course of the little River Sumbar, the source of the Atrek, by way of the springs of Koschljuk, Tscheschine, and Uila Tscheschine. The road was very bad, and had to be levelled in parts by the infantry before it was practicable for the troops. The division now followed in close order, on the right bank of the Atrek, the course of that river as far as Uja-Tepe and Bajat-Chadshi, measuring the roads and examining the country and the river. Markosoff ordered part of the detachment at the places just named to follow the course of the stream further towards the sea, whilst he himself took the direct road to Tschykyschlar past the Karaul-Tepe, having, during the course of the expedition, traversed and explored about 1,870 versts of new routes. On the 18th (30th) of December Markosoff reached Chikislar, and here received the intelligence that the expedition to Khiva was now definitely fixed at St. Petersburg for the spring of 1873; he therefore immediately went on to Tiflis, and arrived at that town on the 28th of December (9th of January, 1873).

We have now, in our historical sketch, arrived at the date when the grand campaign of 1873 was finally decided upon at St. Petersburg, and the first order for the equipment of the different columns sent to the three Governments of Turkestan, Orenburg, and the Caucasus. If we glance for a moment at the events narrated in the preceding chapters, and summarize the circumstances therein detailed, we find that the causes of the declaration of war do not lie in the far-reaching and complicated designs of Russian politics. The occupation of Khiva had for centuries become a social and political necessity, and arose naturally, and logically, from the history of Asiatic affairs. For the safety of her ill-defined frontiers, and for the defence of her Asiatic trade beyond the barren steppes, which were unsuitable for points of support, for firm settlement, and for the formation of a state frontier, Russia had proceeded as far as Turkestan, there to form a strongly established basis for her south-eastern frontier. After the Government had once entered upon this course, it could not halt half-way, but had to attempt to unite this disjointed frontier in one harmonious whole. While the frontier-posts of the Russian dominions were even yet on the Ural, it was Khiva which constantly disturbed the peace and tranquillity of the inhabitants of the Russian frontier, by exciting the Kirghiz races to rebellion, and by making raids for the purpose of robbery and plunder. Since the beginning of the eighteenth century, Russia had not succeeded in stopping these proceedings of the Khivans, either by peaceable or strong measures. It was always they who again and again assisted with impunity in any movement hostile and injurious to Russia, whose enemies found a ready asylum in their capital. Later on, when Russia had reached the Syr-Darya, and at the greatest sacrifice had conquered the Turkestan country along the river and brought it under orderly government and proper control, it was again Khiva alone which rendered the peace unsettled, and from its safe eyry threatened the flank of the Russian frontier, now more extended and exposed, from the Kizil-Kum desert to Tashkend. The administration and military security of the conquered steppes and oasis districts

had caused extraordinary sacrifices in men and money; and, according to the estimate of the *Golos*, the annual deficit for Turkestan only, amounted to nearly two millions of roubles, whilst Russia had every year to sacrifice, one might say, irretrievably 3,000 of her sons in order to recruit the troops in Turkestan. Russia had humbled the pride of the rulers of Bokhara, how could she then allow the small, impudent robber State on her very borders, now as 200 years before, to carry on with impunity its wicked game, to the detriment of order, of her commerce, and of the safety of her subjects? Treaties and assurances of peace had often been made, it was true, but they had been prompted by a momentary need and dread, had never been seriously intended, and had been broken as soon as it was deemed expedient in Khiva, Russia being at the time engaged in complications with other States. Russia could no longer tolerate this state of affairs without a struggle. Therefore when, in 1869, the advance into Turkestan had been accomplished and peace concluded with the Emir of Bokhara, the expedition to Khiva was finally resolved upon, and the cautious and experienced General von Kauffmann definitively entrusted with its execution.

We have just seen why Kauffmann did not proceed at once with the prosecution of the campaign. The Kirghiz risings in the north gave full occupation to the troops, and Kauffmann was also desirous of securing further the friendship and support of Bokhara. Although on the part of Khiva war had been openly continued everywhere since the year 1869, General von Kauffmann still kept quiet for a while, and merely with a view to gaining time sought to treat once more on peaceful terms with the ruler of the hostile Khanate.

The efforts of the Governor-General to remain for a time on tolerable terms with Khiva were, however, entirely fruitless, although he did his best to be conciliatory and forbearing. Immediately after the formation of the Turkestan Government, an official notice was sent through General von Kauffmann to the Khan of Khiva, proposing that he should live in peace and friendship with Russia on the following conditions:—"Liberation

of all Russian subjects imprisoned in Khiva; prohibition to all the subjects of the Khan to mix themselves up with the affairs of the Kirghiz on the Russian border; and, lastly, conclusion of commercial treaties advantageous to both parties." This last point, which had never received attention from the Khivan Government, had always been the principal demand of Russia, and was alone sufficient to justify an attack upon Khiva, as that country, like the uncivilised countries of Eastern Asia, had persistently opposed the development of a systematic trade with Europe, and, like all Asiatic States, had promulgated the curious principle: "My people may travel about unmolested with their caravans and goods in your Empire; we can go in and out among you, as we please; but you may not set foot on our soil, or you will be put to death."*

Under these circumstances, Kauffmann's demands were as mild and forbearing as possible. But the Khan, who, like all Asiatics, only saw weakness in the moderate request of his opponent, vouchsafed no reply to the document. On the contrary, Khiva despatched, at this time, robber bands into the Orenburg steppe and the lowlands of the Syr-Darya, to excite the Russian Kirghiz to revolt, and to collect tribute from them in the name of the Khan. The *auls* which resisted were plundered and burnt. The years 1869 and 1870 also gave conclusive proof of the evil intentions of Khiva. A number of Khivan emissaries again appeared in the Orenburg steppe with a proclamation against Russia, signed by the Khan and his Chiefs. The bands sent out from Khiva not only endangered the lives and property of private individuals, but even threatened the caravans travelling between Orenburg and Tashkend. Kasalinsk and Turkestan merchants and other travellers were killed or enslaved; trade began to be entirely stopped. After the suppression of the rising in the steppe and Mangishlak (see the historical sketch), the ringleaders took refuge in Khiva, and were rewarded by the Khan. The imprudence and hostility of the Khivans reached such a pitch in the year 1870, that the

* Vambéry, "Central Asia," 1873.

Khan forbade the export of grain from the lands bordering on Kasalinsk.* The Governor-General of Turkestan once more addressed himself directly, and indirectly in writing, to the Khan, with the request that hostilities should cease, both in his own and in Russian interests, plainly intimating the consequences which must sooner or later result from such unjustifiable conduct on the part of the Khivans. The advice was not taken; indeed, the Khivan dignitaries replied to the Russian message in almost impudent and menacing terms, proposing conditions which the Russians could by no possibility accept. The Russians were to resign all influence over the Kirghiz, who, as the Khan maintained, were his subjects, &c., &c.

In the year 1869, in order to divert the Central Asian caravans to the Caspian Sea, and to obtain a point for the protection of Russian trade on its eastern coast, and particularly on the side of Khiva, the fortress on the Bay of Krasnovodsk, and, later, Chikislar on the Atrek, had, as we have already seen, been established. Indeed, the reconnaissances from this new side had a very depressing effect upon Khiva, for at the beginning of the year 1872 there appeared in Fort Alexandrovsk, at Mangishlak, and even in Orenburg, two embassies from Seid-Muchamed-Rachim-Khan, offering to come to terms with Russia. In consideration of the fact that the assurances of the Central Asian potentates were little to be depended on, and that they were only in the habit of talking about treaties when they feared danger, the Russian Government took as a basis of the agreement proposed the following articles:—

“I. The Khan was to liberate all the prisoners captured, not only by the Khivans, but also by the Kirghiz and the Turcomans who were still to be found on Khivan territory.

* On the caravan road leading from the eastern part of the delta of the Amu to the Lower Syr grain is frequently exported from the fertile Chimbai districts of the Kara-Kalpaks to Kasalinsk and its environs.

"II. The Khan was to give to the Governor-General of Turkestan a conciliatory explanation with regard to the offensive documents forwarded by his ministers."

These moderate conditions were refused, and the prisoners further immured. They were only liberated when the Khan found the knife at his throat, that is to say, when the Russians had approached the frontiers of his country.

In defiance of the Russian proposals for peace, the Khan sent to the nomad races of the Ust-Urt, and particularly to the Adnis, who were always hostile to Russia, several divisions of troops with instructions to collect taxes for him, and once more to declare all the land south of the River Emba subject to the Khanate of Khiva. It was scarcely, therefore, now doubtful that Khiva would already begin the war in the course of the year 1872, a war for which the fanatical mullahs were inclined, whilst bands of fugitives from that portion of Turkestan which was occupied by the Russians excited the people to the holy contest.

Further energetic action on the part of Khiva was temporarily paralysed by Kauffmann, who succeeded in raising disturbances within the Khanate itself. Backed by Russian influence, Mamurat-Bey rose, marched to Khiva with a band of Turcomans friendly to Russia, under a pretext of unjust taxation, and, by threatening even the capital, made, for the moment, all operations on the part of the Khan against Russia thoroughly out of the question. The Khivans, nevertheless, continued to plunder Russian caravans, falling upon them in the Kirghiz steppe, so that the post-route between Orenburg and Tashkend became altogether unsafe, and communication was several times, at the end of 1872, interrupted for days together. Travellers and merchants were more than once killed or carried away into cruel captivity, and no one finally dared to undertake the perilous journey to Turkestan.

The forbearance and long-sufferance of Russia had now come to an end, and the Government, as the representative of a Great Power, could no longer, without detriment to its dignity, allow a small ruler like the Khan of Khiva to scout all understanding

with Russia, and not only to injure its borders in open hostility, but also to excite to war the friends and the neighbours of the Empire.*

The campaign of 1873 had become an unavoidable necessity.

* See "The Khiva Campaign," compiled from official sources by the Russian Staff. St. Petersburg 1873.

THE BASES OF THE RUSSIAN OPERATIONS IN CENTRAL ASIA.

CHAPTER IV.

THE FIELD OF OPERATIONS AND THE MEANS AT THE DISPOSAL OF THE RUSSIANS IN GENERAL.

I.—THE CAUCASUS AS THE WESTERN DIVISION OF OPERATIONS.

To distinguish by a single collective term the provinces over which the Russian operations extended in the year 1873, would be a matter of almost utter impossibility. There is hardly any quarter of the globe in which one is confronted with such arbitrary and contradictory names and terms, as in this particular part of Western Asia. Nearly every map gives different names, which often clash in the most extraordinary manner. To speak generally, however, the war was carried on in the district usually known as Central Asia, the greater part of which is included in the Turanian table-land. But as it is scarcely possible to fix the natural limits of this district, it may answer our purpose, for greater precision, to place the field of operations within certain known limits.

The eastern shore of the Caspian Sea forms the natural boundary on the west. The other boundaries may be traced as follows ; on the south, by drawing a line from the mouth of the Atrek straight to the Caspian Sea as far as Samarkand, on the east, by a line running from Samarkand to the northern side of Lake Balkash, and on the north, by a line drawn from the same lake to the mouth of the Ural on the Caspian Sea at Gurief. In this manner an irregular quadrangle is described, embracing almost all the provinces to which we shall have occasion to refer in the course of these observations. In the middle lies the

Khanate of Khiva, a long and narrow oasis, which includes both banks of the Amu-Darya, and extends from the town of Kükurtli, on the frontier of Bokhara, to the southern shore of the Sea of Aral. The exact centre of the whole province is the capital of the Khanate, the city of Khiva itself, which is situated almost at the south-eastern extremity of the oasis. If we take the town of Kungrat as a centre, and describe a circle round it with a radius of from 80 to 90 geographical miles, we shall find within the circumference of this circle about the same districts which come within the quadrangle which we have previously constructed.* The circumference itself would about correspond to the maximum of the Khivan dominions, and would touch upon and enclose all the districts which, during the Russian operations, served either as starting-points for the columns of the expedition, or as points of support for the supply of the necessary materials. The circle is filled up almost entirely with deserts or desert-like steppes. The circumference only skirts the cultivated regions of the Atrek, Bokhara, and Turkestan. A girdle of absolute desert, with a radius of over 50 geographical miles (350 versts), encloses the Khanate of Khiva on every side, just as ditches and walls environ an impregnable fortress. In many places, indeed, this girdle of deserts even attains a width of from 400 to 600 versts. If we calculate the area of this circle, we shall find that it exceeds the areas of Germany, France, and Italy put together.† When one reflects that the larger part of this immense territory is desert, one may form a tolerably clear idea of the abnormal conditions of military operations in

* The circumference of this circle stretches far into the territory of Bokhara, but the western parts of the Khanate consist chiefly of steppe land. On the other hand, the desert-like districts north of the Sea of Aral lie far without the circumference of the circle.

† Germany	..	..	..	9,818	geographical square miles
France	..	..	..	9,599	„ „
Italy	..	..	..	5,375	„ „
Total	..	..	..	24,792	„ „

Area of the circle constructed with the radius of 90 geographical miles :
25,446 geographical square miles.

Central Asia, as regards the nature of the country. The Khanate is entirely cut off on the east and west by deserts of sand : on the east, by the desert of Kizil-Kum, on the west, by the plateau of Ust-Urt and by the Hyrcanian Steppe. On the east, the territories of Bokhara skirt the oasis of Khiva, but, as they are also desert in character, they form, in conjunction with the River Amu, which is here several versts in breadth, a complete wall of defence for the eastern boundaries against that country—a frontier-line which only in very rare cases are the warlike bands of either Khanate disposed to cross. On the south-east, it is true, the course of the Amu-Darya connects the two Central Asian States ; but south of the city of Khiva, the banks of this river are for the most part barren, and, judging from the low condition of navigation in Asia, the traffic on the river itself would appear never to have been of importance. The whole of the south flank towards Persia is covered for hundreds of versts with impassable deserts, the so-called Turcoman steppes. The north is bordered by the Sea of Aral, which, owing to the shallowness and sandy nature of its southern shores, as well as to its wild character, which has proved so unfavourable to navigation, has hitherto been little known, and can scarcely be regarded as a means of communication at all. The desert of Kara and Kizil-Kum forms the eastern boundary of this sea, while on the west it is shut in by the bare inhospitable plateau of Ust-Urt. Moreover, the Sea of Aral is for a long distance northwards completely shut out by the Kirghiz steppes in the Orenburg district, and by the desert of Barsuk. The Sea of Aral offers, therefore, the only strategical means of communication from the north, and the Amu-Darya from the south-east. But as, to make use of the latter, a basis of operations must be found in the heart of Bokhara and Afghanistan, the Sea of Aral is the only line available to the Russians, as it is, through the Syr-Darya, in communication with the Russian province of Turkestan. As to the girdle of deserts itself, to which we have alluded, this one is almost entirely surrounded by Russian territory. Russian forts and Russian troops lie in the south-west, west, north, and north-east. Only to the south-east is the

girdle free and thoroughly secure, for there it touches on the unknown and almost untrodden provinces of Khorassan, Afghanistan, and Bokhara. The southern frontier, then, could only have become of any importance if Persia and Bokhara had quitted their neutral position, and taken active part in the events of the year 1873, either on the Russian or Khivan side. We need, therefore, only consider the east, north, and west frontiers. Although the desert nature of the Central Asian provinces is almost everywhere the same, several portions nevertheless present peculiar characteristics, and form, in a manner, special fields of operation. Three principal divisions are worthy of particular notice, of which the first may be subdivided into two.

I. The western, Caspian or Caucasian, division. (a.) The Mangishlakian section, on the western frontier of Khiva, between the Caspian and the Aral Seas, formed by the entire extent of the Ust-Urt plateau, and the peninsulas of Mangishlak and Busatchi. This portion was the scene of the operations of the Kinderli column under Colonel Lomakin.

(b.) The Balkan section, which shuts in the Khanate on the south-east, and is composed of the so-called Hyrcanian Steppe, and the real Turcoman Steppes. This portion is distinguished by the Balkan and Kioren-Dagh mountains, and by the River Usboi, which is the old course of the River Oxus. It is bordered on the south, towards Persia, by the Atrek, and was the scene of the operations of the Krasnovodsk column under Colonel Markosoff.

II. The northern, or Orenburg division. This comprises the east and west shores of the Sea of Aral as its centre, and the Kirghiz Steppe to the north. Portions of the eastern margin of the plateau of Ust-Urt, the desert of Barsuk, with the southern spurs of the Ural, *e.g.*, the mountains of Mugadshar, and parts of the desert of Kara and Kizil-Kum are its chief features. It is especially noticeable as the scene of the operations of the Orenburg column under Lieutenant-General Verevkin.

III. The eastern, or Turkestan division. Bounded on the east by the Khanate of Khiva, which is flanked from north-west to south-east by the Amu-Darya, its most prominent points are

the desert of Kizil-Kum, the Bukan mountains, and the northern frontier of the Khanate of Bokhara. The Syr-Darya, with the row of Russian forts ranged along its banks, and the province of Turkestan, form the basis of this division. It was the field of the operations of the Tashkend column of General von Kauffmann.

The territorial divisions which we have just enumerated have both natural and administrative features of their own, and, as we shall discover later on, may be accurately distinguished and defined. The climate, vegetation, and natural character, though generally similar, are in many respects different. For as these divisions were the separate campaigning grounds of the Russian columns, which carried on their operations quite independently of one another, their dissimilarity was not without its influence on the progress of events, and particularly on the formation and equipment of the several corps of the expedition. The different sections are strategically bounded towards Russia by the two Governments-General of Turkestan and Orenburg, and by the Government of the Caucasus. Thus the Government-General of Turkestan forms the basis for the third division, that of Orenburg for the second, and, finally, the Caucasus for the first, the Caspian division. Khiva may thus be considered the centre of three concentric semicircles :—

1. The semicircle of deserts formed by the four sections extending on the west, as far as the Caspian Sea, on the north, almost up to the line of the Emba, on the north-east and east to the Syr.

2. The semicircle, more or less marked by Russian colonisation, fortification, and occupation, formed on the west by the eastern shores of the Caspian Sea, with that sea and the Volga as lines of communication ; on the north by the line of the Emba and Irgiz, with the Sea of Aral and the post-road between Orenburg, Orsk, and Kasalinsk, as a line of communication ; and, finally, on the east by the province of Turkestan and the fortified line of the Syr to Samarkand and the northern boundary of the Khanate of Bokhara, with the Syr and the post-road from Kasalinsk to Samarkand as a line of communication.

3. As the prime basis of all is the outer semicircle formed on

the west by the Caucasus, with Tiflis as a centre; on the north by the Government-General of Orenburg, with Orenburg as a centre; and on the east by the Government-General of Turkestan, with Tashkend as a centre.

The head centre of the combined operations, St. Petersburg, the capital of the Russian Empire, the seat of the Glawny (or Chief) staff, lies then almost in the point of intersection of the two tangents which one may imagine drawn on the concentric semicircles which we have just described.

We must now consider St. Petersburg as the primary and original starting-point of the combined expeditions. The distance from St. Petersburg to Tiflis, as the crow flies, is 308 geographical miles (about 2,156 versts); to Orenburg, 244 geographical miles (about 1,708 versts); to Tashkend, by way of Orenburg, 436 geographical miles (3,052 versts). These figures appear almost incredible, and yet they only represent the direct distances, the real route taken on the march being very much longer.* Tiflis and Orenburg possess telegraphic communication with St. Petersburg. Tashkend had none till the beginning of the campaign; the line from there to Chemkent, in connection with the Siberian line, was only finished during the recent campaign. The nearest telegraph station for Western Turkestan is only at Orsk, on the Ural (from Kasalinsk to Orsk, 738 versts = 105 miles), and that for the more Central and Eastern is the last station on the great Siberian line in the neighbourhood of Chemkent. A despatch from Kasalinsk, for instance, takes over eight days in transmission to St. Petersburg. The telegraph stations situated furthest east serve the western frontier of Central Asia; they are: Astrabad on Persian territory and on the Messrs. Siemens and Halske's private line to India,† Astrakhan on the Volga, (264 miles, as the crow flies,

* By the mail route the distances are reckoned from—

St. Petersburg to Tiflis	..	=	365	geog. miles (2,556 versts)
.. to Orenburg	..	=	302	.. (2,116 ..)
.. to Tashkend	..	=	579	.. (4,052 ..).

† This line, which exclusively undertakes the telegraph service between England and India, starts from the station of Alexandrovo through Warsaw,

from St. Petersburg), Petrovsk and Baku on the west coast of the Caspian Sea. Not one of the three chief towns enjoys direct railway communication. For Tashkend and Orenburg, the railway lines only reach as far as the Volga, where the three main lines terminate at Zaritzyn, Saratoff, and Nijni-Novgorod. Samara on the Volga, where the road to Orenburg begins, can be easily reached in summer from these places by means of the facilities offered by the splendidly managed passenger services of the Volga companies. From Samara, the post-road goes on to Orenburg, and from the latter town, by way of Orsk, to Kasilinsk and Turkestan. It must be remembered, however, that the Russian post-roads are not level *chaussées* or highways, but in reality only show the direction of the track, which is marked out by post-relays and a few settlements and towns.* Signs of road construction are, as a rule, only to be met with in the east among the mountains, or where the road crosses ravines and watercourses. The Russian post-relays are furnished in the inhabited regions by a kind of posting-house, the keeper of which is usually a rich Cossack farmer, who, in addition to farming and keeping an inn, is expected to supply the necessary post-horses, at fixed rates of from two to three copecks per horse and verst, and a certain number of often very rickety vehicles, called *telegas*. This post-master has to provide by contract horses and coachmen for a fixed number of relays. The real official control of the post service is entrusted to the *smotritel* appointed by the Crown, who is usually an old soldier, and has the rank of an under post-master. He attends to all the corre-

Odessa, Simferopole, Kertsch, Soukhoun-Kale, Kutais, and Tiflis, as far as Dyulfa on the Russo-Persian frontier. The length of the wires was, in January 1872, 7,083 versts.

* The immense network of Russian roads, which, according to Lengenfeldt, amounts to no less than 130,000 versts, must, in European Russia, be divided into two principal portions, namely :—

(1st.) The State's roads (highways, railways, canals, &c.) ; and

(2nd.) The local roads, which are kept in repair by the counties.

In Caucasia and in the Russian Governments-General in Asia, the administration of roads is exclusively in the hands of the Governors or Governor-Generals.

spondence, examines the *podoroshnas* (passports), and is the highest in authority. For the convenience of travellers, the posting-station has a bare white-washed room, with one table, a few wooden stools, the well-known *samovar* (tea-kettle), and a small number of glasses. The care and replenishing of the tea-kettle, the most important article in Eastern Russia, falls to the *smotritel*, who receives for his trouble a few copecks from each traveller. In the steppes and deserts, through which the post-road leads, these stations are often entirely wanting. Sometimes a Kirghiz tent, often, nothing but a post besmeared with the Russian colours, and a water-cask, constitute the station. In such cases the *smotritel* makes provision for the posting-service only, and either supplies horses which are the property of the Crown, or contracts with the nomads for a supply of Kirghiz horses.*

As long as the post-road leads through the steppe there is absolutely no level track; the Russian relay-post, called *perek-ladnaja*, which is generally drawn by three Cossack horses, simply follows the wheel-marks of the conveyance which has preceded it on the same road. In winter the sledges cross the steppe on the snow, and with difficulty make out their way by means of sign-posts erected at intervals between the relay-stations, which are situated from 20 to 40 versts from one another. When the Volga is frozen over in winter, or covered with floating ice in spring, the boat service is stopped, and the journey from the last railway station, Saratoff, to Samara has to be made on sledges.

To reach the Caucasus, the railways *viâ* Odessa and Rostoff, carry the traveller to the north coast of the Black Sea. Poti, on the east coast of the same sea, is reached from there by ship; and the capital, Tiflis, by the Poti-Tiflis railway line, or from Rostoff by the *telega* along the post-road, *viâ* Vladikavkas and the passes of the Caucasian mountains. In winter, when the usual fearful storms prevail on the Black Sea, the Poti-Tiflis

* According to Lengenfeldt, "Russia in the Nineteenth Century," the number of horses the property of the Crown amounts to 71,000 in the whole Russian Empire, and this number is probably much below the mark.

railway service is almost always interrupted, and the mountain passes of the Caucasus are also blocked by terrific falls of snow, accompanied with wind; it may thus happen that all communication with European Russia is completely stopped for whole days together. In seasons such as these, the post-road from Rostoff *via* Stavropol and Mosdok, to Petrovsk on the Caspian Sea, which runs parallel to the Caucasian mountains across the steppes of Cis-Caucasia, is the only practicable route for sledges. The road is more than 880 versts in length, and even a courier travelling night and day in his *troika*, the Russian three-horse team, takes upwards of three days and four nights to make this journey; whereas the post often spends more than eight days in accomplishing the distance between Rostoff and Temir-Chan-Schura, the capital of the province of Daghestan. During the first half of the journey only does the route skirt towns and the *stanitzas* of the Kuban and Terek Cossacks. From Trochladnaja, indeed, where the main road turns south to Tiflis through Vladikavkas, and the wild and romantic pass of the Kasbek, the villages gradually grow fewer, until on the banks of the Terek some miserable Calmuck hut supplies the place of the comparatively elegant Cossack station. Here the relay-stations often lie 40 versts from one another. Only a few overworked and emaciated Calmuck horses perform the post-service, so that it not unfrequently happens that a *telega*, with a team of from five to seven steeds, and very little baggage, is left lying helpless upon the road, either because the horses are unable to draw it along any more, or because they have fallen dead on the ground.

In order to get an approximate idea of these enormous distances, let us follow a courier on his journey from St. Petersburg to Tiflis and Petrovsk on the Caspian Sea. The Russian military courier, who is usually a lieutenant or a junior captain—for nerves of steel and muscles of iron are required for this work—as soon as he has received his despatches and has started on his mission, ceases almost to be a man, and is now only the bearer of the despatches, which must reach their destination in the shortest time possible, quite regardless of the human organisation of their bearer. The courier may fall down half dead,

provided that the despatches are forwarded. He is consequently looked upon as a kind of sacred personage by the posting authorities. He is provided with a *courier-podoroshna*, or posting-pass ;* as soon as the master of the posting-station, the *smotritel*, of whom mention has before been made, has glanced at this all-powerful paper—which is signed by a Governor-General or the Minister of War, and its instructions obeyed at Kamschatka, as punctually and conscientiously as if it were on one of the *chaussées* of the kingdom of Poland—he hastens, zealous and trembling, to do speedily all that he can to despatch the courier with as little delay as possible further upon his way. Even the post must give way to him. If there are not enough horses forthcoming at the station, the mail must be delayed for days, while the last *troika* is harnessed for the courier, who is even permitted in an emergency to make use of his weapons in order to set on quickly. He has scarcely any baggage ; a little bag with linen, a fur cloak, and the most necessary provisions—for at the posting-station only hot water for tea is to be found, seldom indeed eggs or milk—form pretty nearly all the luggage for his journey. It is scarcely possible to describe the courier's conveyance, the *perekladnaja*. Such an equipage must be seen to be understood. It consists of the ordinary Russian peasant's car, the so-called *telega*. The *telega* is a small, open, wooden cart, scarcely five feet in length. It rests upon four small wooden wheels, which run on two wooden axles. In the steppe, the wheels often have neither iron rings nor metal boxes, so that the wood of the axle rubs against the wooden box of the wheel, and often catches fire, in spite of the wheel being perpetually greased. In the upper box of the *telega* it is just possible to sit upright. The coachman (*jemschtschik*) is perched on the front edge of the box. A bundle of straw, or the courier's travelling

* There are three kinds of *podoroshnas* or passports :—

- (1st.) For couriers ;
- (2nd.) For travellers employed by the Government ; and
- (3rd.) For private persons.

The last-named travellers are three times as long over their journey as the first. To attempt to travel without a *podoroshna* would be a harebrained undertaking, and the traveller would be at the mercy of every Cossack or Kirghiz.

bag, which is made fast with a rope to the back of the waggon, serves as a seat for the traveller, upon which he can only by great skill manage to keep himself, whether awake or asleep, as the Cossack horses gallop madly across the trackless steppe, over streams, hills, and trunks of trees, with the conveyance, which is totally devoid of any elasticity. At night, he can only make himself a kind of bed by filling the box of the *telega* with straw. But even then he can only, with considerable difficulty, make a bed of this straw couch, by drawing his knees very high up. This position is, however, so uncomfortable, that most persons prefer to make the whole journey in a sitting posture. But after travelling thus for eight days and eight nights uninterruptedly, the traveller becomes almost deprived of feeling, nay, almost of every human sensation. After having traversed some 20 or 30 versts, the courier presents his *podoroshna* at the station in silence, pays for the post-horses, seats himself in another *telega* which is standing all ready for his reception, if he has not secured himself one of his own at the beginning of the journey, fresh horses are harnessed, and on he proceeds at a gallop to the next station, where the same monotonous dumb-show is again gone through. In this way the courier often leaves 250 versts behind him in one day, and rests during the whole of this time perhaps not more than half an hour, whilst a glass of tea is being prepared for him. A glass of tea, a couple of biscuits, and a few eggs form the courier's usual diet for a whole day, and he is often lucky if he can procure even this.* Besides the station-master and a few wild nomad figures, the courier often sees no human being for days. He is lucky if he once happens to meet on the road some comrade; a halt is then made, and by the side of the *samovar*, which steams and bubbles cheerfully, a friendly glass of tea is swallowed in company. But this is the sole refreshment and recreation to which the courier can look forward during the whole of his journey. Let us now see how the courier whom we have just described, and whose progress, after that of the

* The author made the journey from Kasalinsk to Orsk (40 hours) without taking anything but a draught of brackish water.

telegraphic despatches, is the quickest in Asiatic Russia, gets over the road from St. Petersburg to Petrovsk.

In the spring of the year 1873, the direct train to the Black Sea used to leave St. Petersburg at eight o'clock in the evening. On the fourth day the traveller by this train arrived, about the same hour, *viâ* Moscow and Kursk, at Rostoff on the Don ; that is, after a journey of 72 hours. Several hours must necessarily be wasted before the arrangements for the post-journey to Petrovsk are made at Rostoff, so that the courier is scarcely ready to continue his journey before sunrise on the fifth day. Under the most favourable circumstances, if the steppe is dry and in good condition, and particularly, if horses enough are to be had without delay, and none of the usual accidents to carriage or horses ensue, the courier, supposing that he gets through more than 18 versts per hour, may in another four days, that is to say, on the ninth day, reach Petrovsk, on the Caspian Sea, or even Tiflis. In winter, when hard, firm snow covers the Cis-Caucasian Steppe, the land journey may even be made in a still shorter time. But then, again, the Kasbek Pass is often entirely blocked by the snow.

If he goes by sea, the courier leaves St. Petersburg by the evening express train, *viâ* Moscow, Kursk, and Kiev, and so on to Odessa, which he reaches on the morning of the fifth day. From this place one of the steamers of the Russian steamboat company sails once a week to Poti, by way of the Crimea and Kertsch, making the voyage in eight days. Under the most favourable circumstances, the traveller can be in Poti on the thirteenth day, if he catches the boat at Odessa on the morning of his arrival in that town, which is a very great chance. If, on arriving at Poti, he immediately catches the direct train to Tiflis, he may be in the capital of the Caucasus on the evening of the thirteenth day. But this is rarely practicable, and he must therefore calculate upon 15 days at least, with even more than ordinary luck. The same time is required for the journey *viâ* Rostoff, as well as *viâ* Taganrog, Kertsch, and Poti. From here also a steamer sails only once a week ; but the sea voyage takes at least fifteen days, whilst the journey by land can,

if necessary, be done in from nine to ten. The letter post requires, under the most favourable condition, at least ten days. Thus an average quick journey is from nine to fourteen days. All more important and detailed orders must be forwarded in this way, for only brief instructions can be entrusted to the telegraph, which is often for whole days interrupted by the storms on the Cis-Caucasian steppes that blow like hurricanes, and, in consequence of the immense distances, it can often only be set to rights by adopting the most energetic measures.

Without entering into further details, one may already form an idea from these data of the difficulties and the loss of time inseparable from the transport of troops and war material by the land or sea route which has just been described. Transport by sea from Odessa or Taganrog to Poti is an easy matter, and the service is thoroughly well performed by the excellently managed Russian line, which possesses the monopoly of the navigation to the Caucasus. Poti has, however, practically no harbour. Sand-banks extend far into the sea, and prevent the ships from running into the narrow and shallow opening. All goods must be put on lighters, and by them transported to the roadsteads of Poti, and thence by rail to Tiflis. The land transport from Rostoff is attended with even greater difficulties. Camels are seldom employed in Cis-Caucasia. Everything must be piled upon *telegas* and drawn by oxen, buffaloes, and horses. Large caravans of waggons are formed, which have to contend with unspeakable hardships, and proceed very slowly across the pathless and swampy steppes. It is on this account that in summer-time, the Volga route *viâ* Astrakhan, in connection with the Russian steamboat lines on the Caspian, is still the best to the seaport towns of Petrovsk and Baku on the western coast of the sea. From here, of course, the goods must be despatched by the waggon caravans just described (from Baku on camels) further into the interior of the Caucasus. This route may also be taken by passengers, but it is far longer than the land journey *viâ* Rostoff. In that case, one leaves the railway at Nijni, Saratoff, or Zaritzyn, and takes the Volga steamboat to Astrakhan. From here, twice a week, a small steamer carries the Volga passengers

across the bar at the delta, where they embark on board the Caspian steamer, which makes the passage from the mouth of the Volga to Petrovsk in about 18 hours. For merchandise, as we have said, this is the best road to the places on the coast; but even then it is only practicable if the Volga and the northern end of the Caspian Sea, which in winter is to a large extent frozen over, are free from ice and navigable. The land route from Astrakhan to Petrovsk is scarcely desirable, and is only taken in the most rare cases, as, owing to the deep swamps and deserts, the traffic is so trifling that the post-stations and post-relays are usually in a deplorable condition.

These are the Russian means of communication with the Caucasus. The eastern Governments of Orenburg and Turkestan are far less favoured. In the Caucasus European civilisation is everywhere to be met with; Tiflis is a town both Asiatic and European in character, in which the elegant *café* of a Parisian *restaurateur* is to be found side by side with the Oriental bazaar of the Persian and Central Asian merchant. But beyond Orenburg every trace of European civilisation disappears, and one now comes across the purely Asiatic life in all its wildness.

As we noticed before, the ordinary means of communication, viz., the three railway lines for the route to Orenburg and Turkestan, only reach as far as the Volga. There is only one station on the Volga for the Turkestan road, namely, Samara. In the summer this place is easily reached in a few days, as we have before said, from the three railway stations of Saratoff, Nijni, and Zaritzyn, by means of the Volga steamships. But all traffic on this river is interrupted during a great part of the year, because from November to April it is partly frozen over, and partly filled with floating ice. The opening of the Volga*

* According to the "St. Petersburg Almanac" of the year 1873, for the places of:—

Kasan, the average opening of the Volga 10th (22nd) of April; freezing time, 8th (20th) of November;

Saratoff, the average opening of the Volga 7th (19th) of April; freezing time, 26th of November (8th of December);

Astrakhan, the average opening of the Volga 13th (25th) of March; freezing time, 2nd (14th) of December.

is calculated to take place at Saratoff on the 7th of April, the freezing-time on the 26th of November (8th of December). During the whole of this time communication with Samara is much more difficult. The station of Saratoff is then the only one available for the journey from St. Petersburg. There one must take a post *telega* and follow the post-road *viâ* Volsk, Sysrar, and Simbirsk on the right bank, or *viâ* Volsk and Nikolaiewsk on the left bank. The road from Saratoff through Sysrar (the terminus of the railway which is in course of construction) is 384 versts in length, that through Nikolaiewsk, 411 versts; both routes, under the most favourable circumstances, take two days and two nights, and the frozen Volga must be crossed in a sledge. From the railway terminus of Nijni there are two land routes to Samara. One runs from Nijni, along the right bank of the Volga, to Kasan, 408 versts, and thence *viâ* Simbirsk to Samara, 436 versts, making a total of 844 versts (about 600 English miles). Another way leads direct from Nijni, through Sergatsch and Korsun, to Simbirsk, 466 versts, and thence to Samara, 242 versts, in all 708 versts (about 500 English miles).* By either route the courier would have at least four days and four nights of uninterrupted travelling. There is positively no direct communication by land from the Lower Volga, Astrakhan, and Zaritzyn to Samara. The line from St. Petersburg, *viâ* Moscow and Saratoff, to Samara, is consequently the only route. From Samara a good post-road leads through Busuluk to Orenburg, following the little River Samara for the greater part of the way. There is no such thing as a *chaussée*; the route leads for the most part through sandy steppes, but past rich districts and villages, and it possesses good relay-stations, which are well provided with horses. The country is full of resources, and only of late years has it suffered severely from drought. The distance is 421 versts, and from 36 to 48 hours at least are necessary for the journey. None of the other roads, which meet at Orenburg, are of any importance for direct communication. One road leads from Orenburg *viâ* Busuluk, 253 versts, where the route branches off to Samara,

* Official Russian Post Map. St. Petersburg, 1872.

through Tschistopol to Kasan. It is 773 versts long, and to reach the railway at Nijni 1,168 versts must be traversed with post-horses. The two other principal roads of Orenburg, one of which runs in a northerly direction parallel to the Ural chain to Perm, while the other follows the River Ural to Uralsk and Gurief on the Caspian Sea, do not require consideration, as they are impracticable for direct communication, and are only used for the internal commerce of the Government-General.

Let us now follow the courier on his journey along the route *viâ* Saratoff, of which mention has just been made. He leaves St. Petersburg, by the express train which passes through Moscow, at seven o'clock in the evening, and on the morning of the fourth day he arrives at Saratoff. In summer he takes the steamer, and, if all goes well, reaches Samara in the evening of the fifth day (a voyage of at least 45 hours), and Orenburg on the seventh day. In winter, when the courier has to make the journey from Saratoff to Samara by land, he cannot reach Orenburg under eight or nine days. This road is used solely by travellers, the post, and the larger waggon-transports. Large trains of waggons, which are slowly dragged along by relays of horses and oxen belonging to the Cossacks, and are organized in precisely the same manner as the caravans, keep up the communication between the Volga and Orenburg, the last and the first stations of Russo-Asiatic commerce. These caravans go to Orenburg, or at furthest to Orsk. There the greater part of the goods is packed on camels and carried further into the interior of Asia. The long snake-like procession of waggons winds slowly and interminably across the monotonous steppe, the clumsy, powerful Russian ox, or the gigantic black Asiatic buffalo, moves slowly under the yoke, and the monotonous creaking of the ungreased wooden wheels is only occasionally interrupted by the cry of the wild and rude Cossack coachman, who is enthroned high up on the bales of goods in a kind of small kennel of straw. The curious cavalcade halts before the Cossack *stanitzas*. The draught cattle are unharnessed, a little fortification is formed by the closely packed vehicles, and the drivers bivouac beside the pleasantly flickering fire until the

following morning, when the drivers of the new relay harness their oxen and horses once more to the column of waggons, and continue their journey onward to the next *stanitzas*.

The route *viâ* Orenburg seems almost exclusively to connect St. Petersburg with the Turkestan possessions and the capital Tashkend, which may be regarded as their centre. The route across Siberia is so very much longer, that in point of fact it is only used by solitary travellers or couriers in case of the post-relays on the Orenburg line being out of order, or of great danger arising from Khivan or Kirghiz robbers. From Tashkend the Siberian route, which has only recently been established, leads *viâ* Chemkent (114 versts), Aulie-Ata (154 versts), and Semipalatinsk (1,771 versts) to Omsk. The distance from Tashkend to Omsk is 2,496 versts, or 356½ German miles.* There the road divides. One road leads westward to Orenburg *viâ* Orsk, a distance of 1,496 versts, while the other goes north to Tobolsk, and is 610 versts in length. Thus the distance to Orenburg may be calculated at the almost incredible figure of 3,992 versts = 570 geographical miles, and that to Tobolsk at 3,106 versts = 444 geographical miles — distances which a courier could hardly travel in 17 or in 20 days, even if he were to travel day and night without a single break, and to find post-horses all ready at every relay-station.†

The direct and principal road to Turkestan runs from Orenburg, along the River Ural as far as Orsk, straight to the north-east head of the Sea of Aral; it then skirts the right bank of the Syr-Darya at Kasalinsk (Fort No. 1), and follows this stream up to the city of Turkestan (Azret), and thence, *viâ* Chemkent, reaches Tashkend, and finally, Samarkand. From Orenburg to Orsk (the last telegraph station) the road is good for 265 versts, and leads through rich *stanitzas*, the cultivated land of the Cossacks of the Ural, and past stations well

* — About 1,800 English miles.

† Notwithstanding this the road is much used. Many of the officers proceeding to the seat of war in 1873, or returning thence, preferred it, because on the Orenburg line the horses had become unserviceable, and the travellers had to stop for days in the middle of the desert. From Tobolsk to Perm we have also to reckon almost 1,000 versts (five to six days' travelling).

provided with relays. The road as far as Orsk is at least a discernible track, and on the bank of the Ural there are bridges, dykes, and railings, even reminding the traveller among the Ural mountains of the high-roads of Western Russia. Between Orsk and Kasalinsk on the Syr, however, all regular roads cease, and the route is only marked by steppe stations, which lie often from 30 to 40 versts from one another, and by marks which in summer are composed of small pyramidal heaps of earth, and in winter, when the steppe is covered with a uniform layer of snow, and when there is absolutely no means of finding the way, consist of high sign-posts or of pyramids built of stones. This route passes the River Ural near Orsk, and then follows southwards the right bank of the little River Or, on the western side of the low steppe hills of the Tschaman-Tau (which is a southern spur of the Ural, and ends in the Mugadshar mountain, of which mention has already been made) as far as Dowdy, whence it winds eastward and reaches the country of the Irgiz at the small fort of Karabutak. The road then runs in a south easterly direction as far as the fort of Uralsk on the Irgiz after several times crossing the northern branch of this river which is almost dry in summer, and going directly south from this point past the salt lakes of Katy-Kul and Meldy-Kul, across the sandy deserts of Kara-Kum to the northern end of the Sea of Aral. The road from Uralsk to Kasalinsk, along the Bay of Sary-Tscheganak, is completely shut in by sandy deserts, and does not pass any human habitations or any land capable of cultivation. At the station of Djulyus, where stands the only official building constructed of stone on the whole route, the road enters the territory of the Government of Turkestan, in which the first place of importance is Fort No. 1, or Kasalinsk. According to the official Russian post-route, in which, however, the distances between the stations are often under-estimated, the distance from Orenburg to Orsk is 265 versts, from this to Fort Karabutak 210 versts, to Fort Uralsk $182\frac{1}{2}$ versts, and to Kasalinsk $345\frac{3}{4}$ versts; thus forming a total of 1,003 versts = 143 geographical miles, from Orenburg to Kasalinsk. The Forts of Karabutak and Uralsk,

which are composed of little ruined earthworks, surrounded by a few stone houses and some wooden barracks, and which, apart from the small garrison, possess a population of barely a hundred souls, are the only inhabited spots in the whole tract of country, which can be used as intermediate stations or as *étappes* for troops on the march. All the other stations are only so in name, and lie in the midst of the grass-covered steppe or sandy desert, without any settlements and resources. A hole scooped out of the ground, a tent of felt, often only a pole, a water-cask, or a broken-down *telega*, form the station, such as it is. The stations possess scarcely any means of subsistence; indeed, in several places, drinking water has to be procured miles away. The nomads of the Kirghiz steppe supply the only provisions which are to be had, and they are continually shifting their quarters according to the season and the state of the pasture-grounds, setting up their *kibitkas* for only a brief interval in the neighbourhood of one of the stations. The two forts to which we have alluded possess scanty storehouses, which have annually to be stocked with food brought from Orenburg on camels or by the waggon caravans, and they are scarcely able to support their own garrisons. A division of troops on the march must carry with it, on waggons or camels, all it requires in the way of provisions, fuel, &c., for the whole journey, and its progress is as slow as that of a complete expedition. According to the official regulations, every station must have 15 relay-horses. But as these can only be procured from the nomads, who are very irregular in their supplies and in their places of abode, the regulation number of horses is very seldom available. Many stations have no horses at all, in which case their place must be taken by camels. This is especially the case in the neighbourhood of the Sea of Aral, where horses can scarcely draw even the little *telega* through the deep hot sand of the desert of Kara-Kum. The horses are often so weak that they remain prostrate between two stations, and as they are not easily to be had, owing to the great distances, the traveller is obliged to halt for whole days in the barren desert. Bacon and *kumiss* are, under the most favourable circumstances, the only provisions of the

traveller, that is to say, if he have the good fortune to light upon a Kirghiz tent in the neighbourhood.

The following table will serve to give the reader an idea, better than words could do, of the abnormal and unfavourable state of the means of communication along the Turkestan road :—

(Seven Russian versts = about 1 German mile
= nearly 5 English miles.)

Tashkend—					Versts.
Chemkent ..	..	..	..	6 stations =	114½
Turkestan ..	..	..	..	6 „	155½
Julek ..	..	..	..	5 „	204½
Fort Perovski ..	..	..	..	5 „	110
Fort No. 2 ..	..	..	..	8 „	195
Kasalinsk (Fort No. 1)	..	..	..	7 „	175½
Total ..					955½
Stations—					Versts.
Yunyskaya ..	..	..	14	} Desert stations.	
Bik-Baul ..	..	..	16		
Golovskaya ..	..	..	13½		
Kamyschly-Basch ..	..	..	16½		
Andrejevskaya ..	..	..	17		
Sapak ..	..	..	17		
Ak-Dshulpass ..	..	..	17		
Alti-Kuduk ..	..	..	16½		
Nikolayevskaya ..	..	..	16		
Kul-Kuduk ..	..	..	16		
Dungurlyuk-Sor ..	..	..	15½		
Constantinovskaya ..	..	..	16½		
Kara-Kuduk ..	..	..	16	(The only station building.)	
Djulyus ..	..	..	17		
Terekli ..	..	..	17	(More than 40 versts in reality.)	
Dshalovli ..	..	..	30		
Katy-Kul ..	..	..	36	(Ditto.)	
Dshalangatsch ..	..	..	18	(About 25 versts.)	
Fort Uralak (Gorod Irgiz)	..	..	20		
Total ..					345½
					1,301½

				Versta.
Brought forward..				1,301½
Stations—		Versta.		
Bus-Gumer ..	..	20	} Desert stations.	
Kizil-Jar ..	..	14½		
Seraly ..	..	30½		
Kara-Sai ..	..	32½		
Kut-Sai ..	..	26½		
Tschulak-Kairakti ..	..	25½		
Fort Karabutak ..	..	32½		
				182½
Stations—				
Basch-Karabutak ..	..	20	} Steppe.	
Domdy ..	..	28½		
Bugaty-Sai ..	..	19		
Sary-Kamysch ..	..	22		
Aral-Tjube ..	..	36½		
Istemias ..	..	25½		
Tokan ..	..	32		
Orsk on the River Ural ..	..	27		
				210
Orenburg on the Ural ..	..	..	..	265
Busuluk ..	..	..	..	253½
Samara on the Volga ..	..	..	..	166½
Total from Tashkend to Samara ..				2,379
(About 1,800 English miles.*)				

This table shows us that from Orsk to Kasalinsk a desert tract of 738 versts has to be crossed, which, with the exception of the two forts, is quite without resources, and the numerous stations of which have only high-sounding names, but are never marked by any real places or buildings. From Kasalinsk the road now brings the traveller into the well-watered district of the Syr-Darya, but the general character of the country undergoes no change until Chemkent is reached. Great dusty plains of sand alternate with broad grass steppes. The stations consist, as in the Kirghiz steppe, for the most part only of small earth huts. The many swamps and marshy steppes, such as those of Bakali-Kora, which the road skirts before

* The estimates of the distances given in the above table have been carefully collected from the Russian Official Post Map, St. Petersburg, 1872, and from the Table of Routes of March, Tashkend, 1872. The two do not always agree; but, as we here reckon by thousands of versts, a few versts are of no consequence, and it would be difficult to give preference to one or other of these official sources.

reaching Fort Perovsk, make the journey along the River Syr often very dangerous, on account of the feverish atmosphere and excessive heat. But, generally speaking, the route from Kasalinsk is more favourable than the Kirghiz Steppe which we have already described. The Syr-Darya districts are partially cultivated, or at least show signs of an earlier civilisation and colonisation; horses are to be met with in larger numbers than in the desert of Kara-Kum. The Russian fortresses ranged along the river afford convenient intermediate stations; and once the traveller has arrived at the city of Turkestan, he is in the heart of the province, the towns of which, surrounded by large and well-watered gardens and plantations, are able to supply either travellers or troops on the march with the necessary means of subsistence. The road follows the right bank of the Syr-Darya from Kasalinsk to Fort No. 2; it then skirts the Bakali-Kora swamps as far as Fort Perovsk, where it again follows the right bank of the stream, past Fort Julek, to the Tasch-Suat station, and then, turning into the interior of the province, reaches the city of Turkestan at the foot of the Kara-Tau mountain. From here the road runs in the interior of the country as far as Chemkent and Tashkend, and goes everywhere through cultivated and inhabited tracts. At Tashkend it divides; the road to the east leads along the foot of the mountain to Khojend, and crosses the Syr before this town; the road to the west crosses the Syr at Chinaz, and after passing through a barren country without a single blade of vegetation for at least 100 versts, as far as Jizak, enters the Zerafshan district through the gigantic gate of Tamerlane,* reaching the city of Samarkand on the northern slope of the Bokharian Kara-Tau mountain, the last station of the Turkestan post-road. The total length of this road, from Samara to Samarkand, is 2,651 versts, or 379 geographical miles.

To calculate the time which a courier travelling from St. Petersburg to Tashkend takes, one may reckon for the districts with roads—those, for example, between Samara and

* Tamerlane's Gate is formed by the steep cliffs of the western Nuratany-Kara-Tau and the eastern Sansar-Tau.

Orenburg—an average speed of from nine to ten versts per hour, of course allowing for the necessary stoppages at the stations for harnessing, for posting arrangements, and for meals; for with good horses 20 versts can be got over in an hour under very favourable circumstances.* But for the desert between Orsk and Tashkend one can only allow, in any case, $7\frac{1}{2}$ versts an hour. A stoppage of five hours at each of the chief stations of Samara, Orenburg, Orsk, Kasalinsk, and Fort Perovsk would make, therefore, in all 35 hours; and the courier from Samara, were he to travel uninterruptedly and without any unusual stoppage or accident, would arrive at Tashkend in about 13 days and 14 hours, or 326 hours: as we have shown above, he cannot reach Samara until the fifth day out from St. Petersburg, he would therefore need at the very least from 19 to 20 days for the whole journey from the Russian capital to Tashkend.† The post-bags, which are forwarded like the courier, are usually a month on the road.

From these figures the reader can form a tolerably clear idea of the position of a division on the march, a train of waggons, or a caravan. If he considers, moreover, that the province of Turkestan receives all its European articles by this line *vid*

* The author, who travelled as the military courier, with large luggage, and therefore could not proceed so quickly, reckoned 9 versts per hour. He took, for instance, ten days in going from Kasalinsk to Samara, while it is possible for a courier without luggage to complete the distance in eight and a-half days. By regulation time the vehicle has to traverse, in summer, 10 versts per hour, in autumn and spring, 8 versts, but it is not always possible to do so.

†

	Hours of Travelling.	Distance (Versts).	Average Versts per Hour.
From—			
Samara to Orenburg ..	45	420	9·3
Orenburg to Orsk ..	34	265	7·8
Orsk to Kasalinsk ..	94	738	7·8
Kasalinsk to Tashkend ..	128	956	7·5
Time for stoppages ..	25	..	..
From Samara to Tashkend ..	326 (13 dys. 14 hrs.)	2,379	(8·1 upon an average.)

Orenburg, and that, beyond mere provisions, almost everything must be brought from Europe, he can arrive at an approximate estimate of the difficulties which this country presents with regard to means of communication. The Syr-Darya, although navigable and even available for steamers, is but of little importance as a line of communication, as the navigable channel above Fort No. 2 is a very bad one. Large swamps, sand-banks, and cataracts prevent all navigation for the greater part of the year. The channel near Petrovsk is in summer often scarcely a foot deep, and in spring from three to four feet at most. Formerly numbers of irrigatory canals carried off in summer three-quarters of the water of the principal stream for the cultivation of the banks far into the desert. And when the Russians stopped up many of the canals, thereby ruining the cultivation of whole districts, and turning them again into deserts, they could not do away with all, so that most of the river water is still lost each year. Regular steam communication for passengers or goods does not, therefore, yet exist on the Syr. The Russian steamers are only employed for the service of the crown. Travellers use the post-line which we have described; merchandise is transported exclusively by land on camels by a caravan company, and is often half a year on the road from Tashkend to Samara. A division of troops, which takes its food with it on a waggon-train and daily marches 20 versts, resting every fourth day, could, under the most favourable circumstances and without halting, manage the journey from Orenburg to Tashkend, a distance of 1,959 versts, in about 4½ months.

We have hitherto considered the direct lines of communication between St. Petersburg and the central points of the three Russian provinces, Tiflis, Orenburg, and Tashkend. Communication between the several capitals is even less satisfactory. The Caucasus has absolutely no communication with Turkestan. Its furthest outposts to the east, the little steppe forts on the east coast of the Caspian Sea, were, until lately, entirely separated from the Government-General of Turkestan by sandy deserts and the hostile territory of Khiva. The Caucasus is

only in communication with Orenburg from Petrovsk and Baku, by way of Astrakhan and Samara, by the Volga line, and, as we have seen already, only in summer. In winter there is no direct communication at all. Only the Governments-General of Orenburg and Turkestan are, to a certain degree, in connection with each other. Therefore, for administrative purposes, and for the conduct of operations for a Central Asian expedition, it is only through the Russian capital, St. Petersburg, that constant communication between the three provinces can be maintained. St. Petersburg was the centre for the general direction and the connection between the operations of the three provinces during the campaign of 1873, so that information and instructions for the separate columns, as long as they were in the desert, and not yet combined in the oasis of Khiva itself, had to be sent from one head-quarters through one provincial capital to St. Petersburg, and thence back again through another to their proper destination.* Let us now consider the condition of these three provinces separately, and more especially with reference to their capacities for war and military operations.

I.—THE PROVINCE OF THE CAUCASUS, THE BASIS OF OPERATIONS FOR THE FIRST, OR CASPIAN, DIVISION.

Geographical Situation, Population, and Districts.

The countries of the Caucasus, which are united in one province under a joint civil and military power for the purpose of administration and government, are bounded on the west and east by the Black and Caspian Seas, on the south, by Armenia and Persia, and on the north, by the territory of the Don Cossacks and of the Calmucks of Astrakhan. The northern boundary of the province commences where the little river Kuru-Jeja empties itself into the Sea of Azof, follows the course of this stream, skirts the Manytsch stream in the neigh-

* Thus it happened, for instance, that the news of the disaster and of the retreat of Markosoff's column reached the head-quarters of General Kauffmann only at the beginning of July.

bourhood of Jekaterinovskoie, and then runs along the steppe and salt lakes of Manytsch and Sara-Kamish, almost parallel to the principal line of the Caucasian chain, until it reaches the mouth of the Kuma in the Caspian Sea. The frontier to the south and west, in the direction of Armenia, is not well defined by nature. It begins at the little post of Nikaloya, on the west coast of the continent, and then partly following the ridge of the Armenian mountains, past the Russian city of Alexandropol, ends at the Little Ararat, in the Persian province of Acerheidshan. The boundary on the Persian side is chiefly formed by the course of the Aras, the principal tributary of the Kur. It follows this river as far as the post of Karadulinsk, and, running from here along the ridge of the western spur of the Elbourz chain, past the Mugan Steppe, enters the Caspian Sea at Astara. The district thus enclosed, which contains the most diversified countries and peoples, and which belongs half to Europe and half to Asia, has an area of 7,981·55 square miles, with 4,716,157 inhabitants, or about 591 to the German square mile — 1 German square mile = about 30 English square miles.* The whole country is divided from north-west to south-east by two chains of the Caucasus mountains, which run parallel to each other, the Southern, the Black Mountains, not reaching the snow line, while the Elbourz and the Kasbek mountains of the northern line attain a height of about 18,700 feet, and 16,700 feet respectively.† The northern range, which is generally considered to be the Caucasus, and which forms the division between Europe and Asia, the sacred boundary of the old civilised world, separates the whole country lying between the Black and the Caspian Seas, from Anapa on the Straits of

* According to the tables of the topographical division for the war of the Tiflis staff, 1870; but according to the notices of the "Great General Staff" of the German army, 1873, the area for the year 1867 (inland water included) is as follows:—Caucasus countries = 7,978·6 German square miles, and 4,661,824 inhabitants. According to the newest calculations of Strelbizki, 1874, it is = 8,129·73 German square miles, and 4,893,332 inhabitants, i.e., about 602 souls on a German square mile (or about 30 English square miles).

† Equal to 5,646 metres = 17,382 Parisian feet; and 5,043 metres = 15,524 Parisian feet, respectively.

Kertsch to Baku in the furthest east, a distance of about 116 geographical miles, into the Cis- and Trans-Caucasian countries, forming thereby three divisions which are entirely distinct from one another, with respect to their geography, ethnography, and civilisation. Towards the slopes, the chain is pointed, its peaks are for the most part of a conical shape and close together, and it does not possess many extensive chains. But the steep glacier line which rises up in the middle forms a continuous and insurmountable wall, with single peaks, abrupt and precipitous. The mountains in the front of this central chain descend on the north and south almost perpendicularly into the valleys, and are covered to the south with impenetrable woods. Rapid mountain streams, with steep banks which often scarcely allow space for a narrow path, wind through the contracted valleys; whereas there are no large rivers with broad accessible valleys or mountain lakes. Thus the boundaries of the divisions are sharply defined, their sole means of communication being by ship on the two seas, or by a central and principal mountain pass, the so-called Gate of the Caucasus, through which runs the admirably constructed post-road *viâ* Vladikavkas to Tiflis, and a less frequented post-road from Petrovsk to Baku, along the narrow level margin of the coast. The remaining mountain passes can only be crossed by the sure-footed pack-horses of the inhabitants, and cannot be considered as real lines of communication. In old times even these few roads were completely hemmed in by the Caucasian Wall, as it was called, which led from Derbend right up to the Straits of Kertsch, and remains of which are still to be seen. The northernmost of the sections, distinctly divided by the ridges of the Caucasus, which goes by the name of Cis-Caucasia, forms the most southern and the lowest portion of the great European tableland.* The northern and far larger part of this section is covered with

* From the coast of the Sea of Azof, which is only a little above the level of the Black Sea, the Cis-Caucasian plain declines gradually towards the east, until, at the mouths of the Kuma and Volga Rivers, it is almost as low as the level of the Caspian Sea, which, as it is well known and as is proved by the levelling of Ivanshiutsov, is 88·2 English feet lower than the level of the Black Sea.

steep, treeless, salt steppes, containing wells in which the water, whether stagnant or flowing, is for the most part quite salt. There is no doubt that this plain was covered by the sea in prehistoric times, and formed a common basin with the two seas now separated from each other. Fixed settlements and colonies can only be established in the shape of oases along the fresh-water rivers; the remainder of the territory must be left to the nomad races and their herds of cattle. Only in the west, in the neighbourhood of the Sea of Azof, does one meet with settlements of Kuban and Don Cossacks; the whole of the central and eastern portion is the pasture-ground of the Nagai and Calmuck nomads.* Tartar races, Kirghiz and Turcomans, are to be found on the Caspian Sea, between the mouths of the Kuma and the Terek. While the whole of the north of the Cis-Caucasian tableland is destitute of vegetation and scarcely produces anything, in the south a fruitful and rich strip of country, the luxuriant vegetation of which is due to the two mountain streams, the Kuban and Terek, runs along the long line of the northern base of the Caucasian chain for a breadth of from 20 to 25 German miles. The Kuban, which rises at the foot of the Elbourz mountain, runs in a westerly direction, pouring its waters into the Sea of Azof, and forming the fertile and richly cultivated district of the Kuban Cossacks. The Terek, which flows beneath the majestic Kasbek mountain, turns eastward, and runs into the Caspian Sea, encircling in its course the lands and settlements of the Terek Cossacks. Both these rivers receive a great number of tributaries from the mountains, and form in the plain extensive swamps and water-courses, which are overgrown with reeds almost as big as trees, and are completely impenetrable. The whole country of Cis-Caucasia is distinguished by its Cossack and nomad population, which, belonging for the most part to the Slavonic, Mongolian, and Tartar races, contains about a million inhabitants.

The second and middle section of the Caucasian countries is

* Kloeden, "Text-book of Geography," 1869, reckons that only one-tenth of this territory is land fit for cultivation, two-fifths are entirely sterile soil, and the other half of it pasturage.

formed by the main northern line of the Caucasian ranges ; it is inhabited by those wild and warlike mountaineers who so long and so obstinately resisted the encroachments of the Russians. The southern spurs, towards Trans-Caucasia, and the western, towards the Black Sea, form strips of country most highly favoured by nature. High up on the mountains are splendid pasture-grounds, and in the valleys, fertile fields. The sloping sides of the mountains are covered with thick and magnificent woods, which shelter the laurel of the south by the side of the majestic beech of the north, and which are everywhere overrun and interlaced by the luxuriant vine, forming perhaps, with all the wild fruit and ornamental trees which grow here in such profusion, the only picture which remains of the European primeval forest. This is the home of all the kinds of game which belong equally to Europe and Asia, the native land of the pheasant. On heights where in Switzerland the snow line commences long before, prosperous settlements, fertile meadows, and thick forests of pine are to be found. The centre of the highest chain, and partly also its northern margin, is treeless, and has somewhat more of the character of the lofty Alpine ranges. The country which we have thus described is the home of the Circassian, Abchas, Osset, Tschetschenz, and Lesgian tribes. In Daghestan, the Lesgian district and the most north-eastern part of the section on the Caspian Sea, Schamyl, the last who contended for the freedom and independence of the mountaineers, was taken prisoner by the Russians a few years ago. Since that time the Russian rule has prevailed in the whole mountain range, and its power has penetrated even into the most distant hiding-places and into the narrowest ravines. The distinctive population of this central mountain section, which may be called that of Central Caucasus, is true Caucasian, settled here from time immemorial ; for hundreds, perhaps for thousands of years, they have existed in these mountains, and kept their blood pure up to the present day, in spite of the great streams of peoples which have crossed their country on their way from the interior of Asia to the regions of the West. The origin of the different races, which

live here together in the wild mountains, and which number in all about a million and a half, is very vague and problematical. Proceeding from west to east, one meets with the Circassian, the Abchas, and the Osset languages; in the east, in the countries of the Tschetschenz and Lesgian tribes, even as many as 30 different languages and dialects are spoken. A similarity or resemblance in their manners and customs, but above all in their religion, which among the 53 tribes and the 14 different races is Mahommedan—Christianity has till now scarcely penetrated into the mountains—gives a certain uniformity to their confederation of tribes, which, before the period of the Russian dominion, was even more pronounced, owing to their fanatical hatred of Slav and Christian, and their eagerness for war. Since the year 1864, when Schamyl fell, the open resistance of the mountaineers to the Russian dominion has entirely ceased. It cannot, however, yet be said that Russia has won complete and unlimited influence in the mountain district. A large part of the population (in the year 1864 alone, 318,000) has wandered off to Turkey, and so removed itself from the Russian yoke. Another large portion has asserted its independence in a number of ways, still, for instance, carrying arms which Russia, fearing a general exodus, does not dare to take away, and is ruled by a system of small detached forts, which give so much employment to the majority of the army of the Caucasus that it could scarcely be spared from the country in the event of war.

South of the mountain line just described, as far as the borders of Persia and Turkey, extends the third section, which is generally called Trans-Caucasia, and which already forms part of Asia, not only from a geographical point of view, but from the nature of its vegetation, animal life, population, and customs. This section is characterised by the Georgian principalities of Georgia, Mingrelia, Guria, and Kachetia, which extend over the wonderfully fertile and lovely southern slopes of the Caucasus, and over the valleys of the Rion, which flows westward into the Black Sea, and over those of the Kur, which runs east to the Caspian. The valleys and slopes of Mingrelia and Kachetia

are indescribably grand. Who does not know Georgia, which has been glorified by the poet, and Schirvan so highly extolled—the holy plain of the Kur and Araxes, and the wondrous pasture-land of Karabag, the home of the horse which is very little inferior to the Arab thorough-bred? To the south the land rises again up to the Caucasian and Anatolian Alps, amid which looms the lofty Ararat in majestic isolation. Here is the province of Russian Armenia, the soil of which, if well watered, is extraordinarily fertile; but the high ground is bare and barren, without one blade of vegetation. This third, southern, Trans-Caucasian or Asiatic section is characterised by the Georgian race, consisting chiefly of Kachetians, Imeretians, Mingrelians, and Gurians, and living from the oldest times under sovereign princes, who embraced Christianity at a very early period, and voluntarily subjected themselves to Russian dominion, when they began to feel too weak to maintain their independence against the incursions of Persian tyrants or robbers, and against the attacks of the predatory and warlike mountaineers of the Caucasus. The most southerly portion of the section is inhabited by Armenians. Besides this fixed population, there are settled in the districts of the Caucasus, Tartars, Turks, Kurds, Persians, Russians, Germans, Frenchmen, and Jews. The Trans-Caucasian population may be estimated at a little over two millions.

These three sections, so utterly different and heterogeneous as regards nature, situation, and population, are combined under one government, the province or Government of Caucasus, with its centre and head-quarters at Tiflis. The motley mixture of races, tribes, and families comprised in this confederation is shown by the fact that the inhabitants of the Caucasus speak more than 68 languages and dialects, while the whole of Russia, inclusive of the Caucasus, only numbers 115. The Governor, who is a direct representative of the crown, is his Imperial Highness the Grand-Duke Michael Nikolajewitsch, who resides in winter at the capital, Tiflis, in summer on his charming estate of Borschom, and who has with him Prince Mirsky as military *adlatus* (officer adjoint), and Baron Nikolai as head of the administration. The highest civil and military powers are

vested in the Governor; the civil department is divided into several special divisions, in connection with the Caucasus Committee of the Imperial Council at St. Petersburg, to whom all matters relative to this province are referred for consideration and settlement. The military department is managed by a small Caucasian staff, under the command of General von Swistunoff. The military government is, on the whole, based on the territorial principle, as in all of the fourteen military districts (*okrugs*) of the Russian Empire. But there is besides, in the Caucasus, a special department for the military administration and organization of the military detachments in the mountain districts, where, as for instance in Daghestan and Soukhoun, special military measures are required, owing to the somewhat hostile attitude of the mountaineers, who still carry arms, and are indomitable in their love for freedom. The uncertain behaviour of these mountaineers, who have never been able entirely to get over the loss of their independence, as well as the varied character of the populations and of their local customs, have not admitted of the uniform administration which exists in European Russia. The whole Caucasus is divided into six Governments, in which the military and the civil administrations are on the same basis as in European Russia, and which are again split up into circles or districts (*ujäsd*)—three districts (*oblasti*), two military circles (*okrugs*), and one war division, the last three of which have an almost exclusively military character.* The province of the Caucasus is accordingly divided as follows:—

* Russia is generally divided into *governments*, *districts*, and *countries*. In places of great political importance Governments-General or Lieutenancies are established, which comprise several governments or districts. *Districts* (*oblasti*) mean lands lately acquired, administered in an exceptional or provisional manner: *countries* (*semli*) constitute the lands of the Cossacks, which are governed on half civil half military principles. In the Caucasus the Kuban and Terek Cossacks are, as an exception, united in *districts* (*oblasti*).

	Designation.	Name and District Town.*	Divisions.	Geographical square Miles.		Number of Inhabitants (according to sources).‡	
				Excluding inland waters.†	Including inland waters and Islands (Strelbizki).†		
				1870.	1874.	1870.	1871.
I. North Caucasus— 4,095.54 German sq. miles, including inland waters (1874).	Govt.	Stavropol. Town = 23,612 inh.	3 <i>vjāsds</i> 3 <i>semlis</i>	1,283.83	1,252.76	382,965	437,118
	District (oblasti).	Kuban.	5 <i>njāsds</i>	1,697.00	1,748.35	606,808	672,224
	"	Terek (Teran) Town of Vladikavkas = 15,000 inh.	7 <i>okrugs</i>	1,069.00	1,094.43	477,299	485,237
II. South Caucasus— 4,031.98 German sq. miles, including inland waters (1874); 2.21 sq. miles islands of the Caspian Sea.	Govt.	Tiflis. Town = 70,591 inh.	6 <i>njāsds</i>	732.80	734.41	599,098	606,584
	"	Kutais. Town = 12,165 inh.	7 "	378.06	376.06	592,061	605,691
	"	Erivan. Town = 15,040 inh.	5 "	497.44	501.80	445,682	452,001
	"	Elisabetpol. Town = 16,167 inh.	5 "	794.57	805.12	513,006	529,412

* In the figures showing the inhabitants of those towns differences are also to be found, if we compare the "St. Petersburg Almanac" for 1875 with "Suvorin's Almanac" for the same year.

The totals of both, however, show that the population has increased, as we find—

In—	1873.		1875.	
	Inhabitants.		Inhabitants.	
Tiflis	69,937		70,591	
Stavropol	20,927		23,612	
Kutais	8,263		12,165	
Vladikavkas	8,924		15,000	
Erivan	14,342		15,040	
Baku	12,380		15,604	

Only Novorossysk forms an exception, as its population seems to have much decreased. Similarly the population of the Central Caucasus decreases continually, on account of the incessant emigration of the Mahomedans to Turkey. No registration of births, &c., is possible, because of the superstitions of the Moslem, who would feel offended by any such inquiries.

† The area of the inland waters, according to Strelbizki, amounts to 76.62 German square miles (1 German square mile equals about 30 English square miles) for the whole of the Caucasus. This being taken for granted, and the calculation made after other special tables of Strelbizki, the above figures would amount only to 8,129.61, instead of the sum total (on the following page) 8,129.73.

‡ This is according to the tables of the Topographical Division of the Tiflis staff, 1870; but, according to the "Izvestiya," 1871, the population of the Caucasus is 4,893,332 on 7,895.69 German square miles (not on 8,129.73, or more correct, on 8,129.61), i.e., 613 inhabitants to 1 German square mile, or about 30 English square miles. Small differences of the kind are to be found everywhere, whenever two official sources are compared. Thus the Tables of Strelbizki differ slightly in the decimal figures from the "St. Petersburg Almanac" for 1875.

	Designation.	Name and District Town.*	Divisions.	Geographical square Miles.		Number of Inhabitants (according to sources).‡	
				Excluding inland waters.†	Including inland waters and Islands (Streblitzki) †		
				1870.	1874.	1870.	1871.
Total land area—†	Govt.	Baku. Town = 15,604 inh.	6 <i>ujdsds</i>	708-54	712-68	496,073	513,560
German sq. miles 8,051	District.	Daghestan. Town of Schura = 5,094 inh.	9 <i>okrugs</i>	519-17	541-91	469,189	448,299
Islands of the Caspian Sea... 2-21	War division.	Soukhoom. Town = 1,612 inh.	3 "	132-85	156-71	66,151	70,701
Inland waters 76-52	Military circle (<i>okrug</i>).	Sakatali.	...	72-29	76-19	57,945	56,802
8,129-73	"	Tschernomorsk Town of Novorossysk = 1,862 inh.	...	96-00	129-31	9,880	15,703
		Total of the Caucasus‡	...	7,981-55	8,129-73	4,716,157	4,893,332

According to the latest data, the area of the Caucasus thus amounts to 8,129-73, or more correctly, 8,129-61 geographical square miles, with 4,893,332 inhabitants, or about 602 persons to each German square mile. Besides these provinces, the Russian settlements and military points of support on the east coast of the Caspian Sea come within the administration of the Caucasus Lieutenant-Governorship. As has already been shown in the historical sketch, these consist, in the north, of the districts round Fort Alexandrovsk, usually mentioned by the name of the Mangishlak district, and, in the south, of the Balkan and Atrek districts, formed by the strip of coast which runs south from Fort Krasnovodsk to Chikislar. These districts, which are for the most part desert, had no fixed eastern boundary. They did not denote so much a particular tract of territory as the *rayon* of the Russian sphere of power, as far as it extended to the neighbouring Kirghiz and Turcoman races, and made them permanently tributary. It was only the territory immediately round the little forts that could be really regarded as Russian ground previously to the year 1873; and even this

* † ‡ See notes on previous page.

small district had, as we have already seen, never been thoroughly safe from Khivan inroads and predatory expeditions. Until 1874 the district of Mangishlak belonged, as far as its administration was concerned, to the Ural circle of the Government-General of Orenburg. But particularly—for instance, as regarded the military authority—it was placed under the Commandant of the Alexandrovsk post, Colonel Lomakin, who was again under the control of the Governor of Daghestan in Temir-Chan-Schura, Adjutant-General Prince Melikoff. Colonel Markosoff, an officer of the Caucasus staff, commanded the Krasnovodsk district, and was directly under the head staff at Tiflis. In both districts the army was on a war footing, and the troops were always mobilised. Latterly, since March, 1874, these have been united in one military and civil district (*otdjil*), the so-called Trans-Caspian, and placed directly under the control and command-in-chief of the Governor of Tiflis.* This new Trans-Caspian district is now quite separated from the Ural circle; it belongs to the Caucasian, and is regularly marked out. It is bounded on the west by the Caspian Sea, on the north by the Mertvy-Kultuk or Dead Bay, on the south by the Atrek, and on the east by the Sea of Aral and the very ill-defined limit of the Khanate of Khiva, and it also includes all the islands on the east coast of the Caspian Sea, thus especially Sviatoi, Kulyaly, Podgorny, and the island of Tscheleken, famous for its naphtha springs. The whole is now divided into two districts, one of which, at Alexandrovsk, is under Colonel Navrodski, so well known for the desert campaigns of the Mangishlak division in 1873, while the other is at Krasnovodsk, where General Lomakin commands, an officer who is also at the head of the whole Trans-Caspian district. The Mangishlak district (*prisstavstvo*) is split into three circles (*volosste*), namely, the Mangishlak, Busatschi, and Turcoman circles.†

* "From the Caspian Sea" (corresponded to the *Moscow News*, 1874).

† An Ukase of the 22nd December, 1874, defines the new division of the Mangishlak division, as proposed by General Lomakin, as—

1. The Turcoman circle, a long line from the Caspian Sea (from Fort Alexandrovsk) up to the northern end of the Karabuga Bay.

2. The Mangishlak circle, bounded on the north by a line touching the

Hitherto it has been scarcely possible to give any statistical information with regard to these countries, as no regular order has as yet been introduced into these strips of land, which are, moreover, much neglected both in their natural character and population. An approximate idea of their position may be formed from the communications of the "Caspian Correspondent" on the budget of the newly made province. Its expenditure is calculated to amount to 40,133 roubles, 9,000 roubles of which are for roads, fairs, schools, fortifications, and general colonisation. Only 18,763 roubles are allowed for the central administration, and 10,200 for that of Mangishlak, sums which appear very insignificant in comparison with the budget of the province of Turkestan. There is a revenue of 41,000 roubles to meet these expenses. Among the receipts figure first of all 36,000 roubles, the *kibitka* tax of the Kirghiz, and about 1,950 roubles for that of the Turcomans, the regular income from which, however, must even now be exceedingly uncertain. An improvement in the position of the population is, moreover, to be effected by the migration of the Turcomans, who wander about in two circles of the Astrakhan Government, to the peninsula of Mangishlak (see historical sketch). Strelbizki reckons the area of the Trans-Caspian district, which he bounds on the south by the Atrek, and on the east by the Khanate of Khiva, at 5,939.85 German square miles,* including 25.94 German square miles for the islands of the Caspian Sea belonging to the district.

Thus, according to the very latest data, we may reckon in 1875 the total area under the administration of the Caucasus Government at $8,129.61 + 5,939.85 = 14,069.46$ German square miles, including the inland waters and the islands of the Caspian

Ak-Tau and Ak-Deshul mountains; on the east by the Tchink slope; on the south by a line from the well of Kara-Kin; on the west by the Turcoman circle; and

3. The Busatschi circle, comprising the peninsula of the same name.

Each circle has a chief administrator with a salary of 300 roubles (about 50*l.*) a-year.

* According to Strelbiski 287,401.3 *versets*, which means the above number of square miles.

Sea.* The number of the Turcoman and Kirghiz inhabitants of the Trans-Caspian district, who are thoroughly warlike and who are partly in open hostility to Russia, is not exactly known, and they cannot yet be reckoned as Russian subjects. The census of the *rayon* of the Cis-Caspian administration, lately given as 4,893,332, proves that in spite of the emigration of the Caucasian mountaineers, of which mention has already been made (see note *, page 139), the number of the inhabitants has increased very considerably during the last ten years, indeed by nearly one-third. Brix, for example, estimates the population of the Caucasus in 1863 as 3,800,000.† Wahl, as lately as 1875, reckons it at that time at only 4,000,000, $1\frac{3}{4}$ millions of whom are Christians, and $2\frac{1}{4}$ millions Mahommedans. He sets down the Caucasian population at 530,000 Georgians, 650,000 Lesgians, 150,000 Tschetschenzes, and 500,000 Circassians; the Iranian race at 30,000 Ossets, 18,000 Persians, 11,000 Kurds, and 365,000 Armenians. Besides these, he reckons 900,000 Tartars, 32,000 Calmucks, 11,000 Jews, 5,000 Greeks, 5,000 Germans, and 3,000 Gipsies. He estimates the Russian population at 760,000, including Cossacks.‡ Wahl's calculations are, at all events, derived from older sources; for according to him the Caucasian mountaineers, whom he classed under the headings of Lesgians, Tschetschenzes, and Circassians, amount to 1,300,000, whereas, as may be seen from a preceding remark, the Caucasian *Sbornik*, certainly the most authentic source, lately reckons only 907,633. Wahl's calculation may thus do duty for the middle of the year 1860, and afford a most interesting proof of the large extent of the Mahommedan emigration which has taken place during the last decade, in consequence of the fall of Schamyl, and to which reference has before been made.

* Excluding the sea itself.

† Brix, "The Imperial Russian Army," 1863.

‡ Wahl, "Land of the Czar." London, 1875.

GENERAL CONDITIONS AND STRENGTH OF THE ARMIES OF THE MILITARY DISTRICT OF THE CAUCASUS.

The Caucasus is the only one of the three military districts of which we are here about to treat, and especially of all the Asiatic military districts, whose fighting force consists to any great extent of troops of the Russian line or field army, besides irregular and frontier (Russian line) troops. The obstinate resistance which the warlike and brave mountaineers of the Caucasus offered for nearly half a century to the advance of Russian dominion may have been the cause of this. At all events, the troops of the Caucasus form the best element, the cream, so to speak, of the Russian regular army, as from the very first they have been engaged in continual struggles amid the recesses of that land, and have been brought by careful training to a war footing, and kept on it for many years. Almost every regiment bears an historical name, which recalls to the remembrance of every Russian the memory of famous battles, hard fights, and sieges, in the times of the mountain wars of the Caucasus. The soldiers have now often changed in the old regiments in consequence of the new system of organization, so that in the field regiments only a few veterans are to be found who bear still the scars of wounds, received in the desperate campaigns of the Caucasus. But the fame of the old regiments is well known to their successors and recruits. Proudly they wear the regimental number of their heroic and well-tried predecessors, and are on their part most anxious to emulate the fame of their models of the past. The highest and most honourable civil posts are held by the veterans, who wear the cross of the Caucasus on their breasts, and to whom, as old heroes, young and old in their national pride look up with respect and admiration. Non-commissioned officers and officers have even to this day their breasts covered with orders and medals, all of which have been won in hot mountain fights, and the stories and songs of the illustrious past are fresh in every mouth. The officers of the Caucasus army make a particularly

favourable impression. All who possessed any spirit of enterprise, any love of war and activity, went into the Caucasian army, determined to make a career sword in hand. Officers of almost every nation* are represented among these troops, and form perhaps, as regards military dash and enterprise, the very best element of the Russian army. A good many, it is true, were transferred from the Guards to this corps, either as a punishment or owing to their being obliged to leave the expensive capital of St. Petersburg from motives of economy, but such officers, as is well known, often turn out the best on active service. The pride which the officers of the Caucasus corps take in its history is thus thoroughly justifiable; moreover, the spirit of *camaraderie*, one acquired amid toils and dangers shared in common, has always helped to unite the officers of the Caucasus in closer ties. The officers recruited from the warlike and brave old population of the country, from the Khans of the mountaineers and the princely and noble races of Georgia, form a very effective and useful ingredient in the composition of this corps, and one which the European corps of officers do not possess to such an extent. Then we must not forget the splendid and gorgeous country, with its romantic and strange inhabitants, its manners and customs, and the generally excellent conditions of the garrisons, which, when compared with the monotonous and neglected country garrisons of Russia, may well possess a mighty attraction for the young aspirant for fame.† In many of the districts the army is still on a war footing; at least, the troops are continually on the *qui vive* on account of the fanatical Mahomedan mountaineers, who still retain their weapons. Disturbances and risings on a small scale take place almost every year, the plains of Cis- and Trans-Caucasia are continually visited by robbers from the steppe, particularly from

* Former officers of the French, Austrian, English, Danish, and Prussian services are to be found in the army of the Caucasus.

† It really appears strange, in spite of these facts, that Trans-Caucasia, which is a superb country, should serve at the same time, like Siberia, as a place for the banishment of Russian criminals; but it turns out that, on a yearly average, only 100 criminals are sent to Trans-Caucasia, while 2,000 are despatched to Siberia, and even these figures decrease every year. (This refers to 1873.)

Persia, and for many years a contest has been going on with the Kirghiz and Turcoman races in the East. All these circumstances combined give to the army of the Caucasus in general, and to the officers in particular, a character of peculiar efficiency, of unusual military skill, and perfection. The Commander-in-chief of the troops, who, as Governor, unites the most distinguished military qualities with a high military character and a winning liberality, and who, as a brother of the Czar, is almost idolised by the soldiers, adds increased lustre to the army of the Caucasus. The variable climate, which, from the almost tropical plains of Trans-Caucasia up to the mountains and ravines of the Caucasus covered with perpetual snow and ice, represents all the zones of the earth; the toilsome, dangerous marches and expeditions amid the pathless, sterile mountains; the anxious and wearing service which the troops perform in the small posts and mountain forts, removed for months together from all civilisation, and in which the soldier must minister to his own wants himself, must do all kinds of work for want of workmen, even to tailoring, masonry, forging, and quarrying;—all these give the soldier of the Caucasus, especially the infantry soldier, a docility, endurance, and power of adapting himself to every situation, which is scarcely ever met with in the soldier of any other army. In frozen Siberia, covered with eternal snow, the soldier from the Caucasus marches just as cheerfully and willingly as amid the scorching heats of the burning steppes of Central Asia.

Besides the field troops which we have described, and which form the real kernel of the fighting force of the Caucasus, there are in those mountains, and also in the Governments-General of Orenburg and Turkestan, frontier troops raised from the line battalions, irregular troops from the armies of the different Cossack districts, and, lastly, troops of occupation and militia. The fighting force of the Caucasus is divided, as in the whole of European Russia, into the field army and the local troops (both of which may be composed of regulars and irregulars), and into the navy, as far as this can be taken into consideration with regard to the seas which touch upon the Caucasus. The

law of general service recently proclaimed in European Russia has not been introduced into the Caucasus. The field regiments of the Caucasian army are for the most part recruited from Great Russia.

I.—THE FIELD ARMY OF THE CAUCASUS.*

1. *Field Troops.*

INFANTRY.—The army of the Caucasus consists of the Caucasian grenadiers, the 19th, 20th, and 21st infantry divisions. The 38th and 39th divisions are also at the present moment within the district of the Government, but these really belong to European Russia. Every division has two brigades of two regiments. The 16 regiments of the four first-named Caucasian divisions have, unlike all other regiments, which have only three, four battalions with five companies of equal strength, of which No. 5 is the rifle company. To the regimental staff belong the non-combatant company, including clerks, professionals, train-soldiers, and officers' servants. The rifle companies, which are the *élite* of the battalion, can be formed into a battalion of three or four companies under a major.† The company, the Commander of which may be a Captain or even a Staff-Captain, is divided into two lines or half-lines, and the latter are again

* The statistics relating to the organization of the army go back to the end of 1872 and the beginning of 1873. Since then many changes have taken place. A new division (the 41st) has been established in 1874. The reorganization began in the same year, chiefly in regard to the following points:—

- (1.) Alteration of the tactical division of the peace battalions (4 companies).
- (2.) Reorganization of the fortress and local troops.
- (3.) New regulations for mobilising the engineers.
- (4.) Increase of the artillery and engineers.
- (5.) Partial reorganization of the cavalry (Kuban and Terek Cossacks).
- (6.) The placing, as far as was practicable, of the Caucasian field army on a similar footing to that of European Russia.

The Caucasus field army does not yet form a distinct army corps, such as have been introduced into some parts of European Russia.

† (Notices of the "Great General Staff," Berlin, 1873.) As soon as the reorganization has been carried out, all Caucasus infantry regiments will have 4 battalions, each consisting of 4 companies.

split up into two sections, or corporals' commands. The strength of the infantry battalions is different, and consists of:—

1. Cadre strength	..	..	320 privates and 40 privates unarmed.
2. Usual peace strength	..	480	.. 60 ..
3. Strengthened peace strength	..	640	.. 80 ..
4. War strength	..	840	.. 100 ..

The non-combatant cadre companies are only 119 strong, and those on a war footing only 159 strong. The four Caucasian divisions are kept on the third, or strengthened peace footing, but the 38th and 39th divisions on the usual peace footing. The infantry is to be supplied, like that of the rest of Russia, with the Berdan rifle No. 2 (metal cartridges), bore 0·106 m. As the necessary number is not yet ready, the grenadier division alone has at present received this arm; the others have still the Karle rifle, with paper cartridges.* The Karle arm is a breech-loader furnished with a sword-bayonet, and converted on the Chassepôt system from the old muzzle-loaders. As regards the *rasante* line, rapidity of firing, and lightness of handling, it is much inferior to the Berdan arm. The private soldiers of the grenadier regiments, the non-commissioned officers, and musicians are provided with a side-arm, the *tessak*, or double-bladed broadsword, and the latter carry, instead of a rifle, a smooth-bore percussion pistol. The officers and sergeants carry, according to regulation, revolvers and sabres in leather cases. The uniform of the infantry is the same as that of the entire Russian army—tunics with a double row of white buttons, and of late with only one. During the greater part of the summer the soldiers are permitted to wear a linen uniform, the *kittel*, or smock-frock, on account of the excessive heat, and so present a somewhat strange appearance. The officers, even those of the highest grades in the service, when off duty, wear these linen overcoats—a very elegant and useful uniform—almost invariably in the hot season. Every infantry battalion has five three-horse ammunition waggons, one for each company, which carry about 50 rounds per man. The regiments are called after the

* Governmental battalions, local and halt companies, have the old smooth-bore rifle.

towns in which they are usually in garrison, without, however, being linked with these garrisons, which are denoted by the larger places, Tiflis, Erivan, Stavropol, Pjatigarsk, Derbent, Kutais, Baku, &c. Some regiments bear the names of the provinces in which they are quartered, or with which they are particularly connected by historical associations, as the Apscheron, Kabarda, and Schirvan regiments, or else they are called after their chiefs.

The quarters of the Caucasian divisions have meanwhile changed.

PICKED INFANTRY.—There is in the Caucasus a rifle brigade of four battalions, which, as regards practice in shooting, general activity, and tactical skill, particularly in skirmishing, is far superior to the Caucasian infantry. These, as well as all the Russian rifle battalions with four companies, have three different strengths:—

- | | | | | | | | |
|------------------------------------|----|-----|----------|-----|----|----------|----------|
| 1. The ordinary peace strength of | .. | 384 | privates | and | 16 | privates | unarmed. |
| 2. The increased peace strength of | .. | 512 | „ | | 32 | „ | |
| 3. The war strength of | .. | 672 | „ | | 48 | „ | |

The Caucasian rifle battalions are on the increased peace strength, and are armed with the Berdan rifle No. 1.

CAVALRY.—The regular cavalry is composed of the Caucasian division of dragoons, consisting of four regiments with six squadrons of four lines each, two of which are reserve squadrons;* two squadrons form a division, two lines a half squadron, two horses a file. It has only two strengths:—

The reduced strength of 14 files per line = 112 horses.

The full war strength of 16 „ = 128 „

(Excluding officers, non-commissioned officers, and trumpeters.)

The Caucasian division of dragoons, the Tver, Nijni-Novgorod, Siaver, and Peregasslavl regiments, is on a war footing,

* It must be understood that the tactical division of a cavalry regiment in war strength is four squadrons per regiment. It is only in the Caucasus that the regiments have two reserve squadrons, the other regiments have only one, the 5th or reserve squadron. According to the new plan, recruits are no longer trained by the reserve squadron only, but the others take a fair share in it. The strength of the reserve squadrons is 100 men of permanent service, and 188 horses.

and is armed with the rifled Kruka small-bore carbine, with a bayonet, and the sabre of Caucasian form called the *shashka*, which is quite curved and without a basket, being hung in a leather scabbard round the shoulder, with the train forwards. The flank men have pistols besides. They, too, are to be armed with a light Berdan rifle. The dragoons are taught the infantry drill, and fight well on foot. The horses are procured from the Caucasus itself; they have a great deal of Arab blood, are of splendid breed, and come mostly from the province of Karabag. The regulation saddle is like the Cossack saddle; some of the officers use English saddles, but most of them prefer the comfortable Cossack saddle, especially for long marches. No great attention is paid to the bridle. The dragoon, like all Cossacks, prefers to ride on the snaffle with a whip.

The division of dragoons is thus quartered:—

- I. 15th Caucasian dragoon regiment Tver (Nikola Nikolajevich). Garrison : Zarsskije-Kolodzy.
- II. 16th Caucasian dragoon regiment Nijni-Novgorod (King of Würtemberg). Garrison : Pjatigarsk (Marinsskaja, Staro-Pawlowskaja).
- III. 17th Caucasian dragoon regiment Siaver (King of Denmark). Garrison : Pjatigarsk (Gorjatchewolsskaja and Bekeschewskaja).
- IV. 18th Caucasian dragoon regiment Pereyasslawl (Grand-Duke successor Csesarevich). Garrison : Mosdok (Magomet, Jurtowskaja, Dukowskaja).

FIELD ARTILLERY.—As an artillery brigade of six batteries, which includes also a mitrailleuse battery, according to the latest reorganization, is attached to every Russian infantry division, and bears the same number, the army of the Cossacks also possesses, in addition to the Cossack horse artillery and the two brigades of the 38th and 39th divisions, four brigades of foot artillery: the Caucasian grenadiers, the 19th, 20th, and 21st brigades, which are at the ordinary peace strength, and have four ammunition waggons with three horses each. The brigades are, according to the new plan of reorganization, to have three 9-pounders (Nos. 1, 2, 3), two 4-pounders (Nos. 4, 5), and a mitrailleuse battery (No. 6),* the guns of which are

* The formation of the 5th and 6th batteries was completed in all the artillery brigades in the course of the year 1874. (*Russian Invalid*, No. 5, 1875.)

bronze breech-loaders of the newest pattern, and are only to be made in Russia. The Caucasus batteries chiefly consist of the Krupp cast-steel 4-pounder breech-loaders with double iron carriage, of the Russian bronze 9-pounder breech-loaders, and of the mitrailleuses, Gatling pattern with Berdan bore, 10 steel barrels, and four men to serve each. The horse-battery has only 4-pounders. The Cossack artillery has besides this several different guns, among which are 4-pounder bronze muzzle-loaders of the old pattern. There are, moreover, still two mountain batteries, consisting of 3-pounder bronze breech-loaders. Every battery of the brigades we have named has eight guns, two of which form a line, while two lines compose a division. The battery has three strengths:—

1. Ordinary peace strength: Four guns and four ammunition waggons (exceptionally, four ammunition waggons only in the Caucasus).
2. Increased peace strength: Eight guns and eight ammunition waggons.
3. War strength: Complete train.

The heavy guns of the foot-batteries, the guns of the Cossack horse-batteries, are drawn by six horses, the light pieces,* and mitrailleuses by four horses, the two-wheeled ammunition waggons by three horses. The special guns of the foot-batteries require eight men, those of the horse-batteries ten, and the mitrailleuses four per gun. The whole number can ride upon the carriages, *protze*, and ammunition waggons, and are armed with the dragoon sabre and pistol. The field artillery carry for ammunition, grenades, fire-grenades, shrapnel, and grape. The grenades have a percussion fuse, on the Russian system, which is exactly like the Prussian, and succeeded capitally in the campaign of 1873. By regulation, 120 rounds are carried, 12 of which are in the carriage and 108 in the ammunition cars. The field artillery brigades thus contain:—

* The 4-pounder guns are, according to the newest regulations, likewise to be drawn by six horses. The author saw, in 1873, everywhere only four.

	9-Pounders.	4-Pounders.	Mitrailleuses resp. 3-Pounders.	Ammuni- tion Cars.	Total.
I. In reality according to the ordinary peace strength.	Six brigades = 36 batteries. Caucasian grenadiers, 19th, 20th, 21st, and 38th and 39th artillery brigades. With three 9-pounder batteries, Nos. 1, 2, 3, with 15 men to serve, and 6 horses per gun. With two 4-pounder batteries, Nos. 4, 5, with 12 men to serve, and four horses. With one mitrailleuse battery, No. 6, with 4 men to serve, and 4 horses. All with 4 guns and 4 ammunition cars each.	12 batteries 48 guns 576 men 192 horses	6 batteries 24 guns 96 men 96 horses.	.. 144 cars 144 men 432 horses	36 batteries. 144 guns. 144 ammunition cars. 1,896 men (service). 1,152 horses.
II. According to the reorganization accomplished :—*	Ditto. Each battery with 8 guns, and men to serve 8 guns, and 8 ammunition cars, with 3 horses. (The entire train.) Besides these, 2 mountain batteries, with 3-pounder bronze breech-loaders.	12 batteries 96 guns 1,152 men 384 horses	6 batteries 48 guns 192 men 192 horses	.. 288 cars 288 men 864 horses (without trains and officers)	36 batteries. 288 guns. 288 ammunition cars. 3,792 men. 2,304 horses. (without trains, officers, and parks).

* This table only approximates to the figures of the real artillery material, as it was supposed to be after the reorganization had been carried out, while in 1873 it did not yet exist. In case of war the mountain batteries will be divided between the artillery brigades according to circumstances.

The table, as we have said, represents the strength according to the new organization. At the beginning of the year 1873 this had only been partly done. Before the reorganization, the Caucasian foot artillery brigades consisted, in their normal strength, of the 1st, 9-pounder battery; the 2nd, 3rd, and 4th, 4-pounder batteries; and the 5th, mitrailleuse battery; both foot artillery brigades (38th and 39th) of the 1st, 9-pounder battery; the 2nd and 3rd, 4-pounder batteries, and the 4th, mitrailleuse battery. At the time, for example, of the Caucasian mountain war in the year 1863, the Caucasian artillery brigades were composed of the so-called heavy, light, lightened, and mountain batteries. Thus the grenadier brigade had at that time two heavy, one lightened, and one light battery, with one flying park; the other brigades, 19th, 20th, and 21st, one heavy, two lightened, one light battery, with one flying park; the 19th artillery brigade had, moreover, one mountain battery. The 38th and 39th brigades did not exist at that time in the Caucasus. The year 1873 may be considered the date of the change from the old to the new formation. At the end of that year the brigades had two 9-pounder and two 4-pounder batteries, and one mitrailleuse battery. The strengths of the batteries, including officers, non-commissioned officers, clerks, professionals, &c., are as follow :—

Maintenance Strength of a Battery.	War Strength.	Increased Peace Strength.	Ordinary Peace Strength.	War Strength.	Ordinary Peace Strength.
	Men Maint. Stand.			Horses and Carriages.	
				H. c.	H. c.
4-pounder foot battery ..	261	208	183	160 24	48 4
9-pounder " ..	322	258	223	214 33	56 4
3-pounder mountain battery* ..	328	206	117	194	36
4-pounder horse battery ..	337	274	269	324 24	219 4
Mitrailleuse battery ..	221	188	165	140 16	56 4

* The mountain batteries have no cars in their ordinary strength. Their ammunition is packed in 112 boxes for war strength, and in 28 for peace strength, transported by beasts of burden.

Besides the guns already mentioned, there are still in the Caucasus a number of smooth-bore bronze 10-pounder muzzle-loaders of the old pattern, the so-called *yedinorogs*, i.e., unicorn guns, also cast-iron $\frac{1}{2}$ - and 1-poody* *yedinorogs*, and lightened guns of 8-inch bore and cast steel, which are specially intended for mountain batteries and local defences, or for the arming of small fortified posts in the steppe expeditions. Besides this, the little mountain forts have some rather worthless ordnance of old construction, as old smooth-bore muzzle-loaders—for example, 12-pounder cannons, bomb, 12- and 24-pounder carronades, 2-poody* cast-iron mortars, and many others which have been taken from the regular fort and siege artillery of European Russia.

SIEGE AND FORT ARTILLERY.—The siege artillery of the Caucasus is now being remodelled. According to the new arrangement of the 25th of May, 1871, the Caucasus will have half a siege park and an ammunition park.

ENGINEERS.—The sapper brigade of the Caucasus comprises two sapper battalions and one reserve sapper battalion with four companies, which have their depôt at Tiflis. A sapper battalion contains in peace time, 600 men ; in war, 900.

2. *Border Troops.*

The Caucasian border troops consist, as in the other Asiatic military districts, of the line battalions, the object of which has already been explained. In the Caucasus there are 22 such battalions, which, in addition to the name of the district, are regularly numbered—in the whole of Russia 48 line battalions—and have three strengths :—

Ordinary peace strength :		22 officers, 577 non-commissioned officers, and men.
		84 non-combatants.
Increased	„	22 officers, 777 non-commissioned officers and men.
		89 non-combatants.
War strength :		27 officers, 1,026 non-commissioned officers and men.
		94 non-combatants.

* "Poody" is a Russian weight, equal to 40 Russian or 36 English pounds avoirdupois.

The border troops were really intended only to be employed in the province in which they are quartered; but in all the Asiatic campaigns they formed the principal part of the troops taking the offensive, and are thus to be included with them in the field army. Line battalions are, for example, quartered in Vladikavkas, Kumesch, Gunib, Derbent, Petrovsk, Chunsach, Schuru, Soukhoun, Poti, Sakataly, &c.*

3. *The Irregular Troops of the Caucasus.*

These could as fairly be classed among the field troops as among the local troops. The cavalry are chiefly employed with the field army, while the infantry forms the chief occupying force of the Cossack district. They are only recruited from the Cossack districts, and compose the Cossack armies. The law is the same for all these districts, that is, that every individual of the male sex, who is fit for military duty, is bound to serve during war. As an equivalent, every Cossack tribe receives a piece of land large enough to support the whole population and its flocks, as well as to provide the equipment of their armies. According to the regulation, every Cossack General possesses 1,600 *dessiatines* of land, every staff-officer 400, every superior officer 200, every non-commissioned officer 100, and every Cossack 30. The Cossack districts are placed, as regards their administration and military organization, under an Ataman, the Hetman of the Cossacks, who is usually a Russian General or Lieutenant-General, and whose income may be estimated at a good deal over 20,000 roubles. Thus every Cossack is subject to military service. From his seventeenth year he is liable to *stanitza* duty, and from his twentieth to regimental duty. Formerly the period of service was for life; the Cossack was exclusively a soldier, even from his birth. The life-long service has recently been reduced to from 20 to 25 years. The levying of the troops is performed in each *stanitza* by lot. Those who

* When the field army of the Caucasus was reorganized and increased, part of the line battalions were used to form the new regiments and to complete the old. Thus the border (line) troops have been partly transformed into field troops.

escape pay a tax for the period of obligatory service. The Cossacks supply equipment and horses at their own expense, and receive in return a fixed allowance from the crown. A third of the troops levied do service with the colours during peace; the remainder are on leave, and may return to their occupations in the country, but must always be ready to hasten to active duty. Every man on furlough is summoned to the manœuvres. The Cossacks furnish Cossack cavalry regiments, Cossack battalions, and horse artillery. The cavalry regiments consist of four or six *sotnias*,* with from 600 to 800 horses per regiment. The normal strength of a cavalry regiment (of 6 *sotnias*) is:† 21 officers, 873 non-commissioned officers and men, 873 riding and 90 pack and train horses. The Cossacks of the Caucasus, who, on account of their protracted and arduous service in war against the mountaineers of the Caucasus, are generally called Cossacks of the line, and are famed throughout the whole of Russia for their valour, their military skill, and fitness, form two armies:—

I. The Kuban army:—

Ten cavalry regiments of six *sotnias* each.

Two foot battalions.

Five horse batteries with four guns (in war time eight guns); besides the two squadrons of Kuban Cossack body-guards, which are quartered in St. Petersburg as the escort of the Czar.

II. The Terek army:—

Five cavalry regiments of four *sotnias* each (three regiments on active service).

Two horse batteries with four guns (in war-time eight guns). One squadron of Terek Cossack body-guards as the escort of the Czar.

The Caucasus thus furnishes a total of 15 cavalry regiments, two foot battalions, and seven horse batteries with 56 guns.†

Some of the Cossack regiments bear the names of their districts; for example, the Kislyar, Grebenski, Vladikavkas, and Smiyevski regiments of the Terek army, single *sotnias* of which took part under Lomakin in the Khivan expedition. A pro-

* A *sotnia* means in Russian the number 100, and is used for the irregulars instead of "squadron."

† According to the reorganization scheme of August 8, 1870.

visional school of artillery for the Kuban and Terek armies has, moreover, been established in Maikop. The Kuban and Terek Cossacks have in time of peace double strength of officers, in order to supply the required number when the regiments are increased at the approach of a war.

II.—THE LOCAL TROOPS OF THE CAUCASUS.

These troops are :—

1. The reserves, which have in time of peace to supply the deficiencies of the active army in men and horses, and to train the recruits and remounts. They consist of the reserve infantry battalions, from which six infantry divisions are recruited, of eight reserve squadrons of dragoons, which compose the 5th and 6th squadrons of the four Caucasian dragoon regiments, and of one Caucasian reserve sapper battalion. The reserve infantry battalions, as well as the reserve troops, with the exception of the reserve dragoon squadrons, have been abolished by the order of the 24th of July, 1873.

2. Fort battalions and fort artillery. In the Caucasian fortresses of Alexandropol (Gumry) and Achalzych there is a permanent garrison of two fort battalions which form independent bodies of troops, and have a regular war strength of 900 men. In the remaining fortresses there are besides two fort administrations of the 1st class, two of the 2nd, and two of the 3rd class, each with a company always on full strength :—

Fort Artillery Administrations and Companies.	Fort Company Constant Strength.		Fort Administration.		Total Combatants.
	Officers.	Privates.	Officers.	Privates.	
1st class in Alexandropol (Nos. 1 and 2) ..	20	1,356*	8	36	1,348
1st class in Tiflis (Nos. 1 and 2) ..	10	568	8	36	564
2nd class in the province of Terek (Nos. 1 and 2) ..	10	458	4	25	454
2nd class in the province of Daghestan ..	5	339	4	25	337
3rd class in the province of Kuban ..	5	229	3	20	227
3rd class in Achalzych ..	5	339	3	20	337

3. There are besides in garrison in the Caucasus five Governmental battalions and six battalions of Caucasian district and circuit detachments, which are told off for police and guard service in the different towns and districts. The five Governmental battalions form the garrisons of the towns of Stavropol, Tiflis, Baku, Erivan, and Kutais. Of circuit commands, 13 are in Trans-Caucasia, five in the province of Terek, and one in the Government of Stavropol.

4. The "Caucasian militias" consist for the most part of native Georgian or Tartar volunteers. To these belong the three Caucasian Druschina battalions, which have a permanent formation in Grusia, Kachetia, Guria, and Daghestan, and the "irregular cavalry regiments" assembled, like the Cossack regiments, in Kutais, Daghestan, and the Terek district; as, for example, the Daghestan horse, which took part in the Khiva campaign. The regiments are composed of three divisions of two *sotnias* each, which are recruited from volunteers belonging to the various populations of the district. The Terek irregular horse consists of the Kumyk, Tschetschenz, and Osset divisions; the Daghestan regiment principally of Lesgians. A squadron of these volunteer mountaineers forms the famous and showy Circassian body-guard of the Czar; the men have,

* Only Alexandropol in peace 458 men.

like the Cossack cavalry regiments, the Circassian national costume, arms, and equipment. The *natschalniks*, or military administrators of the *okrugs*, have, moreover, besides the small infantry posts which protect their residences, a kind of cavalry body-guard, which is recruited from native mountaineers, is often over 100 strong, and is in the pay of the military chief. Such men are also to be found serving on most of the staffs of the higher commanding officers, as almost every Russian officer or native nobleman has several armed men (*Djigites*) in his household, who protect their master and his family, and perform, in addition to military, various private services. While the war with Schamyl was raging, the militia troops were particularly useful in defending the peaceful country people on the border-lines of Russian occupation against the attacks of the hostile Caucasians. After the fall of Schamyl, in the year 1859, their importance considerably diminished, and by degrees became much impaired. At the beginning of 1860 there were, besides the cavalry regiments and Druschina battalions to which we have referred, three *sotnias* composed of the natives of Daghestan, one Labian, Kuban, and Dshara-Lesgian *sotnia*, also recruited from the mountaineers.*

5. There are, moreover, in Tiflis a company forming a school of instruction for the infantry of the Caucasus, an engineer dépôt, a moveable artillery workshop, and a laboratory for the repair of damaged cannons, small-arms, and ammunition, and an apothecary's department, as well as the various offices and staffs of the central military administration.

* The provinces of Daghestan, Guria, and Terek had besides militia infantry acting as local police. The total of the Caucasian militia force was, according to Brix, in the year 1863, 7,767 men, and it was supposed that in war time besides 22,250 men might be levied; now, however, part of this militia has been done away with.

Review of the Russian Military Strength in the Caucasus.*

	Actual Classification of the Troops.				Guns.	Peace Strength.	Guns.	Total.	
	War Strength.	Increased Peace Strength.	Usual Peace Strength.					War Strength.	Peace Strength.
1. Field army— Infantry ... Rifles ... Border troops	Infantry ...	{ 16 regiments, of the 19th, 20th, 38th and 39th in- fantry divisions = 64 battalions. 1 rifle brigade, the 4 Caucasian rifle battalions = 4 battalions. The Caucasian line battalions = 22 battalions.	{ 8 regiments, of the 38th and 39th in- fantry divisions = 24 battalions.						
				114 battalions =	139,499	93,098			
	{ 1 Caucasian dragon division of 4 regi- ments ...	...	...						
Cavalry ...	...	...	...	3,815	...	3,389			
Field artillery ...	...	...	{ 6 artillery brigades, 16 parks ...	16,730	288	5,572	144		
Sappers ...	...	...	{ 1 sapper brigade (including reserve sapper brigade) = 3 battalions ...	2,355	...	1,661	...	165,899	108,790†
								288	144

Actual Classification of the Troops.				Guns.	Peace Strength.	Guns.	Total.		
War Strength.	Increased Peace Strength.	Usual Peace Strength.	War Strength.				Peace Strength.		
II. Irregular troops {	1. Terek army*	...	...	12,498 3,921	11,568 3,921	40 16	16,349	15,609	98
	...	...	Reserve troops	2,921	1,483	...	...	...	...
III. Local troops	...	...	Fort battalions, Government district command.-batt.	15,663	14,498	...	17,983	15,911	...
	Three irregular cavalry regiments	In round numbers	3 Druschina batt.	3,000 1,700 2,000	1,500 1,700 2,000	...	...	...	...
IV. Militia	Armed body-guards	...	...	...	...	...	6,700	5,200	...
	Districts' militia	...	...	...	(?)	...	...	...	...
For the year 1878.—Total of the Caucasian forces, exclusive of staffs, administration, &c. ...				...	...	...	196,331	140,340	173

* The author, in these figures, has only tried to arrive at an approximate estimate of the real strength of the troops in the Caucasus.
 † According to notices of the German "Great General Staff" (Berlin, 1878). According to Suroria's Almanac for 1876, the total of the troops in the Caucasus is 154,046 men; it cannot, however, be ascertained what strength is meant.
 According to "Russia's War Forces" (Vienna, 1871) the war strength of the army of the Caucasus is 198,414 men altogether.

The Caucasian army classified in the foregoing table, which now represents a compact and independent force, owes its formation and organization to the protracted mountain wars in the Caucasus. The kernel of this fine army, the four Caucasian infantry divisions, the dragoon division, and the line battalions, existed after the termination of those bloody wars by the storming of the Gunib and the capture of Schamyl on the 25th of August, 1859, in very nearly the same form as at present. The disposable force in the Caucasus has since been increased by the renewed formation of the 38th and 39th infantry divisions, but has been diminished by a considerable reduction of the line battalions and militia. It will not be uninteresting to give here a few details which First-Lieutenant Brix furnishes respecting the army of the Caucasus in his "Imperial Russian Army on the 1st of January, 1863." At that time the *corps* classification still existed in Russia; the territorial distribution was then only in its infancy. But no corps-connection existed between the various parts of the Caucasian army; it was composed, as now, of the troops quartered in the Caucasus, divided into five sections, corresponding to the military distribution of the country. It consisted, accordingly, of the troops: (1) in Trans-Caucasia; (2) in the province of Kuban; (3) in that of Terek; (4) in that of Daghestan; and (5) in the Government-General of Kutais. Besides the four infantry divisions already mentioned, and the one cavalry division of which we have also spoken, there were already at that time four artillery brigades, two sapper battalions, one train brigade, two reserve parks on a war footing, and 37 line battalions. Brix estimated, in 1863, the regular field army, including officers, non-commissioned officers, and musicians, at 135,049 combatants (a total of 152,776 with non-combatants) on its war strength, and 126,260 combatants (a total of 144,152 with non-combatants) on its peace strength. He reckons, however, the "irregular troops under the Commander of the army of the Caucasus" quite distinctly from the others, and among them, he classes the Cossacks and all the militia. The war strength of these troops he estimates at 77,583 combatants (a total of 78,976 with non-combatants), the peace

strength at 39,595 combatants (a total of 40,599 with non-combatants).

The entire active strength there in 1863 would amount to 212,632 combatants on a war footing, and to 165,855 combatants on a peace footing. We may gather from this that, although from a numerical point of view the war strength of the army of the Caucasus has diminished since 1863, its tactical value has greatly increased through the additions to the regular field troops, and the reduction of the irregular elements, particularly of the militia.

Of the forces just enumerated, the irregular troops are quartered in their Cossack districts on the Kuban and the Terek, the local troops in their permanent garrisons, the militia, as a rule, in the districts where they have been recruited. The troops belonging to the real field army garrison, by turns, the larger towns and fortresses, but by far the greater number of them are employed in the occupation of those districts of the Caucasus which are still threatened by the obstinate and unbending character of the mountaineers. Thus they are quartered partly in regiments in places which are of especial strategical importance—as, for instance, on the west shore of the Caspian Sea and on the eastern side of the mountains—partly in detachments, in battalions or companies, in the smaller forts and larger posts, which have been built at all the principal passes on the roads which lead over the Caucasus, at the openings of valleys and in the paths formed for the domination of mountaineers, in the flat country along the course of the rivers, at frontier points which are particularly menaced on the side of Persia and Kurdistan, and at the harbours of the Black Sea. The posts in the mountains never consist of impregnable earthworks. They date from the time of the Russian mountain wars, when a safe path was opened by degrees into the impassable chain, by means of a number of fortified posts at no great distance from each other. The mountaineers had no field guns. Their guns were used solely for defensive purposes, as at the defence of the Gunib by Schamyl. The fire-arms of the natives are of small penetrating power and range; they are only Turkish flint and match-lock weapons, with a very long rifled barrel and very small bore. The chief

strength of the Caucasian lay in the naked sword, and in hand-to-hand conflict. Masonry of simple construction was a sufficient protection against such weapons as these. All the *kreposts** of the mountains consist for this reason only of walled cannon *emplacements*, the so-called Caucasian towers, several of which are usually connected by crenelated walls provided with loop-holes for firing. In the space thus enclosed the Commander's house is situated, with the barracks for the largest part of the garrison, and the wells and store-house for a several months' supply of provision and ammunition, powder and shot, which can often only be carried up the steep, well-nigh inaccessible mountains with the greatest difficulty. These *kreposts* are frequently destitute of trenches, and are only closed by solid gates of oak; often, they consist simply of a single, isolated round tower, erected to afford a covered shelter for one or two guns. In many such places guns, which are of various patterns — generally the old 12-pounder, the 10-pounder *yedinorog*, or even divers specimens of the old system—stand quite alone, and are only protected from the weather by a small wooden roof; in others they even lie unmounted on the ground within the fort. At very important points, as, for example, Vladikavkas, Petrovsk (which is of value as the only good naval harbour on the Caspian Sea), and at the Gunib (the fortress which already, from its natural position, was difficult of approach, and has now become impregnable from its permanent works, and which has gained eternal fame as the last lurking-place of Schamyl), extended fortifications have been constructed. Alexandropol and Achalzych, however, are the only real fortresses according to modern ideas.† In the plains of Cis-

* Every fortress or larger fort is in Russian called "*krepost*." Small mountain or steppe forts, though forts, are usually only called "*posts*," as, for instance, the Embaska, Kasalinsk, the Alexandrovsk, and many others.

† Of larger fortresses the Caucasus possesses—

In the district of—		Inhabitants.
Erivan : Alexandropol (Gumry), with ..	..	20,600
Tiflis : Achalzych, with ..	..	13,775
The Terek Cossacks : Vladikavkas, with ..	..	15,000
Baku : Schuscha, with ..	..	19,945

Caucasia there are also to be found posts with earth walls and trenches. Thus the flour and corn store-houses, the bakehouses and powder magazines, which are to be found in all the *stanitza* garrisons, are enclosed by low earth walls built in the form of a square, and encircled by little trenches. On the Central and Lower Terek we even still find the Cossack watch-houses, which were so much used in the war of the Caucasus. They are formed by small redoubts, in the midst of which is a house made of planks for the reception of the supplies, and for the accommodation of the small Cossack garrison, (often only from 10 to 20 men strong) and near it a wooden staging like a lighthouse, about 60 feet in height, on a covered platform of which a Cossack marches up and down with shouldered weapon, keeping watch and guard day and night over the broad, level plain around. These watch-posts are constructed within sight of each other in a line between the larger posts in the plain. The signals of a solitary watch-post raise the alarm in a few minutes, just like an optical telegraph, through the whole country. In earlier times, they warned the peaceful inhabitants and the garrisons of the approach of hostile, plundering mountaineers; now, they give due notice of the arrival of robber bands, or of the insurrectionary movements which now and again occur in the

Among the "posts" of larger extent must be reckoned—

In the district of—				Inhabitants.
Daghestan :	Petrovsk, on the Caspian Sea, with	..	..	4,263
Daghestan :	Temir-Chan-Schura and Gunib, with	..	..	5,094
Daghestan :	Derbent, with	..	..	15,191
Terek :	Grosnoye (was to be destroyed in 1875), with.	..	..	2,615
In the Government of—				
Tiflis :	Gori, with	..	..	5,183
Erivan :	Erivan, with	..	..	15,040
Kutais :	Poti, with	..	..	3,023
Fortified harbours are—				
In the district of the Black Sea : Anapa, with..				4,898
and Gagry.				

Besides many others, as, for instance, in Redout-Kale, Vuesapnoye, Vosdviahenkoye, &c. Small mountain forts, frequently consisting of a Caucasus tower only, are to be found in considerable number in the Caucasus, particularly along the River Kuban and in Daghestan, *e.g.*, Chunsack, Ischkerty, Chodchalmachi, and many others.

country of the Terek. These are dangerous posts ; for if the enemy arrives with far superior numbers, the few Cossacks of the watch perish, in spite of wall and ditch and the most obstinate resistance in the world. The attacks of the mountaineers are so unexpected and swift, that the watchman has scarcely time to give the alarm signal, and very rarely is he able to escape on his horse, which always is ready saddled below. As we have said, the watch-posts now perform only police and private duties ; amongst other things, they give warning of fire in the villages, or of the steppe conflagrations, which often devour everything around them.

The regulars and *élite* of the Caucasian line regiments are quartered in Daghestan, in Kabarda, and on the eastern side of the Caucasus range. Among these are the famous regiments of Apscheron, Schirvan, Sannersk, Kabarda, &c. A portion of these and of the mounted Cossacks form the garrisons of the Trans-Caspian steppe fortresses, as Alexandrovsk, Krasnovodsk, and Chikislar, on the east coast of the Caspian Sea, of which we shall hear more later on. The troops in the Trans-Caspian districts are mobilised, and are thus on a war footing.

Lastly, as regards the mortality among the troops of the Caucasus, the reports are very satisfactory as compared with those in the other military districts. According to the Suvorin Calendar of 1875, the cases of sickness in the regular army (estimated at 154,046 men) were, for 1872, 18·34 per cent., the deaths 1·36 per cent. Accordingly, next to the West Siberian and Warsaw military districts, the sanitary condition of the army of the Caucasus, as regards illness attended with fatal consequences, may be classed among the best in the Russian Empire. Rich nature, healthy mountain air, and the most favourable quarters may be the principal causes of this. With respect to trifling illnesses the Caucasus must be admitted to furnish the highest figure of all military districts.

III.—THE NAVIES OF THE BLACK AND CASPIAN SEAS.

Having dealt with the Russo-Caucasian forces on land, we now come to the navies of the two seas which border the Caucasus, as they are of no slight importance in war operations, were it only for the transport of troops and war material, especially for the east coast of the Caspian Sea, or for the defence of the coasts, and for communication to and fro. The Black Sea fleet consists of—

- 5 screw corvettes and yachts, with a total of 47 guns.
- 1 screw transport.
- 8 transport steamers.
- 14 steamers of the coast flotilla.

- 28 ships, with 53 cannon, in the harbours of Odessa, Sevastopol, and Kertsch.

The normal strength of the crews of the fleet, which is distributed into two divisions, is 3,500 sailors. Of these, in the year 1873-74 there were nine ships, with 320 officers and 3,000 sailors, in service.

The Caspian Sea fleet consists of:—

- 17 Caspian steamers $\left\{ \begin{array}{l} 3 \text{ screw steamers.} \\ 3 \text{ gun-boats.} \\ 3 \text{ small steamers.} \\ \text{Several transport steamers and steam pinnaces.} \end{array} \right.$

- 14 armed sailing-vessels for cruising on the coasts.

- 31 ships, with 45 guns, distributed among the harbours of Petrovsk, Baku, Aschurade, Derbent, and Astrakhan, the greater part at stations on the coasts.*

The strength of the crews was, in 1873-74, 1,436 men. There were in commission 11 ships, with 140 officers of all ranks, and 1,150 men.

For protecting the trade and communication on the Volga

* According to the newest figures of the Russian "Sea Magazine" for 1874, the Black Sea fleet consists of 2 iron-clads with 4 guns each, 29 unarmoured vessels with a total of 45 guns; the Caspian fleet of 20 unarmoured steamers, of which one was still in course of construction, and 9 were not yet provided with guns.

and the Caspian Sea, the head-quarters at Tiflis has at its disposition, in the event of war, the extensive merchant fleet and numerous passenger boats of the different steamboat companies. These are hired by the Crown as they are wanted, and even in time of peace are placed under the control of the marine administration, and are commanded by officers both Captains and Lieutenants, who were formerly in the navy. The officers retain their uniform and promotion, but are entirely in the service and pay of the private companies, and often become directors and agents-in-chief. In the campaign of 1873, the ships of the "Caucasus and Mercury" Company, which were thus commanded, performed the entire service between the Caucasus and the eastern steppe fortresses, the starting-points of the Caucasian operation columns. In Astrakhan there are two large steamboat companies for the Caspian Sea, which do the greater part of the trade with Persia, by way of Astrabad and the roads of Enseli, and most of the passenger traffic along the coasts. Besides these, the Caspian Sea is covered with hundreds of small fishing-boats, which are employed on the west coast in collecting the famous caviar, on the east coast, in productive fisheries, and in the transport of naphtha. The only real harbours on the Caspian shores are Petrovsk (with lighthouse and the only practicable naval harbour) and Baku; the only roadsteads worthy of the name, Nisow, Derbent, Enseli (the roadstead of Rescht), Sarinski, and Kurinski. The remaining stations for shipping are nothing but mere anchorages, like the one for the navy at Aschurade on the peninsula of Sara, as the historical survey has already shown. Favourable spots for harbours are the Bay of Kinderli, the Gulf of Krasnovodsk, the Bay of Chrivinski, and the Gulf of Enseli. Besides these, for the inland traffic, the small harbours at the mouth of the Kuma and the Terek delta, such as Schlandrukoff and Scherebriakoff, are of especial importance, as they are of great use in providing the eastern districts of the Caucasus with manufactured articles from the interior governments of European Russia by way of the Caspian Sea, as well as in supplying, in conjunction with Petrovsk and Baku, portions of the Caucasian army with war

material through the Russian Ministry of War. In several years the quantity of grain imported from the Volga provinces into these harbours, exclusively for military objects, amounted to upwards of 600,000 chetverts.

The Volga has four companies* for passenger traffic, which possess large steamers fitted out with every luxury. Not to speak of other vessels, it is navigated by 357 steamships alone, 60 of which carry passengers. The shipping on the Caspian Sea can, of course, only carry the commerce of the interior, as there is no direct communication with the Black Sea;† it is nevertheless becoming of great importance, as it continues from the Caspian Sea, by means of the Volga, through the Vyschni-Valotschek, Tichwin, and Maria canals, to the Baltic Sea, and, by way of the Duke of Wurtemberg's canal, to the White Sea. The delta of the Volga is a great hindrance to the shipping. Like all the mouths of the rivers of Inner Asia, it forms an extended and spreading network of small channels, which are so choked with sand, a misfortune which is every year increasing, that most of them are of no service whatever. Only one of the principal arms of the Volga is navigable, and the entrance even to this is blocked up by a bar so large that only small boats, drawing from one to two feet of water, are available for the transport of passengers between the large Volga ships and those of the Caspian Sea. For the conveyance of the more bulky merchandise lighters are used, and it is by their means that such goods are brought over the mouth of the Volga. As there is no

* These companies are: "Samoletk," "Caucasus and Mercury," Steamboat Company "On the Volga," and "Kama-Volga-Leow."

† The ingenious idea of cutting a canal through the isthmus of the Caucasus to connect the two seas by means of a navigable channel, and of directing the immense interior traffic of Russia and of a part of Central Asia through the Volga and the Caspian Sea into the great stream of the Mediterranean traffic, has never been carried out. The project, however, was already of advantage, as it led to the levelling of the isthmus, the exact level of the Caspian Sea being ascertained thereby. The difference between the levels of the Caspian and the Black Seas, owing to other local conditions, is said to be unfavourable to the construction of a canal. The projects for a Central-Asiatic railway, lately so much talked of, and the speedy completion of the Rostoff-Vladikavkas railway line have, however, thrown the project of a canal into the back-ground.

harbour between the bar and the sea, the vessels lie at anchor out at sea, and the articles have to be transferred in the open. In winter the ice completely precludes all commercial intercourse. In the earlier times the steamboat traffic of the Caspian Sea could not be largely developed, as coal could only be procured with difficulty, and wood fuel was very expensive and hard to find. It is only lately that it has begun to flourish, and this is due to the wonderful productiveness of the naphtha and petroleum wells on the west coast of the Caspian Sea at Baku, the waste produce of which has been adapted, by a clever invention and at a very trifling cost, to the heating of the steamboats.*

The Russian merchant fleet comprises, according to Lengenfeldt:—

On the Black and Azof Seas	..	876 ships, including 111 steamers of 80,134 tons.
On the Caspian Sea	..	267 ships, including 18 steamers of 17,566 tons.

THE PRODUCTIVENESS AND RESOURCES OF THE CAUCASUS WITH REFERENCE TO THE REQUIREMENTS OF THE ARMY AND OF WAR.

The raw produce of the Caucasus, as far as the subsistence and requirements of the Caucasian army are concerned, would in general be sufficient for the demand, particularly if the products of the country of the Don Cossacks, who live on the borders, and who are intimately connected with the Cossack districts of Cis-Caucasia, were also included in the territory of the Caucasus. The countries of the Cossacks of the Don, the Kuban, and the Terek, as well as the Georgian principalities of Kachetia, Mingrelia, Grusia, &c., are extensively and well cultivated. In the latter province especially, vine-culture is carried on with great success, and its produce is far in excess of the needs of the country, and a very considerable exportation conse-

* How traffic on the Caspian Sea has increased of later years may be seen from the "Russian Review," Part I, p. 113.

quently takes place. The chief crops of the farmer are, in addition to corn, madder, rice, cotton, and silk. The greater part of the Caucasus, the northern steppes of Cis-Caucasia, the arid steppes of the plain of the Kur, and the barren mountains of Armenia, are, on the other hand, scarcely cultivated. It is true that the tribes of the Caucasus do till the ground everywhere, but in the wild, stony mountain range, where the little fields high on the rocky slopes cannot be reached and cultivated without great risk, farming is attended with so much trouble and labour, and with such small results, that it is scarcely able to satisfy the very trifling requirements of the simple and unpretending mountaineers. The poverty of this district is, however, amply compensated for by the great fertility of the countries of the Cossacks we have mentioned, and by the wonderfully fruitful Georgian principalities, which may be compared to a little Paradise. The corn grown in the Cossack land is very considerable, and the surplus in the district of the Don Cossacks alone would suffice for the requirements of the entire Caucasus. The export for the year 1871 was:—

				Chetverts.	
Wheat from the harbour of	Taganrog	..	..	1,531,893	
"	"	"	Rostoff	..	1,262,443
Rye	"	"	Taganrog	..	104,297
"	"	"	Rostoff	..	276,986*

The following statistics show what extensive agricultural resources the Cossack districts in general possess:—

		Population.	Males.	Productive Land.	Waste Land.
				Dessiatines.	Dessiatines.
Don Cossacks	..	990,619	485,857	12,788,962	1,728,052
Terek "	..	120,165	60,899	1,639,718	331,282
Kuban "	..	470,258	244,101	Of both,	9,508,000

* "Russian Review," Part II, 7,73, "The Export Trade of Russia," by F. Matthæi.

The Don Cossacks alone produce 5,386,000 tschetverts of rye.

If, however, in spite of the immense quantities of grain, the importation for military purposes, as stated at page 169, in the neighbouring ports of the Sea of Azof from the Volga amounted for several years to 600,000 chetverts, this need cause no surprise, being owing to defective means of communication. Notwithstanding the short distance of the Sea of Azof, the cost of the transport of grain to the Eastern Caucasus and the west coasts of the Caspian is smaller, when it is sent from the central provinces of the Volga, than when despatched from Rostoff or Taganrog. Moreover, high prices, on account of bad harvests in the countries of the Don Cossacks, may have been the cause of the comparatively very large importation from the Volga to which we have drawn attention.

The cultivation of tobacco prevails over the whole of the Caucasus. The product for the year 1871, according to the "Russian Review," was :—

	Land.	Tobacco.
	Dessiatines.	Poods.
For the country of the Don Cossacks ..	6	253
„ Stavropol, the Terek, and Kuban districts	938	53,244
„ Kutais	407	8,492
„ Baku	81	5,270
„ Elisabetpol	62	3,842
„ Tiflis	144	2,693
„ Erivan	126	2,085
„ Derbent	3	151
Total	1,767	76,080

The Cossacks of the Don produce over a million hectolitres of wine ; the Caucasus, particularly Kachetia, whose red and white wines are celebrated, more than one hundred millions of hectolitres.

The number of cattle raised is as follows :—

	Horses.	Horned Cattle.	Sheep.	Pigs.	Goats.
The land of the Don					
Cossacks ..	370,000	1,012,000	2,246,000	220,000	40,000
Stavropol ..	98,000	322,000	1,032,000	64,000	51,000
Tiflis ..	78,000	301,000	1,388,000	209,000	57,000
Kutais ..	33,000	139,000	86,000	100,000	59,000
Erivan ..	33,000	225,000	575,000	2,000	..
Baku ..	143,000	544,000	1,486,000	13,000	82,000
Kuban district ..	113,000	543,000	1,013,000	160,000	43,000
Terek district ..	34,000	102,000	94,000	40,000	..
Total ..	902,000	3,188,000	7,920,000	808,000	332,000*

According to these returns, horse-breeding is largely carried on, but at the present time the numbers must be smaller, as of late years it has greatly fallen off in the Caucasus. But in any case the districts just mentioned afford unusually valuable material for the Cossack army, as well as for the Caucasus regular army, and would produce sufficient horses to mount twice or three times the number of troops. Of the breeds of horses in these districts—which are quite as different in Russia as the lives of its settled and nomad inhabitants—there are three which deserve special mention, viz., the steppe horses, including the Don, Calmuck, and Kirghiz breeds; the mountain horses of the Caucasus, with the Karabag and Kabardin; and, lastly, the Don Cossack horse. There are two breeds of Don horses—the native, of the old Tartar blood; and those improved by mixture with Turkish, Arab, Persian, and Circassian blood, which the Cossacks ride, and which are distinguished above all the Russian breeds for their lightness and speed. The chief quality of the Don horse is its great endurance and indifference to weather and climate, and the little trouble which it gives as regards fodder and care. The Cossack horses remain for the greater part of the year on the steppe pastures, left entirely to themselves, and it is only in winter, when the plain is covered with snow, or the ground frozen hard, that they are

* Report of the Caucasian division of the "Imperial Geographical Society" for 1869.

herded together in enclosed and sheltered places. Apart from any other circumstances, therefore, habit and its free life combine to make the Don horse a first-rate animal for campaigning purposes. The Calmuck horse is found in the northern plains of Cis-Caucasia as far as Astrakhan, and is exclusively of Mongolian and Tartar blood. The animals are small, rough, long-eared, and of unprepossessing exterior, but are, nevertheless, endued with immense endurance and very hardy. They are only good for saddle horses, and though they look lazy and sluggish when in repose, when mounted and ridden, they are full of fire and activity. The Kirghiz breed resembles this one most, and is, if possible, even uglier in appearance. But as it remains the whole year in the open air, and even in winter crops the scanty herbage of the snow-covered steppes and deserts, while in summer it has often to suffer thirst for days, and even then, only gets brackish water to drink, it endures hunger and the hardships of a desert campaign even better than the Calmuck horse, and yet it is of great activity and speed. Its proper home is the Kirghiz steppe to the south of the Orenburg Government, and on the east coast of the Caspian Sea. But it is also to be met with on the steppes of Cis-Caucasia, especially among the nomads in the districts of the Kuma River.* The Caucasian horse, however, is the finest breed of chiefly pure Arab blood. The best of this breed is the Karabag, which is only second to the Arab thoroughbred, and is chiefly reared in the province of Karabag, to the south of the Kuma. This animal holds the same rank among Asiatic horses as English thoroughbreds among European horses. It is rather small, but strong, and at the same time neat and elegant, and of fine shape, noble, and well formed. The Karabag horses possess a fine instinct, are intelligent, and have an elastic and sure tread—qualities which render them particularly valuable among the dangerous and precipitous mountain paths of the Caucasus. This splendid horse is light and agile, full of fire and energy, and at the same time tame, docile, and obedient. The Circassian or Lesgian dashes wildly on his charger along the steepest

* More will be said on the Kirghiz horse in the following chapters.

bridle paths, amid dizzy precipices and glaciers, over rugged masses of stone and down shelving, rocky declivities, without a stumble, without once hesitating or looking nervously in front. In the evening he quietly removes saddle and bridle from the noble beast, and lets it wander freely over the mountains, and on the narrow and steep grassy slopes, without any anxiety as to its fate. One short whistle is enough to bring the horse back in the middle of the night from the steepest heights, the most delightful pasture, to the service of its master ! The Kabardin, which is generally called the Circassian horse, is of a noble race, and is a mixture of the mountain horse with the Arab thoroughbred. It is, however, strong and fiery, and if inferior to the Karabag in elegance and grace, it is quite its equal in endurance and strength. The Circassian horse can perhaps endure fatigue and changes of weather and food better than the noble Karabag. The home of the Circassian is chiefly the province of Kabarda. I myself rode throughout the whole campaign a Kabardin horse, which I had purchased in Daghestan of an old Lesgian warrior. I rode the splendid animal every day, and in spite of the most terrible fatigues and privations never once knocked it up. A handsomer and more showy Karabag, on the other hand, which I bought of a Circassian officer from the plain of the Kur, suffered more from bad water and fodder in the desert, and when it arrived at the Khanate of Khiva was a complete skeleton, and only recovered after a rest of several weeks among the rich and fragrant pastures of the oasis.

These horses are mostly bred in private studs. Nearly every Cossack, besides, breeds for himself on a small scale, as he is a born warrior and horseman. In the country of the Don Cossacks alone it is estimated that there are more than 38 horses to every 100 inhabitants. The number of the studs is :--

	Studs.	Stallions.	Mares.
In the country of the Don Cossacks ..	116	1,526	19,529
Besides, in the hands of private breeders on the steppes—			
In the country of the Don Cossacks ..	..	911	13,667
" " Terek Cossacks ..	..	549	5,986
" " Kuban Cossacks .	..	2,049	24,326
" " Calmuck Cosacks	..	42,367	331,531*

With the breeding of horses we may mention that of camels and Asiatic buffaloes for purposes of transport into Trans-Caucasia, the latter animals being chiefly used in the sandy districts of the Kur, in the eastern part of Georgia, and in the province of Schirvan for agricultural purposes and for the transport of the immense waggon columns, in the place of European oxen. It is calculated that there are about 38,000 camels in the Caucasus, which are principally distributed among the Governments of Baku, Erivan, and Tiflis.

The wonderful fertility and productiveness of Georgia, as regards crops and such fruits as grow in the north and south of Europe, need scarcely be mentioned here. Who has not heard of the magic gardens of Kachetia, of Mingrelia and Georgia, where the grapes, cherries, peaches, and melons of the north mingle with the figs, water-melons (*arbuse*),† and almonds of the south? These gifts of Nature must not be too lightly regarded, for when dried or preserved they afford admirable material for the nourishment of the soldiers in the desert campaigns. They are the only preventive against scurvy. The Russian soldiers are almost like children in their love for preserved fruits, and are never without some in their pockets. But the Caucasus does not supply one chief requirement of the army, namely, tea and sugar. The extensive shipping communication, however, kept up between the Black Sea ports and other countries makes up completely for this want; several East Indiamen in the tea trade sail from the harbour of

* See Saroff's "Russian Empire."

† The "*arbuse*" is a large, juicy water-melon, and most necessary food and refreshment for Asiatics.

Odessa every year, and some tea is also supplied by the caravan traffic through Persia. Attempts to acclimatise tea in the Caucasus have, moreover, it is said, been successful on the east coast of the Black Sea. Flour for the army is almost entirely procured from the large steam-mills of Rostoff on the Don. Rock salt is obtained in large quantities in the Caucasus mountains and in the province of Erivan, sea salt in the land of the Don Cossacks, and also in Cis-Caucasia, at the little river Manytsch and at Stavropol. The extensive trade in fish and caviar on the shores of the Caspian Sea is so well known as hardly to require any mention here. The annual average of the Caspian fisheries amounts, according to Danilevsky's calculation, to 12 million pood, of the value of at least $10\frac{1}{2}$ millions of roubles.

We thus see that the subsistence of the army, as far as food is concerned, is well secured by the produce of the country. But this is not the case as regards war material and equipment. Although trade, particularly with Asia, is in a flourishing condition, all industry has remained very backward, in spite of the enormous, but hitherto for the most part still hidden, wealth of the Caucasus in minerals and raw materials. The mountains of the Caucasus abound in silver, lead, copper, and iron. The plains can boast of silk and even cotton culture. In the basin of the Caucasus there are two extensive mining districts, which yearly yield over 190,000 poods of coal. From the steppe plants, when burned, a quantity of soda is obtained, and the salt lakes of the Cis-Caucasian tableland yield a tolerable supply of salt. Immense and invaluable stores of petroleum and naphtha*

* The produce in naphtha was, according to the "Russian Review," Part III, p. 74:—

	Poods.
In 1871, in the Government of Baku	1,165,258
In 1868, in the district of Kuban (Peninsula of Taman)	975,650
In 1868, in the district of Daghestan	15,717
In 1871, in the Government of Tiflis	59,522
In 1871, in all the Caucasus	1,375,523

The productiveness of naphtha springs near Baku has considerably increased in 1873 by new borings. In 1871 naphtha was obtained from 697 springs. From the salt seas of the Government of Stavropol the salt obtained in 1872 amounted to 925,749 poods.

N

are to be found at Baku, and on the east coast of the Caspian Sea. Yet, in spite of all this, industry and manufacture have always remained in a most backward condition. Want of workmen, the prevailing insecurity of affairs, and the difficulty of communication may hitherto have been the cause of this. Nevertheless, we find in the Caucasus, amongst others—

19 small cloth manufactories, yielding	..	10,000 roubles profit.
99 cotton factories, yielding	..	249,055 roubles value of produce.
206 leather factories, yielding	..	358,000 „ „
2 iron foundries, yielding	..	61,792 „ „

At any rate, the industry of the country is in no way on a par with the wants of the territorial army with respect to equipment and dress. Cannon, fire-arms, and steel weapons, as well as all the material appertaining thereto, are procured from European Russia, but the greater proportion of them from foreign parts. Only the irregular troops—as, for instance, the Circassian irregular horse regiments—and the militia are supplied by the old mountain industry with sabres and daggers, *shashka* and *kindshal*. The obsolete Turkish flint arms, which are exclusively used by the natives, who obstinately prefer them to all other modern percussion arms and breech-loaders, on account of the facilities they afford in the way of ammunition, are only manufactured in small quantities in the Caucasus. Most of them are traditional heir-looms, which have gone down from father to son, and are of the most varied origin. New flint weapons are for the most part imported from the Turkish districts.

The want of weapons is exceptionally great in the Caucasus, owing to the fact of the mountaineers, even in private life, being always armed to the teeth. The poorest and most ordinary day labourer has his complete equipment, at least a rifle, a *shashka*, a *kindshal*, and a pistol. The more wealthy possess at least one charger, and spend much money on weapons ornamented with gold, silver, and turquoises. In the country of the Lesgians, the last people subjugated by the Russians, no one is to be seen without arms, which form part of their costume. Only despised

and miserable Jewish usurers go about unarmed. So we see the peasant with his trailing sabre following the plough, with his large dagger at his hip, and loading his hay-cart with his rifle slung from his shoulders. Even when hunting and playing, the Lesgian still retains his *kindshal*. It is not therefore difficult to picture to one's self how dangerous these peculiarities may prove to a military administration in a land where the old ideas of freedom, independence, and fanatical Islamism, with hatred of the Christian, and thirst for deadly vengeance, are ever rife—where the people, still holding fast to the ancient customs and usages which the Koran on the one hand, the strong religious discipline of Schamyl on the other, prescribe, are exposed to the seditious instigation and dangerous fanaticism of the True Believers of Stamboul or Mecca. Nevertheless, the Government at Tiflis does not dare entirely to break with the old traditions. For if it believes itself strong enough to deprive the people of their arms by force, and by force to put a stop to the practice of blood-vengeance, &c., it only refrains from doing so because it fears a general exodus, and foresees the consequent transformation into a perfect wilderness of all the sterile mountain districts, a country which no other people but the indigenous Caucasian inhabitants would know how to cultivate and occupy. It is only by degrees that it seeks to influence the life of the people, which is still in many respects anything but civilised.

The uniform and equipment of the native cavalry are provided in the country itself. The clothing and uniform of the field army are looked after by each separate corps. The soldier makes his own clothes and boots, only receiving the material from the crown, namely, cloths, leather, tick, &c., which come partly from European Russia, and partly from abroad. The small articles are entirely procured from abroad. The repair of arms, which in Russia plays a prominent part, now that new and complicated weapons have been entrusted to the infantry that is still slow in learning how to handle the guns with delicacy and care, is entirely in the hands of German gunsmiths. European Russia contributes powder and ammunition, for the

Caucasus is utterly destitute of the materials for the manufacture of powder—saltpetre and sulphur. The largest portion of both these ingredients must be brought, where manufacture is absolutely necessary, from abroad, as is the case also in European Russia. Russia only possesses unimportant saltpetre works at Samara and Simbirska. Foreign countries, moreover, contribute hospital furniture, and especially tents, the latter in particular being supplied by France, and on the French pattern (*tentes d'abri*); medicines, including provisions for campaigns and expeditions, such as preserved meats, fruits, and vegetables, biscuits, &c., are supplied by the military factories at St. Petersburg, and to a large extent by private firms in Moscow.

In spite of this state of things in the Caucasus, which is on the whole not unfavourable, there is no reason for surprise if the imports have been double and treble the exports during the last few years. The exports are almost exclusively confined to silk, lamb's-wool, corn, and more recently to naphtha and rock-oils. The imports, on the other hand, include woollen manufactures, tobacco, vegetables, and, above all, European articles and *objets de luxe*. It will not be uninteresting to look closer at the import statistics. The returns of the Trans-Caucasian trade were, for example, in the years—

					Exports.	Imports.
					Roubles.	Roubles.
1870	..	..	..	..	3,927,335	11,461,384
1871	..	..	..	..	4,810,167	8,443,065
1872	..	..	..	..	5,629,413	9,457,029
For the years 1870, 1871, and 1872..					14,366,915	29,361,478

We have already seen that even grain has been among the imported articles, and that for many years in very considerable quantities.

How great the expenditure is, particularly for the military administration, in spite of the rich productions of the Caucasus

and the remunerative taxes, may be gathered from the following table* :—

Year.			State Revenue.	Expense of Administration for Trans-Caucasia.	Deficit.
			Roubles.	Roubles.	Roubles.
1872	..	..	5,831,554	6,077,295	245,741
1873	..	..	5,885,059	6,166,604	281,545
1874	..	..	6,570,888	7,111,139	540,251
1875	..	..	..	6,727,125	..

In addition to this it must be stated that the hitherto unknown income for 1875 has undergone a reduction of 162,412 roubles on account of the diminution of the customs and tobacco duty, a loss which amounts to 561,000 roubles, and cannot be covered by the increase derived from the other branches. The budget for the administration of the *chancellerie* of the Caucasian committee at St. Petersburg is alone set down at 28,517 roubles for 1873. As we may therefore gather from the above facts, the commerce, the industry, and, above all, the produce of the Trans-Caucasian lands, which are so richly endowed by Nature, must greatly increase before all the expenses of the administration can be covered.

* The figures are taken from "Suvorin's Almanac," the Russian Senate's News," and the "St. Petersburg Journal."

CHAPTER V.

II.—THE GOVERNMENT-GENERAL OF ORENBURG, THE BASIS OF OPERATIONS FOR THE SECOND (THE NORTHERN) DIVISION.

Geographical Situation, Population, and Districts.

THE centre of the Orenburg military district (*okrug*) is the government of the same name, embracing the middle and upper course of the River Ural and the southern portion of the Ural mountains, with its capital, fortress,* and head-quarters at Orenburg. The territory, which is under the civil and military administration of the Governor-General, Adjutant-General von Kryshanovsky, extends on both sides of the frontier between Asia and Europe, and belongs, as in the Caucasus, equally to both continents. The Governor-General's rule extends, on the north and north-west, as far as the Governments of Perm and Samara, belonging to the Kasan *okrug*, and on the west, as far as the Government of Astrakhan, but has, in this part, no natural boundary. On the east it stretches to the Government-General of West Siberia. The frontier for the Kirghiz-Kaïssaks of both Governments-General, which runs between the Orenburg *oblast* of Turgai and the West Siberian *oblast* of Akmolinsk, is partly marked by the River Ubagan, the Dengis Lake, the Sary tributary, and the principal chain of the Ulu-Tau mountains, and reaches in the neighbourhood of Lake Saumal the frontier of the Government-General of Turkestan.† From this it follows in a north-westerly direction the northern boundary of the Syr-Darya district, until it reaches the Sea of Aral at the Bay of Perovski. The southern boundary is partly formed by the Caspian and Aral Seas, but it has not yet been properly defined

* Orenburg is now abandoned as a fortress. When I passed through it, in June, 1873, it had already begun to be razed.

† See "Historical Sketch," Chapter II, p. 61, note 2, on the frontier of the Government-General of Turkestan.

in the territory lying between the two, as it here touches upon the districts of the nomad Kirghiz, whose position with reference to Russia is still by no means clear, and who in 1873 even declared themselves dependents of Khiva. An imaginary line drawn from the easternmost inlet of the Bay of Meatvy to Cape Urga, on the Sea of Aral, would approximately form the line of demarcation for the Orenburg Government, and would also be the boundary of the Trans-Caspian territory (the Mangishlak district), belonging to the Caucasus. Of the districts thus defined, by far the greater part is comprised in the South Russian (the so-called Aral-Caspian) tableland, which almost throughout its whole extent has the character of a desert or a steppe, and is generally known by the name of the Kirghiz steppe. The eastern and larger portion belongs to the continent of Asia, and is divided into two districts, the Ural and the Turgai *oblasts*, the inhabitants of which are altogether nomads, and belong to the race of the Kirghiz-Kaïssaks, or Little Horde. To Europe belongs the district of the Ural Cossacks, which extends west of the River Ural in a long strip of land running from north to south, and the district of the Bukeyeff Kirghiz, the so-called Inner Horde, which at an early period had separated from the Little Horde, and moved in a westerly direction to the Government of Astrakhan. The northern part of the military district, which is decidedly European in character, is formed of the two Governments of Orenburg and Ufa, belonging to European Russia; the latter of which formerly came under the Orenburg administration, and was only separated from it, as an independent district, in the year 1865. The Ural chain is the rough boundary between the two governments. The territories of the Ural Cossacks belong to the Ural district, while those of the Orenburg Cossacks, which lie partly along the central portion of the River Ural, partly to the west of the Upper Ural, on Asiatic soil, are allotted to the Government of Orenburg. The Government-General of Orenburg comprises an area of 22,012 geographical square miles, with about 3,105,900 inhabitants, being an average of about 142 to the square mile. It is divided into two Governments, two Cossack lands, and three districts.

GOVERNMENT-GENERAL OF ORENBURG.

GOVERNOR-GENERAL: ADJUTANT-GENERAL KEYSHANOVSKY.

Parts.	Name.	Circle.	Circle Town of same Name.	Steppe Ports.	Geographical sq. Miles.†	Inhabitants (1870).	<i>Khitzas</i> ‡
In Europe	Government	1. Orenburg ... 2. Orsk ... 3. Verkhne-Uralak ... 4. Troitzk ... 5. Tschelyabinsk ...	Inhabitants.† 33,431 3,098 6,166 7,741 5,187	Exclusive of the Orenburg Cossack lands‡	2,599-50‡	658,893	Inclusive of the Kirghiz and Calmucks.
	Government	Ufa. Governor: State Councillor Schtscherbatski	1. Menselinsk ... 2. Birak ... 3. Beliebei ... 4. Sterlitamak ... 5. Ufa ... 6. Siato-Ustorsk ...	...	2,213-90	1,351,859	
	Land of the (<i>zemlia</i>)	Ural Cossacks* (to the Ural district)	15,455	113,066 inhabitants, on 5,251,621 dess. of land	1,928-90‡	113,086	
	District of the	Bukeyeff Kirghiz ...	...	...	1,577-14	208,800	Inner Horde in 40,000 <i>Khitzas</i> .

* The "Russian Invalid" gives 50,928 males and 49,656 females, total of both sexes 100,584, as the population of the Ural district, exclusive of Kirghiz and Calmucks.

† The figures on the area are calculated according to Strelbiski, by reducing square verstis into geographical square miles.

‡ The total area of the Ural district amounts to 8,654-21; this only includes the area on the left bank of the Ural, i.e., the Asiatic part, whilst the European is counted extra as the country of the Ural Cossacks. In the figures given by Strelbiski the newly acquired portion of the River Annu Darya is already included.

§ Per *khitzka* 5-1 inhabitants are to be reckoned, according to Colonel A. Tillo.

Parts.	Name.	Circle.	Circle Town of same Name.	Steppe Forts.	Geographical sq. Miles.†	Inhabitants (1870).	Kibitkas.‡
Asia ...	District (oblast)	Ural. District Chief: Lt.-Gen. Yevarkin (parts in Europe)*	1. Uralak ... 2. Kalmukovsk (Fort) ... 3. Gurief (16,463 inh.) ... 4. Embensk ...	Exclusive of Ural Cossack lands*.	5,495·31	346,715	Little Horde in 61,767 kibitkas.
	District	Turgal. District Chief: Maj.-Gen. Baluek Excl. Aral Islands = 22·11 sq. m.	1. Ilezsk (Ilezskaya) 2. Irkut (Fort Uralak) 3. Nikolayevski ... 4. Turgal ...	Fort Ak-Tyubinskoye. Fort Karabutak Fort Constantinovskoye	8,283·31	289,980	in 66,797 kibitkas.‡
	Land of the (zemits)	Orenburg Cossacks (portions in Europe at the Government of Orenburg)	Capital Orenburg (at Orenburg) ...	941,654 inhabitants,† on 7,678,204 deas. of land	875·83	241,654	
Exclusive of Sea of Aral = 1,216·74 geogr. sq. m. Total for the combined districts of the Government-General of Orenburg							169,664 kibitkas. = 809,184 inh.

* The total area of the Ural district amounts to 6,654·21; this only includes the area on the left bank of the Ural, i.e., the Asiatic part, whilst the European is counted extra as the country of the Ural Cossacks. In the figures given by Strelbiski the newly acquired portion of the River Amu Darya is already included.

† The figures on the area are calculated according to Strelbiski, by reducing square versts into geographical square miles.

‡ According to Saroff's "Russian Empire."

§ Per kibitka 5·1 inhabitants are to be reckoned, according to Colonel A. Tillo.

In this Table the Sea of Aral, with its 22·11 German square miles of islands, is not included. But when it is included, the area of the Government of Orenburg covers 23,228·93 geographical square miles, so that the actual land area would be estimated at $22,012·19 + 22·11 = 22,034·30$ geographical square miles.

In the introduction we have fully described the historical growth of the Government-General of Orenburg, particularly with regard to its extension in a southerly and an easterly direction towards Asia. The centre of the entire development of such frontier arrangements was always the town and fortress of Orenburg, the position of which, as the chief stronghold of the Cossack line, has been of special importance to the Russian operations since the beginning of the last century. The city of Orenburg was first founded on the 12th August, 1735, at the spot where the Or flows into the Ural,* on the site of the modern Orsk; in 1740 the town of this name was transplanted 184 versts below, on the Krasnaga-Gora; in 1742 it was re-transplanted to its present situation near the mouth of the Sakmara. Orenburg is not only the centre of the civil and military administrations, but is that of the trade between Russian and Central Asia, and especially the rendezvous of all the different families and races which have fixed their habitations on the borders of the two continents, and which carry on their business here.† Like Tiflis in the Caucasus, Orenburg is a town both European and Asiatic in character. The centre of the city possesses elegant houses many stories in height, Government palaces, museums, and theatres. On a well-kept pavement one lounges past coffee-houses, hotels, and shops, which offer for sale every imaginable *objet de luxe* of European civilisation. Splendid gardens and pleasure-grounds surround the town as far as the raised bank of the Ural, and in the restaurants which these contain and which are provided with

* According to the diary of John Castle, an Englishman, and late artist in the Orenburg expedition.

† See Chapter III, p. 103, on commercial treaties between Orenburg and Khiva.

every comfort, one may see every evening the ladies of Orenburg promenading to the sound of the military bands, dressed in the very latest Paris fashions. In this *beau monde* one may see the Kirghiz woman moving about quite unconcerned in her strange attire, the Bokharian and Khivan wandering about quietly and gravely in their capacious *chalats*, the Tartar and the Bashkir with busy and crafty air, and the devout and subdued Persian looking out for employment. One verst to the south of the city, on the left bank of the Ural, stands a large bazaar, the outside walls and halls of which cover an area of several acres ; it is this which attracts all these people, as if by magic, from the furthestmost regions of Asia to this one spot only, with nothing in view but trade and barter. All the wares of Central Asia, of Persia, of Russia, even of China, are here displayed *en masse* to the astonished gaze of the purchaser, whose eyes and ears can scarcely comprehend the motley confusion of dresses and languages. On leaving the town, and crossing the line of the old fortress, which is now in a state of dilapidation, one enters an entirely new district. Here the provincial character of the Russian Government, the character of the Cossack stations, strikes the stranger at once. Small one-storied wooden houses, quiet and peaceful in appearance, border broad streets often 100 feet in width, which, from their unpaved and sandy state, recall to one's memory the post-roads of the steppe. This is the quarter of the Old Russians, of the Cossacks, of colonists and immigrants of the most diverse nations ; Germans, Englishmen, Frenchmen, and others live quietly together—to a certain extent, indeed, the pioneers of European civilisation in the Far East. The enormous trade and traffic, the motley confusion and noise of a great harbour, may indeed raise unbounded admiration in the mind of the inexperienced spectator, although he well knows the immense means of transport which shipping bestows on mankind. How much greater, then, must be the surprise excited by the traffic of a city like Orenburg, the continental position of which, amid endless steppes and deserts, without road, railway, or ship communication, restricts trade simply and solely to caravan transport, so that each single bale of goods

must be piled on and taken off the back of the patient camel at least once a day on journeys of from three to four months' duration !

Just as the capital is characterised by the threefold nature of its inhabitants, their manners and customs, so a threefold division is noticeable in the district and in the provinces contained in it. The countries on the right bank of the River Ural belong not only geographically, but even as regards population, nature, and civilisation, principally to European Russia ; the territories on the left bank are composed of broad, interminable plains and steppes, which only show signs of grass in the north, being entirely made up on the south of salt and barren deserts of sand, and, like the nomad Kirghiz-Kaissaks by which they are inhabited, giving a picture of thorough Asiatic wildness and absence of civilisation. Finally, distributed throughout both districts lie the lands of the Cossacks : on the right bank of the Lower Ural, the country of the Ural Cossacks ; and, chiefly on the left bank of the Upper Ural, the scattered lands and districts of the Orenburg Cossacks, mingled with the Bashkir races, from which they have sprung through intercourse with the old Russian Cossacks (see historical sketch). The Bashkirs, properly *Basch-kuet*, *i.e.*, "bee-rearers," are a Tartar-Musdisch people, of Mongolian appearance and type, chiefly inhabiting the Ural mountains in the Government of Orenburg as far as the mining districts of Samara and Perm. The Bashkirs lead a half nomad life, like that of the Kirghiz-Kaissaks. In winter they live together in the mountain villages ; but in the summer the Bashkirs leave their old people, their women, and children in these villages, and taking their horses and sheep, the world-renowned "Fat-tails," with them, wander in nomad fashion to the grassy plains of the South. In and near the district of the Bashkirs is to be found the Tartar tribe of the Meschtscheriaks, which is relieved from taxation, but, like the Cossacks, is bound to military service up to the age of forty.

The Old Russian districts are principally limited to the Orenburg circle, to the portions of the circuits of Orsk and Verchne-Uralsk, which belong to Europe and are situated on the

right bank of the Ural, and to the entire district of the Government of Ufa, which has rather the uniform flat type of Great Russia, though it is somewhat within the sphere of the border-traffic of Asia. The principal trade of the province of Ufa is to be found along the river system of the Bielaya, which flows into the Kama, a tributary of the Volga, and in the valleys of the Ural chain, running west into the plain, which are comparatively busy with mining and other industries. Extensive meadows and fertile fields, which are, however, much intersected by uncultivated salt and sandy belts of ground, cover the plains, and a thick growth of tree and wood fills the mountain valleys. The Orenburg circle is marked by the Sakmara, with its numerous tributaries, which rises in the Ural, and flows into the river of that name somewhere below Orenburg, bearing the produce of the mountains on small rafts to that river, which is not navigable at all as far as Orenburg, and only partially so below it. The heights of the curiously formed Ural chain, which consists of peaks lying near each other in rows or groups, or of rounded cones, are for the most part bare or only covered over with small brushwood or grass, which, dried up in summer, gives to the mountains a peculiar yellowish-blue hue. This strange colouring, together with the unusual shape of the close rows of detached mountains, fixes for ever in the memory the first impression conveyed by the sight of the mighty chain, which is intended as the boundary of two of the quarters of the globe. Vegetation and cultivation almost entirely follow the numerous watercourses which wind through the groups of mountains. Their luxuriant and park-like banks are overgrown with the most superb elms, limes, alders, and plane trees, and the eye can look with delight from afar on the rivers winding like bright green veins through the waste and barren hills. The valleys of the Ural, with their green and fragrant meadows, and their lovely groups of trees which, as if planted here by the gardener's hand, blend with meadows in charming and picturesque harmony; the clean and peaceful Cossack *stanitzas*, with their little wooden houses tastefully ornamented with various colours, and nestling in the hill-sides like the chalet of the Swiss herdsman;

the beautiful mountain water which, clear as crystal, sweeps past the Cossack's hospitable hut ;—all these together combine to awaken in the glad heart of the European, who on his homeward journey, after many months of weary travelling in the wild sandy steppes of Central Asia, at the bridge over the Ural at Orsk treads again once more the longed-for soil of Europe, to an extent which scarcely any other spot could inspire, the charming and delightful feeling of home. The Cossack *stanitzas*, and the peasant villages of the two Governments, convey everywhere an impression of great industry and of active cultivation. The large churches, which are often built with extraordinary splendour and luxury, attest the prosperity of the country people. They are usually constructed in the Greek style, and with their green and often gilded cupolas of copper, and their lofty, white-washed towers, which appear even higher from the contrast with the tiny Cossack huts, are seen from afar on the level and monotonous plains. But the left banks of the River Ural contrast most unfavourably with this picture of cultivation and general well-being, which meets the eye of the traveller as he enters the districts on the right bank. They are still inhabited, as far up as the capital of Orenburg, partly by Orenburg Cossacks and Bashkirs ; but the flat region of the steppe already begins to assume the wild and monotonous character of the Kirghiz steppe, and here and there may be seen the *auls* of the Kaissaks. The banks of the River Ural lower down are covered with luxuriant trees, particularly with groups of the alder, which grows here to a great height. But there are few signs of cultivation to be met with, as in spring the whole valley is inundated for many versts, and the rapid stream renders all attempt at farming impossible.* Meadows and pasture land are in an excellent condition here. Fishing in the river district of the Ural is very profitable.

On leaving the lovely banks of this river and going southwards, one reaches the broad desert-like plains of the so-called

* The Rivers Ural and Samara, as well as most of their tributaries, usually cause great inundations in spring, by which the traveller is detained ; he has often to cross them in dangerously small boats. But the very same rivers have hardly any water in summer, and frequently dry up altogether.

Aral-Caspian plateau, which form the southern division of the Government-General, and are chiefly Asiatic in character. Starting from the west, they comprise the district of the Bukeyeff Kirghiz and the two *oblasts* of Uralsk and Turgaisk, inhabited by the Ural Cossacks and by the Kirghiz-Kaissaks of the Little Horde. This immense territory, which covers more than 17,000 German square miles, is almost universally designated as the Kirghiz Steppe—an expression which is not altogether correct, for the inhabitants of this country, the Kirghiz-Kaissaks, are not really Kirghiz, and must be distinguished from the real Kirghiz, who, called Kara (or Black) Kirghiz, wander about in the mountainous parts of Central Asia, particularly in the Tian-Shan and its spurs; the country, besides, has almost everywhere the character of a desert, and does not correspond with the notion of the steppe proper, which presumes the existence of grassy fields and meadow-land. It would not, indeed, be an easy task to give a thoroughly correct description of these broad Aral-Caspian plains, for they are not, like a desert, thoroughly destitute of vegetation; as, for example, the great salt desert in Central Persia, or the desert of Gobi. At the most it might answer the idea of a desert-like, sandy steppe. The Orenburg Kirghiz steppe forms part of the large South Russian tableland which was mentioned in connection with the Calmuck steppe in northern Cis-Caucasia. The Trans-Caspian districts are exactly similar to the Cis-Caspian, of which a description has already been given; in the former, however, the wildness of the desert is perhaps more striking. The Aral-Caspian basin, which scarcely reaches an average height of 300 feet, and is in many places even below the level of the Caspian Sea, is of an undulating character; its slopes are very extended and descend gradually to the plain. Deep and broad gullies occasionally intersect the level country with great abruptness, and are filled either with salt water, or with marshy and swampy ground. The eye lights upon no tree, no shrub, on which to fix its gaze. Rarely indeed are the plains of sand or clay overgrown with low herbs and grasses. Only in the direction from north to south, the Mugadshar and Tschaman

mountains, a southern extension of the Ural, and a few low hills interrupt the endless monotony of these enormous plains of sand and clay. Their highest peak, the Aïruk, hardly attains the height of 1,000 feet. Almost all the stagnant waters are, as was the case in the Calmuck Steppe mentioned before, quite salt and bitter. Salt water flows in many of the little streams. Swamps and morasses, productive of dangerous miasmas, skirt the numerous salt lakes, both small and large, which in summer are nearly dry, so that the salt crystallises in their hard beds. Vegetation is exclusively limited to the banks of the fresh-water rivers, and to the soil in their immediate neighbourhood. Here, it must be admitted, fields of green grass and high reeds may be met with. The Kamish reed, out of which the Kirghiz weave their tasteful mats, thrives in the shallow parts of the still waters. Most of the flowing waters of the interior sink into the sand, or form steppe and salt lakes without a single outlet. Only a small proportion of these reach the River Ural, the Caspian, or the Aral Sea. The Ural and the Emba are the only rivers which discharge their waters steadily and continuously into the Caspian. The Ulu-Uil and Sagys disappear in a host of small watercourses and lakes, which in summer generally evaporate from the sand. Roughly speaking, the central portion of the Mugadshar chain forms the watershed.

From this point to the east flows the Irgiz, which loses itself in the steppe; to the north, in the broad valley which lies parallel to the mountain chain, the Or runs to the Ural; to the north-west, in the same way, flows the Ilek with its tributary the Chobda, and the Utva; while to the west run the Ulu-Uil and the Sagys, and, finally, to the south-west flows the Emba, the most considerable stream of the plateau. All the rivers just named are remarkable for their shallowness, for their slow course, for the constant crumbling away of their flat sandy banks, for the formation of a host of tributaries and frequent changes of their river bed, and lastly, for alterations of the delta. Some of them lose their stream entirely at the mouth, and then form large and extensive morasses; others vanish beneath the sand drifts, and thus covered often flow on

for several versts, to appear again suddenly further on. In most of the rivers of the interior the water is brackish and scarcely drinkable, but all are comparatively rich in fish. On the banks of these rivers and of their tributaries, which are usually very numerous, are situated the few pasture-grounds and meadows, which alone afford scanty sustenance to the nomads and their flocks. All the other districts which are not watered are, as we have stated, desert—the scanty wells of which for the most part contain nothing but salt water—with scorching heat and fearful sand-storms in summer, with tremendous falls of snow, bitter cold, and dreadful icy *burans* in winter, all of which contribute to render the speedy passage of caravans and nomad tribes almost out of the question. In the historical sketch we have already attempted, in connection with the expeditions of Bekovitsch and Perovski, to illustrate the nature of these inhospitable districts. The greater part of the Bukeyeff districts, the southern half of the Ural Cossack-land, and the belts on the north of the Ust-Urt plateau and the Sea of Aral, contain in the same way nothing but extensive deserts. The most formidable and impassable of these are the Desert of Barsuk, to the north of the Sea of Aral, and the Kara-Kum (Black Sand) desert between the Irgiz and the Syr-Darya. On the whole, the desert character and the poverty of vegetation increase from north to south. On the banks of the River Ural we still find glorious meadows; but further on to the south, on the banks of the Or, these fields grow gradually more barren, until finally they merge, south of the Irgiz, into the thoroughly sandy deserts of Kara-Kum and Barsuk in the east, and in the west, into the well-known plateau of the Ust-Urt.

The historical sketch at the beginning treated of the nature and development of the populations of this district, the Kirghiz-Kaïssaks or Kaïssaks of the Little and Inner Hordes, and the Ural Cossacks. We shall hear more of the Kirghiz when we come to talk about Khiva. Besides the Kaïssaks, the Kirghiz steppe has Tartar inhabitants, and we may notice, particularly in the department (*ujäsd*) of Calmuckov, Calmucks who belong to the race of the Astrakhan Calmucks, are

worshippers of the Grand Lama, and, like the Kirghiz, exclusively nomad. A few Russians reside in the chief towns of the circuit, and as garrisons in the small forts of the steppes. All the Kaissaks of the Little Horde became, as shown in the historical sketch, nominal Russian subjects a few years after the death of Peter the Great in 1731, but real subjects only in the first half of the present century. Now, all the nomads, who wander about between the River Ural, the Syr, and the northern slope of the Ust-Urt plateau, are true and devoted subjects of the Russian Crown, as has been proved by the voluntary and frequent assistance which they rendered to the advance of the Russian troops in the last campaign, but, otherwise, the incorporation of this nomad population into the Government-General of Orenburg has never led to any considerable benefit. The trifling production of cattle and manufactures scarcely sufficed to satisfy what was absolutely necessary to the unpretending and modest requirements of the nomad tribes. The few taxes, some roubles per *kibitka** or *jurta* — as their felt tents were called — and with which the idea of a family living in each tent (reckoned on the average at five members a-piece), is connected, could scarcely cover the expenses of the administration of the two *oblasts*, not to speak of the sums which are annually required for the maintenance of the steppe forts and their garrisons. Nevertheless, the inadequacy of this line of posts, as single marks of Russian might and influence in the southern portion of the Kirghiz steppe, to protect the nomad tribes subject to the Crown against the predatory Khanate of Khiva, is proved by the circumstance that the robber hordes penetrated only lately, in their ravages and plundering, from Ust-Urt to Irgiz, even to the neighbourhood of Orsk. The southernmost fortified line is formed by the Forts of Nijne and Embenskoye on the Emba Delta, by Fort Embensk on the Middle Emba, and Fort Uralsk (town of Irgiz) on the River Irgiz. All three posts

* Taxes were first levied in 1837 from 15,506 *kibitkas*. In 1846 the taxes were 1½ roubles per *kibitka*; in 1873, in the southern part, from 2 roubles to 3 roubles 50 copecks per *kibitka*.

lie more than 300 versts from one another as the crow flies, more than 300 versts from the northern slope of the Ust-Urt plateau, and further still from the southern line of demarcation which we have already sketched. The district between the Middle Emba and the little River Chegan can therefore be only nominally included in Russian territory: for, situated as they are at some distance from each other, the influence of the Russian forts over the nomads was here a mere nothing; taxes were not paid in; and even the Kirghiz tributary to Khiva pastured their cattle there. The central and by far the most important point, the Embensk post, which was at the same time to form the centre and the watch-station for the Emba circle, had been very much neglected before the year 1873. There were, it is true, four barracks here, in which the little garrisons found the requisite quarters. But there were no other buildings for the officials, and their families, except small rickety store-houses; so that, for example, the chief of the circle lived at Orenburg, his adjutant at the Iletzkoi post, and the physician and judge at Uralsk. This unsatisfactory state of things is now to be remedied, and the Government-General intends to raise extensive buildings on the River Emba, which may result in the erection of a real village or small town.

GENERAL CONDITIONS AND STRENGTH OF THE ARMIES IN THE MILITARY DISTRICT OF ORENBURG.

In the historical introduction I fully described the manner in which the Russian rule, by means of the fortified Cossack lines, penetrated south and east into the territories of the nomad Kirghiz. Here, in the level steppe, without mountain or gully, the resistance of the population was comparatively feeble, and could be overcome merely by little Cossack expeditions. There was no question here of a war of long duration against an obstinate native race, lurking in fortified retreats, as was the case in the Caucasus, where a people who despised death disputed every foot of ground in the inaccessible mountain.

While in the Caucasus a well-drilled and disciplined field army forms the nucleus of the fighting strength, in the Government-General of Orenburg we find most value placed on the Cossack army and also on the frontier troops (now regulars, before, cordon and garrison battalions), the proper line or field troops, as in the Caucasus, here being entirely wanting.* The historical sketch showed how the Cossacks formed the centre of gravity of the military frontier occupation in the Orenburg district as the extreme outposts, and in a certain measure, as pioneers of the progress of Russia towards Asia. Latterly, however, as the frontier lands have been extended further into the interior, in consequence of the additional conquests in Central Asia, the dominant position of the Cossack troops has fallen more into the background, and we now see them gradually replaced by regular soldiers. There is an evident tendency also in the Asiatic Government-General to unite, if possible, into combined Asiatic army corps the divided and scattered elements of the regular troops, which were formerly in the service of the many small garrisons, administrations, and circuits, and to concentrate them more in the larger places, while the garrison service of the little steppe posts is entirely entrusted to the Cossack infantry. General military service has only been made compulsory in the Governments of Orenburg and Ufa.† The lands of the Ural and the Orenburg Cossacks and the two *oblasts* of Turgaisk and Uralsk, with the district of the Bukeyeff Kirghiz, are exempt from this. The border troops consist of the first, second, and third Orenburg line battalions; the second and third being stationed at Orenburg, the first at Orsk. Besides these, one governmental battalion is to be found at Ufa and one at Orenburg. The military circuit has neither field cavalry nor artillery; these are exclusively furnished by the Cossack troops.

* Since 1873, when the rifle battalion (now in Turkestan) left Orenburg, there are no longer any regular field troops in the Government-General.

† At the first recruiting in 1874, in the Government-General of Ufa, 13,785 young men drew the lots, of whom 2,917 came out free, whilst 2,904 were drafted into the field army. In the Government-General of Orenburg, of 7,572, the number of 1,506 came out free, whilst 1,495 had to serve.

The Orenburg army includes:—

Fifteen cavalry regiments (polks), of 6 *sotnias* each, 40 *sotnias* on service (17 *sotnias* in Turkestan).

One cadet *sotnia*.

Nine Cossack foot battalions of 5 files, 2 battalions on service (1 battalion in Turkestan).

One Orenburg horse artillery brigade of 3 batteries, with 24 field guns, 2 batteries on service (1 battery in Turkestan).

The Ural army includes:—

Twelve cavalry regiments of 6 *sotnias* each, 23 *sotnias* standing on service (3 *sotnias* in Turkestan).

One detachment of foot Cossacks, with 200 men as garrison at Uralsk.

The foundation of the Cossack army of the Ural was laid in the years 1613-14. Specified territories were at that time assigned to the Yaik Cossacks as their property, in return for which their duties and rights as regards the Crown were clearly defined.

The formation of the Orenburg army took place much later, viz., in the year 1748.

The organization and strength of these Cossack troops, as well as of the frontier troops just mentioned, are in general similar to those described in the Caucasus section. Of the Cossack soldiers enumerated, only a third part, as a rule, are to be on service in time of peace; a number which is, however, usually exceeded, the administration of Turkestan, as we have noticed, claiming a large proportion of them. The Cossack *sotnias* are distributed among the larger towns of Orenburg, Orsk, Uralsk, Ufa, Turgaisk, Ilezk, and Orenburgskoye. The Cossack infantry, a battalion (three or four companies of which are always on service in the Orenburg district), form the garrisons of the little steppe posts, such as Troizk, Karabutak, Embensk, Uilskoye, &c. Besides these, a battalion of the Turkestan rifle brigade is quartered in the Government-General of Orenburg. Of the Orenburg Cossack horse artillery brigade there are only two batteries on service: Battery No. 1, with a war strength of eight guns, in Turkestan; Battery No. 2, with a peace strength of four guns, at Orenburg. The guns are rifled bronze

four-pounders, breech-loaders of the newer patterns. Even in peace the full strength of eight guns per battery is kept up. Of the men, however, according to the general regulations, only one-third are on service. The peace batteries have for the four guns a threefold complement of men, which enables a third of them to be relieved every two years from duty. The Orenburg Cossack troops, particularly those in the district of the Kirghiz Steppe, have no fixed quarters, but are subject to continual changes: one portion is constantly on the march, forming small moving detachments, which are usually despatched, in spring, to protect the broad and defenceless plains, lying between the widely separated Russian points of support, against predatory incursions, and which traverse until the autumn the most exposed districts, such as the desert of Barsuk, and the deserts north of the Sea of Aral and the Ust-Urt.

The collective strength of the Orenburg fighting force is therefore as follows:—

**SKETCH OF THE RUSSIAN FORCES IN THE GOVERNMENT-GENERAL
OF ORENBURG.**

For 1873.	Troop links.	Increased Peace Strength.	War Strength.	Peace Strength.	War Strength.
I. Field troops* ...	1 battalion of the Turkestan rifle brigade. 1 battalion ...	544	813		
II. Frontier troops ...	1st, 2nd, 3rd Orenburg line battalions. 3 battalions (with officers and non-combatants)...	3,664	3,460		
III. Local troops ...	3 governmental battalions, Ufa and Orenburg, with 4 companies, of 1,000 and 800 men respectively, permanent strength ...	1,800	1,800		
	1 reserve infantry battalion (No. 70 Ufa)* ...	193	193		
	District detachments (Ufa-Orenburg) and in provinces of Uralak and Turgai ...	1,286	1,286		
	<i>Etappe</i> commands about...	100	911	(6,466)	(7,541 m.†)
IV. Local detachments	Local artillery detachment ...	344	468		
	Engineer department, 1st class ...	25	25	6,955	8,265†
V. Irregular troops ...	Orenburg army ...	9,028	21,075‡		
	Ural army ...	3,815	11,129		
	(Exclusive of the portions in Turkestan = 9,344).			12,843§	32,204
Total of the Orenburg forces, inclusive of the Cossack troops quartered in the Province of Turkestan = about 3,500 men ...				19,798	40,469

The troops of the Orenburg military district quartered in Turkestan are included here, although they are not under the orders of the Government-General of Orenburg. If we deduct them, we find 16,298 men to be the available forces of Orenburg on a peace footing, and 36,969 men on a war footing. As may be gathered from the foregoing details, the total of the Orenburg troops is comparatively very inconsiderable. Since

* Since 1873 the reserve troops have been abolished.

† If staffs, officers, intendant-officers, and officials of the Medical Department are included, in round numbers 8,500 would be an approximate estimate.

‡ According to *Wojenny Sbornik*, in 1874, the Cossack army amounted to 27,000 men.

§ According to *Suvorin's Almanac*, the peace strength of the military district of Orenburg for 1872 was 16,298.

the acquisition of the Turkestan possessions, the necessity of maintaining a large force in the Government-General of Orenburg has diminished, while, again, additional stress has been laid on the organization of the army of Turkestan. As we shall perceive later on, the Government-General gave up the greater portion of its troops to Turkestan. Before the conquest of Turkestan, in the year 1860 or a year or two after, the Orenburg troops, who formed at that time the so-called "detached Orenburg corps," were more numerous. The detached corps consisted in the year 1863 of the 32nd infantry division, *i.e.*, of three line battalions on a war footing, two battalions and three half battalions for keeping order in the interior; also of a detachment under the Chief of the Syr-Darya line of one and a half battalions, and under the head official of the Ural mines one of three battalions. The strength of these troops amounted at that time to a total of 12,519 men. The Orenburg irregular troops were then composed of three separate corps, the Orenburg, the Ural, and the Bashkir corps, and were estimated at 43,928 men (12,612 men, peace footing).^{*} For the entire fighting strength on a war footing, the total disposable troops would therefore have amounted to 56,447 for the year 1863. But since that date Russia has extended her rule over more than 18,000 geographical square miles in Central Asia, a territory the area of which exceeds that of France, Prussia, Bavaria, Würtemberg, and Baden put together, and in which more than 30,000 men have lately been quartered.[†]

The governmental battalions of Ufa and Orenburg have, in

^{*} According to Brix, "On the Imperial Russian Army," 1863.

[†] The newly-acquired districts on the mouth of the Syr-Darya since 1873 are—

	Geo. sq miles.
1st, the district of Syr-Darya	7,807 '91
2nd, ,, Zerafshan	924 '95
3rd, ,, Ili	1,293 '52
4th, ,, Amu-Darya (1873)	1,880 '29
5th, the Trans-Caspian district. . .	5,939 '91
Total	17,846 '58

Exclusive of parts of the Semirietchensk district.

(See the Table for Turkestan in the following Chapter.)

general, the same organization as those of the Caucasus ; but while in the latter country they are of two strengths, the full, and the *cadre*, in the former districts they have only one permanent strength. Of the district detachments four are in garrison in the Government of Orenburg with 617 men and four officers ; five in the Government of Ufa with 656 men and four officers ; and there is also one small detachment in the province of Ural, and one in that of Turgai. Besides these there are in the Government-General of Orenburg four *étappe* (halting) detachments with four officers, who are directly under the orders of the head of the military government. The *étappes* are stationary troops at the principal points of the Orenburg steppe road, and have to perform *étappe* service, as also to provide, as regards shelter and nourishment, for the transport of reserves, recruits, and prisoners. There is besides under the Governor-General at Orenburg one local artillery detachment, with one Lieutenant-Colonel and about seven artillery officers, to look after the artillery material and the workshops. For the erection and maintenance of fort and military buildings, the town of Orenburg further possesses one Engineer Department, 1st class, which consists of about 16 men, two military officials, and six staff-officers.

As may be seen from this sketch, the districts of the Kirghiz-Kaissaks are not included in the armed forces of the Government-General. Up to the present date the military forces of the nomads, who are mostly of necessity armed for the protection of their own families and flocks, and also for the settlement of internal disputes, have not been permanently organized, and would afford Russia no support in the event of a war. At the period of the Russian advance in the East, the Russian Commanders knew how to gain over one or another race as allies against a hostile nomad district, in order, by thus adroitly availing themselves of the internal dissensions and squabbles of the various tribes and *auls*, gradually to subdue the Kirghise steppe by means of its own inhabitants, and to render it, for good and all, tributary to the Russian Crown. But the nomads, who had been associated for thousands of years

both by tradition and custom, with particular camps and pasture-grounds, never agreed to distant campaigns or expeditions beyond the Kirghiz steppes, as in the Turkestan excursions of the Russian conquerors. A few armed *djigites* or guides, at the very most, could be prevailed upon to accompany the Russian troops as interpreters, spies, or leaders of caravans.

The Kirghiz-Kaïssaks are in general well mounted, and possess a wonderfully fine and sharp sense of locality, which in the broad, monotonous sandy plains, that often for days together afford not the slightest clue to the horseman as to his whereabouts, alone makes it intelligible how it could be possible for them, who travel every year over thousands of versts, to find accurately again and again the same route, the same camping ground, and the same wells, which to a European would not be recognisable by any mark or peculiar formation of ground. The traditional arms of the Kirghiz are the sabre, battle-axe, and lance; every Kirghiz wears a dagger, which is often very richly ornamented. All these arms are seldom to be found on one horseman; for one carries a lance, a second a sabre, a third an iron battle-axe or a wooden club. The sabres are of very primitive Turkish workmanship, being curved swords with a plain unguarded hilt, worn sometimes about the hip in a leathern sheath with broad bands, but generally over the shoulders, and are usually procured from the interior of Asia or from Persia, but lately also from European Russia. The lance is decidedly the most effective and the most dangerous weapon that the nomads possess. The shaft is formed of stout ash wood, and also of a strong pliable reed, and, with its iron head, which is more than a foot in length, measures nearly 20 feet. The length of this weapon, which is out of all proportion, often gives a very comical appearance to the little lancer, who is perched on his tiny steppe pony with knees drawn up high. But the skill with which the Kirghiz contrives to lodge the point in the mark is indeed astonishing. It strikes the breast of the enemy more surely than the bullet from the gun, with which the nomads cannot yet be said to be particularly familiar. The pistols and the old cast-off weapons which have been palmed off

on the ignorant inhabitants of the steppe by Russian speculators, especially Jews, are for the most part worthless, and would scarcely be of any use even in the most experienced hands. A good rifle, on the contrary, would be an article altogether useless to the Kirghiz as soon as it required repair, apart from the fact that powder and lead are extremely expensive in those regions, and are only to be obtained from a few Russian frontier settlements. The sale of weapons is, moreover, forbidden by the Russian Government, and is very strictly watched in the district stations, a circumstance which does not, somehow, prevent Russian arms from being obtained in large quantities by the Turcomans on the Persian frontier. The steppe tribes are more skilful in the handling of the old-fashioned bow and cross-bow than in that of fire-arms; indeed, even the services of the aling are not despised. From a military point of view, the militias formed out of these elements would be almost worthless, but for the fact that the *djigites* recruited from them would be indispensable and of great value, as reconnoiters and camel-drivers, for an expedition or a steppe campaign. The character of the Orenburg Kirghiz is quiet and generally peaceable. They follow inoffensively the traditional line of march to the well-known pasture-grounds of their race, and generally content themselves with the produce of their herds, and the handiwork of their wives. They only seize their arms earnestly and energetically when they are attacked by hostile robber bands and see the safety of their families and their small property threatened. Then, they are quite ready to begin an obstinate pursuit, and to assume the offensive against the bold spoilers of their property or honour. Hereditary feuds and *vendettas* can also excite the otherwise peaceful nomad to a thirst for war. If he be left in peace around his pasture-grounds, he will never, without due cause, or out of mere desire for plunder and lust after gain, pick a quarrel, or undertake a campaign. In this respect he is essentially different from the nomads of the Iranian plain, where the Turcoman races of the Tekke and Yomuds live exclusively by robbery and plunder, and are distinguished for their great bravery, skill in fighting, and warlike disposition. The Kirghiz-

Kaïssak is not fond of fighting, and avoids it whenever he can. During the campaign of 1873, it was attempted to form a local militia for the Orenburg column out of the Kirghiz *djigites* who accompanied the staff of General Verevkin, and it was hoped that this force could be used as an *avant garde* against the hostile Khivan cavalry. As long as nothing was to be seen of, or feared from, the enemy, during the march through the desert, this little Kirghiz troop acquitted itself of its reconnoitring and guide duties with the greatest credit. But as soon as the Khivan soldiers presented themselves, as soon as a fight or a skirmish began, the Kirghiz *djigites* were the first to flee panic-stricken at the sight of the Yomuds, whom they regarded as invincible and cruel, and to hide themselves in the bushes, from which they only emerged when the battle was over and the Russians had defeated the foe. Their expressions of anguish, when the cannon began to roar and the musketry to rattle, were often piteous in the extreme. Less terrified and cowardly were the militia organized in the same manner for service with the column of Colonel Lomakin, which had been formed out of the nomads of the Ust-Urt, the inhabitants of which, particularly those belonging to the well-known tribe of Adai, are accustomed to wars and battles, in consequence of their fights with Khiva and the Turcoman hordes, which have lasted for hundreds of years. The *djigites* of that country are also better armed, and a good European fowling-piece and a tolerable acquaintance with the handling of it are not rare among them.

The Kirghiz-Kaïssaks are distinguished for their excessive hospitality and their strictness in the performance of their religious duties. A certain natural loyalty and sincerity, and a rigorous adherence to a promise given or to an agreement made, have produced on different travellers an impression favourable to the simple and homely nomads. Unfortunately, Slavonic civilisation and contact with Slavonic elements have had no beneficial influence upon them; and, on the Russian borders especially, the evidence of the corruption is plain. The Kirghiz, abandoning their own good qualities, adopt the bad qualities of the Slavonic colonists, drunkenness, excessive indulgence in

vodka (whisky), thirst for lucre, and trickery in trade. The officers of the Russian army were much amazed to see a young American, Mr. MacGahan,* in the year 1873, accompanied only by three servants, accomplish without danger and injury the whole distance from Kasalinsk to Khiva, through the desert of Kizil-Kum, which was occupied by hostile Kirghiz, and reach in excellent condition the right bank of the Amu-Darya. MacGahan depended, in his adventurous and certainly remarkably bold and perilous ride, solely on the hospitality of the brave nomads, who never deserted the solitary and often half-starved foreign rider, and of whom the enterprising young American could not speak in sufficiently favourable or grateful terms.

Little can be said in general about the characteristics of the Orenburg frontier troops. They are, when quartered in the districts of the Orenburg steppe, very like all those Russian frontier troops, who, cut off in distant Asia and Siberia from all civilisation and luxury, and from all communication with Europe, perform, with monotonous uniformity and unbounded apathetic *ennui*, their guard and garrison duties from year to year in the small, miserable, and dirty stations or forts of the steppe. Here the men are now more used to professional work and private service in the fort, &c., than to real military service.† The few educated officers whom a harsh destiny has driven from the civilisation of European Russia to these inhospitable regions, become in course of years so deadened, from the eternal sameness and solitude, that they have scarcely any interest left for what goes on in the great outer world. The remainder of the officers are for the most part drawn from the non-commissioned officers. This is the case in the steppe districts south and east of the River Ural. In the staffs, as at Orenburg, Orsk, Uralsk, and Ufa, and in the military administrations, there are of course many officers who formerly belonged to the regular army and

* MacGahan: "Campaigning on the Oxus, and the Fall of Khiva," Correspondent of the *New York Herald*. London, 1874.

† Of late great improvements have been effected in the military service of the steppe garrisons.

the Guards; many of these are drafted into the Cossack armies, so that the garrisons of Orenburg and Uralsk, for example, possess officers' *corps*, which differ but little from those of the rest of Russia. The higher posts are almost exclusively occupied by officers of the regular army and the Guards.

In general, the Orenburg frontier troops might not possess as a body that high state of efficiency which distinguishes the soldiers in the Caucasus. Until the middle of the present century comparatively little was done for their organization and improvement. The military centre of gravity lay at that time in Caucasia, which was not yet subjugated. It was not until the reign of the Emperor Nicholas, in the year 1840, that much interest began to be taken in the hitherto neglected Asiatic troops. Then, under his rule, a cadet corps was founded in Orenburg, which was to form the nucleus of a permanent and effective officers' corps. "Before this date," relates Wenjukow,* "a number of local Chiefs, especially the Cossack, could scarcely read or write; whilst those who came from European Russia were notorious either for their bad morals, or their slight aptitude for service." The frontier troops had not enjoyed the valuable and protracted opportunity, which fell to the lot of the army of the Caucasus, of practising themselves in the art of war against a rival endowed, even if only to a certain degree, with the same qualities as themselves. That the line battalions therefore stand, as regards tactical perfection, on a lower footing, is no subject for wonder. On the other hand, they are famous for their great endurance, and pre-eminently so for their power of bearing fatigues and privations, especially the toils and hardships of the Asiatic climate, which unites in itself the extreme temperature of Northern Siberia in winter with that of the southern deserts of Central Asia in the summer season. Their life among the nomad inhabitants of the steppe, and adoption of their manners and habits, their earlier and often warlike incursions against the rebellious Kirghiz and steppe

* See Colonel Wenjukow: "The Russo-Asiatic Frontier Lands," p. 30. Translated into German by Captain Krahmer, of the "Great General Staff" in Berlin.

robbers, consequently render them, as far as acquaintance with the ground, acuteness, and tactical knowledge are concerned, peculiarly adapted for a struggle with the steppe tribes of Central Asia. In the history of the victorious campaigns along the Syr, as far as the heart of Turkestan, and in the later affairs in Khiva, numerous instances will be found of their ability and powers of endurance in this respect.

The quarters and cantonments of the Orenburg troops have already been mentioned. On this side of the Ural they differ but little from those in European Russia, and are usually situated in the larger places and towns boasting more or less European civilisation. The Trans-Ural quarters, on the other hand, are for the most part duller, and are of a very primitive kind. They consist of abandoned *stanitzas* or colonies, and in the south, of small steppe forts or posts, as they are generally called in that part. These forts bear an exact resemblance to the mountain strongholds of the Caucasus which we have already described. But while they are there, for the most part, built of stone or masonry, they are here usually composed of low earth walls with small dry ditches, which enclose some inconsiderable and generally ruined government buildings, magazines, and barracks. A few one-storied houses or felt huts lie scattered about the *enceinte*, and afford scanty accommodation for the inn, the post-station, the local forge, and the shop of a Jewish trader. The small field-profiles of these works (on the Vauban system) completely answer their purpose here in the steppe, as they are not supposed to be proof against storming or to be able to resist a serious siege. The steppe fortresses are only intended to form the head-quarters of the military command, which has to preserve order in the surrounding country from this point with flying detachments, or with frequent expeditionary corps and patrols, and to form the points of support of the dépôts and store-houses for the troops; therefore no particular attention is bestowed on the arming of these works. Only a few old smooth-bore cannon lie dismounted on the rampart; there is generally only a single gun mounted on its carriage, and protected by a small roofing of boards; it

stands ready for action on the head front of the wall, looking out solitary and dismal upon the wild barren plain of sand below. The steppe fortresses which we have described have of late also considerably lost in importance from the fact that there is no longer any danger of disturbance from the Kirghiz steppe, but far more, and almost exclusively, from the south, from Khiva and the steppe tribes who sympathise with the Khanate. As for protection against the Khivan robber bands, the most southern Russian forts, as the Emba fortresses,* Karabutak, Uilskoye, Ak-Tjubinskoye, are much too far away to the north, and too wide apart to be able to defend the great space between, and the whole districts as far as the Sea of Aral and the Ust-Urt. The belt of land between the Aral and Caspian Seas always afforded the principal opening for the predatory incursions of the Khivans, as it was completely open to the north, and, in spite of the most repeated reconnaissances, no suitable positions for points of support were found.

The arming of the Orenburg frontier troops will not be treated here at length; it would only be of interest as regards the Orenburg detachments employed during the campaign against Khiva. It has been decided to arm the rifle battalions, as a rule, with the Berdan rifle, and the remainder of the regular infantry with breech-loading needle-guns of the Karle pattern; but this has not yet been carried out. The fort artillery have smooth-bore cannon of the oldest and most varied pattern, especially *yedinorogs* and smooth-bore 12-pounders (lightened guns), as in the Caucasus and Turkestan.

The characteristic element of the Orenburg troops is, in any case, the Cossack army, the formation and training of which have followed the gradual extension of the Government-General of Orenburg. Although the space in this work will not admit of showing and defining more precisely the character of the different Cossack troops, particularly from a tactical point of view, it does not seem out of place to give here a short

* The Emba fortifications consist of two small forts, the Embensk and the Nijne-Embenskoye posts.

sketch of the origin and special characteristics of the Orenburg Cossacks.

There are now, as we have already stated, only two peculiar kinds of Cossack troops in the Government-General of Orenburg who, by their appearance, differ from one another in trifling points. Their historical development, and consequently their military value and their military capacity, are, however, without a doubt widely different. The Ural Cossacks, whose acquaintance we have already made under the name of Yaik Cossacks as the pioneers of Russian progress in the East, and as a thoroughly warlike and dashing race of horsemen, who first in the time of Peter the Great penetrated into the unknown Khivan Empire, have to this day preserved their old fighting traditions. The Orenburg Cossacks are less warlike and less bold. They made their first appearance later, when the boundaries were so well fortified that a footing could be obtained for the ably planned Cossack colonies behind the line of steppe fortresses. The Orenburg Cossacks are the representatives of this generally peaceful advance, by means of settlement and cultivation, to the eastern frontiers. On this account the taste for a regular mode of life, agricultural pursuits, landed possessions, family life, and home is more spread among them: military service is not so much of a second nature to them as to their brethren of the Ural. Although active and efficient in the field, they are always longing to return to their homes and properties, and are not free from a certain discontent and uneasiness at having to fight for a length of time in distant lands, far from their own families, and surrounded by strange manners and customs. The reason for this state of things is to a certain extent attributable to the heterogeneous factors out of which the army of the Orenburg Cossacks was composed, that is to say, not like that of the Ural, from a particular race bound together by warlike traditions, but from several different races, in course of time receiving numerous additional corrupting elements thoroughly foreign to the nature of their race. A convincing proof of the difference of the two Cossack types was given by a fact which I had often the oppor-

tunity of witnessing during the campaign, that the Ural Cossacks, on account of their brave, enterprising, practical, and dashing qualities, were more popular, and more appreciated by the troops of Central Asia, particularly by the infantry, than the Orenburg Cossacks.

We will, therefore, now especially consider the development of the Orenburg army, which will afford some explanation for this state of things, as, moreover, we have already learnt in the first chapter something of the military characteristics of the Ural Cossacks.

Before the foundation of the Government-General of Orenburg, the Orenburg Cossacks neither existed in their present form nor even under their present name. The countries between the Volga and the Ural were inhabited by Cossack races, which were called, after their capitals, Samara, Ufa, and Isset Cossacks. Out of these three elements, then, a Cossack army was afterwards formed, which by an *ukase* of the year 1748* first received the title of the Orenburg Cossack army, and was assigned to the Government-General. It was not before the year 1755 that another *ukase* ordered the formation and organization of the new army, which at that period numbered 5,887 Cossacks. The term of service was then for life. The troops were divided into three categories—the paid, the poorly paid, and the unpaid. As regards the obligations of the men, it was distinctly stated that “the Cossack must serve as long as he has strength.” But in return for this the Crown allowed him, as has already been stated, a free gift of land and entire exemption from taxation. And as the population of the newly formed Cossack province was very scanty, Cossacks from the Don, as well as noblemen from Poland, Russia, and foreign countries, were at first introduced into the country and established as settlers near Orenburg. But as this was not sufficient, new settlers were eagerly sought for everywhere, and a great number of adventurers were to be found among them. In order to stimulate trade, whole villages of Tartars were even induced to migrate from Kasan to the east. The countries of the newly

* See *Wojenny Sbornik*, 1874: “The Orenburg Cossack Army.”

formed Cossacks received, therefore, into their midst elements which were neither advantageous nor good. This plan subsequently proved to be such a bad one that exertions were made to get the Tartars, if possible, to change their abode once more.

In the year 1840 the position of the Orenburg Cossacks underwent a thorough reorganization. Their lands, as well as their administration, were entirely separated from the Government-General. The government, which was purely military and distinct from the civil, was placed under a military chief, called *ataman*. The whole province was divided into two military districts, each of which had to supply five "*polks*" or regiments. At the head of these districts were chiefs of circles and regimental commandants. The army at that time consisted of 10 regiments of horse, one brigade of horse artillery, and three batteries of eight guns, Nos. 16, 17, and 18. The earlier privileges of the Cossacks, which permitted them to remain in their own country or on its borders, were set aside, and it was now decided that they could be drafted off to other provinces and their quarters changed. The term of service was fixed at 30 years, 25 in the field and 5 on the frontier, and a kind of reserve was formed out of those who were not serving. The Russian peasants who refused to submit to the new regulations, and to be inscribed as Cossacks, were compelled to quit the country of the Orenburg Cossacks.

At the time of the Perovski administration, and the commencement of the first expeditions in Turkestan, a fresh attempt was made to increase the population of the Cossack lands by the reception of Crown peasants and Calmucks. As a necessary consequence of this step, the effective strength of the Cossack army was increased by an *ukase* of the 1st (13th) January, 1858, and two regiments of horse and six battalions of Cossack infantry were added to it. Although the Cossack, who is both by nature and tradition a horseman, and an enemy to all foot exercise, was at first much discontented at the formation of the Cossack infantry, the new system was yet considered a good one, as it lightened the obligations imposed on the poorer portion of the Cossacks, and relieved them from quartering and

keeping a charger. This advantage was, however, only partially attained, as it appears that some of the richer people were likewise enlisted in the infantry; still, in the year 1865, the strength of the Cossack battalions was further increased.

In the year 1865, and under the administration of Adjutant-General Besak, the Chief of the Orenburg military district, a complete change again took place in the Cossack system. At the instance of the Governor-General, the judicial and police administrations of the Orenburg Cossack country were once more united with that of the Government-General by an *ukase* of the 10th (22nd) September, 1866. The military power was alone kept distinct from the civil administration. The independent office of *ataman* was suppressed, and merged in that of the military head of the Orenburg Government.* A particular fund, common property of all the Cossacks, existed for the military administration, and was included in the military budget. An annual sum of 60,000 roubles was paid out of this fund to the civil authorities for judicial and police services. The effective strength of the army was, moreover, raised to that set down in the preceding table. A portion of the Orenburg troops were sent out to be constantly employed in the Syr-Darya district. Changes were also made in the conditions of service. The younger recruits were chosen by lot, and those who escaped service, besides other communal taxes, had to pay annually a sum of 4 roubles 56 kopecks into the military chest. Relief from the service took place every two and a half years. Only two and a half *sotnias* of the so-called line (cordon service), which had their depôts in Orenburg, Orsk, and Troizk, have been told off since 1866 for the occupation of the borders. At present there are 40 *sotnias*, two battalions, and two batteries of the Orenburg army on service; 23 *sotnias* and 200 infantry of the Ural army as garrisons in Uralsk and other small steppe fortresses. Then there are 17 *sotnias* of Orenburg Cossacks, which require eight and a half *sotnias* as relief, and three *sotnias*

* The *ataman* of the Ural Cossacks is the military Chief of the Ural circuit, since 1873 Lieutenant-General Verevkin; the *ataman* of the Orenburg Cossacks is Major-General Boborykin.

of Ural Cossacks, with one *sotnia* and a half as relief, in Turkestan. According to this estimate, the Cossack troops on service in the different districts are thus distributed :—

URAL COSSACKS.			ORENBURG COSSACKS.		
<i>Ataman</i> : Lieutenant-General Verevkin, Chief of the Uralsk district.			<i>Ataman</i> : Major-General Boborykin, Governor of Orenburg.		
	Sotnias.	Files.	Sotnias.	Battalions.	Batteries.
In Turkestan, on active service ...	3	...	17	1 (resp. 2 to 3)	1 with 8 guns
In Orenburg, reliefs for <i>sotnias</i> in Turkestan ...	1½	...	8½	...	...
For cordon service ...	...	...	2½	1 to 2	1 with 4 guns
Cadet <i>sotnia</i> ...	...	...	1		
For steppe forts ...	...	...	3½		
Steppe detachments ...	18½	2	8½		
Total ...	33	2	41	2 to 5	2 batteries.

Greater attention was now paid to the improvement of the Cossack population, as this was rightly considered to be the first thing necessary for the development of the Cossack army. An attempt was also made to give the irregular Cossack troops more of the smartness and character of the Russian cavalry, and individuals were now sent to St. Petersburg to be educated, who were afterwards appointed to the permanent cadet corps, to which now every year Cossacks are ordered. But it was particularly sought to raise the standard of popular instruction and the Cossack schools. Up to the year 1819 there were only 18 lower schools in the whole province. In the year 1848 there was already a school in every larger *stanitza*. There are at present in the country of the Orenburg Cossacks 300 schools in all, which are attended by 9,000 boys.

How much has of late years been done in the Orenburg military district for the education of the people alone, is shown by a reference to the statistics of the Ural Cossack country for the year 1874, published by the *Russian Invalide*. According to it, in the year 1873, the sum of 57,635 roubles, or 18 per cent. of the total expenditure of the Ural military district, was expended for schools alone.* In the towns of the district there were, in 1873, 37 educational establishments, including two high schools (gymnasias), seven military schools, one music and

* *Russian Invalide*, December 1874.

one religious school, and eight private schools; whilst in the *stanitzas* of the different districts there were 142 schools, 42 of which were military schools, the remainder being private schools. The result was that on the 2nd (14th) of January, 1874, out of about 51,000 individuals of the male sex, 11,011 could read and write, and 4,218 could only read, there being thus nearly 30 per cent. of readers out of the whole number.

Up to 1841 the officers' corps were recruited from the children of the local officials or of simple Cossacks, who could furnish proofs that they had attended school regularly. But only a few of them had frequented the gymnasias, the higher district schools, or the cadet school founded at Nepluyeff in 1824. It was in the year 1858 that the regulation came in force that the *ouriadnik*, the Cossack non-commissioned officer, must pass an examination before being gazetted as *charunjyi*, or ensign. Although the examination was a trifling one, none of the Cossack non-commissioned officers could at that time pass it.* This unsatisfactory state of things was to a certain extent remedied in the year 1860, by the establishment of staff schools for officers' children at the chief military centres; but the want of trained officers still continued, until in the year 1867 a cadet school was at last founded in Orenburg, at which the *ouriadniks* got a purely military education. Up to the year 1867 the officers had received no pay when temporarily unemployed, so that the poorer ones were compelled, when not on active service, to provide for themselves. It thus often happened that an officer had to seek employment in the families of rich Cossacks whose sons had previously been under his command. In consequence of the numerous disadvantages of this system, which naturally weakened the authority of the officers, it was decided that an officer, during his free time, should be placed on half pay, and should on retirement receive a pension. On account of the sterility of the soil, a double portion of land was, moreover, assigned to the officers of the Orenburg army.†

* *Wojenny Sbornik*.

† See Cossack matters in the Caucasian division. In the districts of the

The reforms of 1865 had, in general, an unfavourable effect on the military development of the Orenburg Cossacks. As order had for two or three decades past been established in the Orenburg district, and quiet and tranquillity reigned on the frontier lines, which had formerly been so unsafe, the Cossack territory was no longer in a state of continual expectation of war and mobilisation; and the younger generation was able to devote itself quietly to the cultivation of the soil and other peaceable pursuits. It was only the older Cossacks who still belonged to the ancient warlike stock, and the younger ones merely learned by hearsay of the campaigns and steppe expeditions in which their fathers took part. If, owing to these causes, warlike tastes began to die out, the reforms gave protection and support to the civil life of the people. The Cossack now became a good husbandman, but a bad soldier; a better citizen, but an inferior warrior. The Government, moreover, bestowed less care and attention on the distant Cossack army, which was considered quite capable of carrying on the irregular warfare in Central Asia, as in all other Cossack lands. While great care and considerable sums were devoted to the organization of the Don and line Cossacks in the Caucasus, and great stress was laid on their amalgamation with the Russian field army in an European campaign, but little was done for the Cossacks in the remote east. The appointments to the cadet corps were only made in a very limited quantity, and the cadets scarcely acquired sufficient knowledge to enable them to serve as non-commissioned officers. The service in the *stanitzas* was indifferently performed, and was quite unable to meet the exigencies for which an irregular cavalry are supposed to provide. In addition to all these facts, we must especially bear in mind the unfavourable conditions which, as we have already seen, had hindered the development of the Orenburg Cossack army. The Orenburg Cossacks, composed as they were of the most diversified elements, formed in no respect, like the Don Cossacks, one strong kindred people. Further, the geographical features of the Orenburg Cossacks a General received 3,000 dessiatines of land, a staff-officer 800, and a field-officer 400.

Cossack countries were in general unfavourable, being ill adapted to the centralisation of the administrative and executive services. The territory of the Orenburg Cossacks extends in a long belt of about 1,000 versts from the country of the Ural Cossacks far up into the Government of Tobolsk, while on the Kirghiz Steppe it is in many places scarcely 10 or 12 versts in breadth. So great a disproportion between the length and breadth operated disadvantageously in every respect, the more so as hitherto there were only two military districts, which had the direction of more than 400 *stanitzas*.

It is chiefly owing to the *ataman* of the Orenburg Cossacks, Major-General Boborykin, that, to obviate these disadvantages, a further reorganization has been lately introduced. The Cossack lands have been divided since 1867 into three districts, Orenburg, Orsk, and Troizk. Greater attention has been paid to the school instruction, and its beneficial results are proved by the data previously given. Whilst still at school, the children are imbued with military ideas, and the school thus becomes a training institution for the service. In most of the schools there is an old Cossack veteran, who instructs the young people in gymnastics, marching, drill, and especially in frontier service. The children of the more wealthy Cossacks have also the opportunity of learning to ride. The attempt was especially made, by regulating the practical service, to rekindle and awaken the military and warlike spirit, which after many years of peace had shown signs of disappearing altogether. It was, in the first place, ordered that the young Cossacks, before being admitted to service in the regiment, should go through a year's course of drill at the *stanitza*. During this period of preparation the young Cossacks received no pay, but simply an allowance for the keep of a charger; they were always occupied with riding and musketry drill, under the guidance of special instructors, who had previously gone through the course of the cadet corps, and had to do a month's troop duty in summer at the head station, before being allowed to perform regular duty with the troop. The period of training with the troop was fixed at only sixteen and a half months; of these, four and a half during the winter

were passed in theoretical instruction in the *stanitza*, while nine months in summer were set apart for practical duty with the *sotnia* in camp. Summer manœuvres for exercise in a knowledge of field duties became now an annual institution, the time being chosen so as not to interfere with the agricultural pursuits of the Cossacks.

The training in military tactics which the Cossack officers up to this time received had been very limited, as there was no linking of regiments and brigades in the Orenburg district, a circumstance which led to the officers having no other chance of learning their work than with their *sotnia*, or when with the small Cossack detachments. In order to remedy this evil, officers were repeatedly ordered off to other stations. It was also laid down that officers, before leaving their respective Cossack circuits on transfer to other military circuits—to Turkestan, for example—must have done a month's duty in the field. All these different useful changes were confirmed on the 2nd (14th) of October, but were only regarded as provisional for the next three years, and as being preliminary to further reforms, which were projected for the year 1874, and which were in that year definitely settled, when the new Cossack reorganization was introduced in October, 1874.

Let us now turn to a special examination of the equipment and clothing of the Cossacks. The article in the *Wojenny Sbornik*, of which mention has already been made, furnishes the most interesting details with regard to them, some of which I cannot refrain from quoting.

When a Cossack army was formed, there was no particular uniform, although it was the rule to have a common dress for all. It at that time consisted of a long white overcoat ; of a blue *kaftan*, which was kept tight round the waist by a black girdle ; of white overalls stuck in high boots ; and of a fur cap of black sheepskin, with a blue or red *kolpak*.

In the year 1803 the first *ukase* ordering a particular uniform for the whole Cossack army was issued. The uniform was now composed, as was the case with the Don Cossacks, of a dark blue coat with red facings, and broad blue pantaloons with

wide red stripes. The girdles of the Cossacks varied in colour, according to the regiment, while the officers wore silver scarves. The head-dress consisted of a shako with white, or, for officers, silver, mountings and a white plume (*sultan*). To the smaller articles of equipment belonged a kind of leather cartouche, which, as with our cavalry, was worn over the shoulder.

In the year 1833 the colour of the breeches was changed from dark blue to dark green, and the facings were light blue, instead of red, with *pompons* instead of *sultans*. In the year 1856 the shako was discarded, and the fur cap, now known as the *papacha*, again introduced with the blue *kolpak*. Besides pantaloons and coat, the Cossacks now wore cavalry pelisses of a grey, coarse stuff, and boots and stocks like the regular troops. They have no spurs, but instead of these they carry short whips, which are tied to the right wrist with leather straps. The Cossack infantry, like the cavalry and artillery, wear a coat, a *papacha*, and pantaloons. These regulations are the same in both Cossack armies, in the Ural as well as the Orenburg; only, to distinguish the two, the former have red facings, red striped breeches, and red *kolpaks*.*

Up to the year 1830 the weapons of the Cossacks were of the most varied description, and consisted of fire-arms and steel arms, which were the proceeds of campaigns in Persia, Hungary, the Caucasus, and Turkey, and others had been presented as a special distinction to individual Cossacks. Up to 1838 the Cossacks had the ordinary cavalry sabre, which was replaced later by the Cossack *shashka*, made in the Russian factories, and particularly in Toula. The lance was introduced at the beginning of this century, in order to give the poorer portion of the Cossacks a substitute for the gun. As a fire-arm the Cossacks first used the *turka* weapon, which sufficed for all military and sporting purposes, and could be used indiscriminately with shot and ball. Later on each horseman received a carbine and two pistols. Since 1856 pistols have been abolished, but more value

* See the splendidly illustrated work "Description Ethnographique des Peuples de la Russie," par T. de Pauly, St. Petersburg, 1861; and the illustrated periodicals, "Collection of Uniforms in the Russian Army," St. Petersburg, 1837.

has been placed on the improvement of the musket. The Cossacks were gradually armed with the Tanner, the six-lined rifled Cossack gun, or dragoon matchlock,* and with the seven-lined rifle of the Imperial family. A portion of the mounted Cossacks have the carbine of "small calibre." Finally, in the year 1873, it was decided to give a new kind of arm to all the Cossacks. Accordingly twenty-two thousand Berdan rifles† have been ordered in America for the Cossacks, the cost of which is to be defrayed partly by the Government and partly out of the Cossack military fund.

In spite of these numerous changes and decisions, the Cossack regiments of the Orenburg military district are all differently armed, and weapons of different patterns are often to be met with in one and the same *sotnia*. According to the general regulation, the mounted Cossacks at the beginning of the year 1873 had the *shashka* in a leather sheath, the lance, and the bayonet, the latter being carried by the trooper over the shoulder. The bayonet is fastened to the sword-belt, when the weapon hangs from his shoulder. The lance is not worn on home service. The officers carry a regulation revolver. The equipment of the foot Cossacks is, by regulation, similar to that of the regular infantry—gun with bayonet, knapsack, cartridge-box, and case. The Cossack artillery have the same equipment as the cavalry. They wear Cossack *shushkas*, in leather sheaths, and pistols. Every Cossack, no matter to what corps he belongs, has to look after his own arms. Among the Cossack infantry, who perform garrison service in the small forts, one finds a mixture of the oldest and most curious weapons, taken, apparently, mostly from old stocks, which had been years ago discarded by the European regular army. As special decorations, assigned to the Cossacks in honour of striking historical events by his Majesty the Emperor, the Cossacks carry banners, on which they lay a great and almost superstitious value. The Orenburg Cossacks possess forty of these, which are carried by

* See *Suvorin's Almanac*, 1875.

† *Wojenny Sbornik*, 1874.

the various *sotnias*, as there were no regular regimental links.*

So much for the general characteristics of the Cossacks of the Orenburg district. If we maintained at the beginning of our observations that the Orenburg Cossacks, as a rule, were inferior to the Ural Cossacks in warlike capacity and training, it must not be supposed that we intended to infer that the Orenburg Cossacks were altogether deficient in these qualities. The Orenburg Cossacks have repeatedly taken part with credit to themselves in the Russian campaigns of the last century, though their active share with the regulars has not been particularly noticed. In the course of the 18th century we do not find the Orenburg Cossacks in the regular army employed on the line and in the Khirgiz Steppe, but almost exclusively in their own country. Here they fought for nearly a hundred years with the wild and unruly races of the Kirghiz, Calmucks, and Bashkirs, against the rebels in the land of the Yaik Cossacks, against Pugatcheff, &c., as the historical sketch has shown. The Orenburg Cossacks had in those days severe and harassing duty to perform on the line. The disturbances in the steppes had at that time assumed such proportions that the peasant could only till his field, as in the Caucasus, armed with musket and sabre. The Cossack might then be seen gathering in his crops with trailing sabre and loaded gun, and bringing them into the *stanitza* under a strong escort. It was only in large bodies that the armed Cossacks could work in the fields. Nothing could be done in the steppe, no journey, no scientific expedition could be undertaken, no caravan could pass along the trade route, except under a strong escort of Cossacks. The Cossacks were compelled to put forth their entire strength to resist the hostile barbarians of the steppes, and consequently acquired great courage and skill in warfare. Later on, when

* The symbols of the colours are mostly of a religious nature, and are therefore highly revered by the strictly religious Cossack. The Ufa Cossacks possess the oldest colours with a painted symbolic deity, and the legend: "With these colours defeat the enemy;" and "I shall increase thy race like the stars in the skies."

peace again reigned on the Kirghiz steppe, the Orenburg Cossacks, especially after Perovski's time, were employed in the Turkestan war, where they gained many laurels. Since 1822 we find them in the cities of European Russia, doing duty as police.

The Orenburg Cossacks were enrolled for the first time in the regular army during the war with Sweden in 1790, when a small corps of about 150 horse accompanied the Russian troops. In the French campaign of 1807 two regiments of Orenburg Cossacks were sent to the seat of war, but they were not called upon to join in any military operations, as they did not reach the army until the battle of Friedland had been fought. They proceeded from France to the army of the Moldau, where they took part in all the events of the campaign, and were employed to watch the frontier-line. The body-guard of General Kutusoff is said at that time to have consisted exclusively of Orenburg Cossacks.* These two regiments performed the cordon service on the Dneister, on the Turkish frontier, up to the year 1819. In the year 1813 we find a third regiment in Germany. The second regiment took part in the siege of Dantzic and in the battle of Leipsic. In the following years, in 1829 against the Turks, in the Polish risings of 1813 and 1863, in Hungary and the Crimea, nine regiments of the Orenburg Cossack army took part with the regular army in various engagements, and won much distinction. From the year 1864 Turkestan and Central Asia have been exclusively the field of their action.

Later events, showing the collective strength of the forces in Central Asia, have given further proofs respecting the relative value of the Cossack troops and the regular cavalry.†

We may, in conclusion, mention that the Cossack reorgani-

* *Wojenny Sbornik*, 1874.

† Although in general the author has abstained from a too minute description of the Russian army, for fear the work should have become too voluminous, yet he is of opinion that he should not pass over the peculiar and characteristic circumstances respecting the Cossacks, because these matters were so essential for the development of the Central Asiatic army. He had, moreover, an opportunity of making special acquaintance with them, as it was his lot to live, to suffer, and to fight with the Orenburg, Ural, and Caucasus Cossacks of Lomakin's column.

zation, as applied to the Don Cossacks by the decree of the 31st of October (11th of November), 1874, has not yet been carried out in the case of the Orenburg Cossacks. The Ural Cossacks, however, are to be thoroughly reorganized, and a new scheme, similar to that for the army of the Don, is to be introduced in the course of the year 1875.

Little has as yet been done as regards the health of the troops in the Kirghiz Steppe. There are only a few insufficient hospitals in the principal towns, and doctors are altogether wanting. The troops in the Aral Steppe enjoy, however, good health, which is owing both to the fine climate and the encampment of the soldiers in the habitable and practical felt huts, which are here universally used as tents or instead of permanent barracks.*

THE PRODUCTIVENESS AND RESOURCES OF THE GOVERNMENT-GENERAL OF ORENBURG, WITH REFERENCE TO THE REQUIREMENTS OF THE ARMY AND OF WAR.

The Government-General of Orenburg, like the Caucasus, supplies, as a rule, the military requirements of its troops. But the European or Cis-Ural portion of the Government, with the exception of a few Trans-Ural Cossack districts, is alone productive, and the whole Asiatic portion has to be supplied from the north. Agricultural pursuits flourish on the European side, as the ground is very fertile. According to Saroff's statistics, in the year 1860 the area of the Government was as follows:—

Orenburg = 16,509,000 dess.; 3·4 per cent. of which is arable, 16 per cent. meadows, 29·1 per cent. wood.

Ufa = 8,040,000 dess.; 10·3 per cent. of which is arable, 9·2 per cent. meadows, 5·25 per cent. wood.†

* *Suvorin's Almanac*, 1875: "Health and Mortality in the Russian Army."

† The above figures respecting the wood area for Ufa and Orenburg, taken from *Suvorin's Almanac* for 1875, do not quite agree with those of Saroff.

The rest of the country consists of gardens, pasture, and totally uncultivated lands.

In the district of the Orenburg Cossacks there are 6,837,388 dess. of productive and only 840,816 dess. of valueless ground ; and in that of the Ural Cossacks 3,627,811 dess. of the former and 1,623,814 dess. of the latter. For the years 1864 to 1866 the rye produce of the Government of Orenburg was estimated at 2,280,000 chetverts, while that for the Government of Ufa amounted to 4,086,000 chetverts. The Government of Orenburg is especially famous for the fertility of its meadows, while the cultivation of tobacco is insignificant. In the year 1865 five dess. of land planted with tobacco only produced 397 poods net. The supply of wood has, in general, much decreased, as the forests in East Russia are beginning to feel the effects of the extravagant use of this material. In the central and southern portions of the Orenburg district these forests supply the sole and indispensable material both for fuel and building purposes. According to Suvorin's Calendar for 1875, there are 538,000 dess. of crown forest in the Government of Ufa, and, in addition, 5,066,000 dess. of private forest ; the Government of Orenburg has a similar area of private forest. It is only in the north, and particularly in parts of the Government of Ufa, that the Ural coal comes into use, this coal formation extending on the western slope along the whole length of the Ural mountain chain. The two principal strata of coal run parallel from north to south in the district of the Government.* The more westerly begins at the town of Ufa, and runs for 70 versts across the River Ural as far as the southern steppes, while the eastern one only extends to the town of Orsk, on the River Ural. The Orenburg coal is of the Jura and chalk formation. Owing to the rich and excellent pasturage, cattle-breeding flourishes in the Cis-Ural Governments, and large numbers of horses are bred there.

* Helmerssen : "Geological Map of Russia," St. Petersburg.

The returns for 1864 and 1871, according to Saroff and the Suvorin Calendar respectively, give the following results:—

	Horses.		Horned Cattle.	
	1864.	1871.	1864.	1871.
Orenburg	567,000	581,000	370,000	441,000
Ufa	525,000	587,000	310,000	309,000
Total	1,092,000	1,168,000	680,000	750,000

	Sheep.		Pigs.		Goats.
	1864.	1871.	1864.	1871.	1864.
Orenburg	1,092,000	880,000	80,000	65,000	202,000
Ufa	880,000	380,000	75,000	120,000	80,000
Total	1,472,000	1,260,000	155,000	185,000	282,000

It will be seen from these figures that there are more horses bred in the two governments than in Caucasia, and the number is here increasing rather than diminishing, as is the case there.* Moreover, the numbers in the districts of the Kirghiz and Calmuck Steppes are not included in the above figures, although breeding is carried on there with a certain amount of success. The horses bred in these two governments are for the most part of the same race as the Cossack horse, which was described as the Don horse in the chapter on the Caucasus. A good horse for agricultural purposes, and the Bitygen horse, which is particularly fitted for drawing heavy loads and is much used in the waggon columns which transport goods to Asia, are also bred here. The Bitygen horse, with the camel and the huge Orenburg

* According to Wenjukow, none of these races are, however, either very good or fit for the regular cavalry; but they are the better fitted for service in the steppe, being accustomed to want of fodder and water, to cold, and to long marches.

draught ox, performs the whole inland trade between Russia and Asia, and is therefore of incalculable value. In the Government of Orenburg there are about 62 horses to every 100 inhabitants. In the year 1865 there were 29 private studs in the Orenburg Government, with 45 stallions and 566 mares; in the Ufa Government, 15 private studs with 56 stallions and 329 mares. It is estimated that there are 3,387 stallions and 30,049 mares in the district of the Orenburg Cossacks; and in that of the Ural Cossacks, 2,102 stallions and 18,231 mares. There is also in the Orenburg district a large Government stud, in which remounts for the light cavalry and artillery are chiefly bred. It will thus be seen that the production of the two Governments in horses and cattle alone is far in excess of the requirements of the Orenburg military district. The European portion of the Government-General also furnishes exclusively the supplies required by the troops. The large number of horned cattle bred, including the famous fat cattle of Orenburg, is shown by the statistics already given. The Government of Orenburg, with 144 mills, produced, in the year 1869, 62,700 roubles' worth of flour. The salt mines of Iletzka and Sashchita easily supply the necessary amount of common salt; and sea salt can also be obtained in abundance in the Ural district from the salt lakes of the interior. The Ural district produced in the year 1872 nearly 77 million pounds of rock salt and 20 million pounds of sea salt. The cultivation of the sunflower, which is chiefly used for making oil, and the production of honey must also be mentioned as specialities of the two Governments. The Bashkirs are celebrated bee-rearers, and it is from this, their favourite occupation, that they have acquired their name.* Different articles and preserves are made out of the honey, and particularly the so-called *sbites*, a kind of spiced honey, of which the soldier is very fond, and which he must not be without while on the march or in the field. The production of vegetables and fruit is not large, but melons and water-melons

* Rearing of bees is carried on here on a large scale, and is of great importance for the production of honey, as well as for that of wax candles.

thrive splendidly.* The requirements of the troops in this respect, as well as in that of tea, sugar, brandy, &c., must be partly supplied from West Russia. The rivers of the Ural are filled with fish, and the hunting in the mountains and on the steppes yields a large quantity of skins and furs, which are indispensable to the troops, owing to the severity of the winter. The long-haired thick skin of the steppe sheep, which is mostly black, generally forms the winter clothing even of the soldiers, and without it, indeed, no inhabitant of the Government-General could exist during six months of the year.

As regards industrial pursuits, the Ural chain is rich in mineral treasures. Gold, platinum, iron, and especially coal and copper, are to be found there.† Nothing but copper is produced in several districts of the Governments of Orenburg and Ufa. All manufactures, and that of the iron industry in particular, have greatly declined since the abolition of serfdom, as it is very difficult to procure workmen, but from a military point of view they were never of any great importance. According to Saroff, there are—

				Value of Annual Production.
				Roubles.
In the Government of—				
Orenburg	7	iron foundries with		312,000
Ufa	8	" "		1,038,998
Orenburg	77	leather manufactories		320,624
Ufa	69	" "		181,253
Orenburg	5	wool manufactories		52,000
Ufa	1	" "		2,000
Orenburg	11	cotton mills		45,000

For mere military purposes, Orenburg has only one manufactory for coarser kinds of cloth and four for finer sorts, which

* The author, during the whole of his journey through the district, did not see one fruit tree. The night frosts, which occur throughout the year both summer and winter, are said to be the reason of this.

† Gold is worked in the Governments of Perm and Orenburg, producing about 6,000 pounds weight a-year. The produce in iron of the two Governments, and of that of Ufa, represents two-thirds of the total production of Russia.

provide the material for the clothing of the troops. The manufacture of felt in these manufactories is of greater importance, as it is indispensable for the repair of tents, huts, shoes, &c. The leather required for boots, articles of equipment, harness, &c., is largely supplied by the above manufactories. Arms and small items of uniform, as well as powder and ammunition for the soldiers, are, as in the Caucasus, brought from the west of European Russia or from foreign countries. Saltpetre for the ordinary supply of powder in the workshops is procured from Samara, while the powder magazines and dépôts are provided from the manufactories of Kasan. There are magazines and dépôts for powder, ammunition, arms, &c., in the principal towns of the district; these in their turn receive their annual supply from the capital, Orenburg.

For the care of the war material already in stock, for the repair of damaged cannon, for fire-arms, and ammunition, moveable artillery-workshops and laboratories have been established in the town of Orenburg, where there are also dépôts for articles connected with the medical, drug, and engineering departments. The rest of the articles required by the troops, as, for instance, hardware for the smaller garrisons, are easily supplied from Orenburg, which, as we have already stated, is the centre and emporium of the extensive trade between Europe and Asia.

We thus see that the supply both of manufactured and unmanufactured articles, as far as the requirements of the troops are concerned, is ample in the European portion of the government-general, and especially so when the limited number of soldiers is taken into consideration. But the case is very different in the Asiatic portion, in the Trans-Ural, the produce of which scarcely suffices for the support of the almost entirely nomad population which inhabits or roams about in it. We have already formed an acquaintance, at the beginning of the chapter, with the character of the Kirghiz Steppe and its inhabitants, as regards the districts lying between the fifty-first and forty-sixth degrees of northern latitude, and can therefore judge tolerably well of the sterility of the region. The barrenness and dryness of the soil, the lack of all higher

vegetation, and the wandering propensities of the inhabitants of the steppe, have ever made all fixed settlements, with the exception of a few Cossack colonies and steppe forts, impossible. It is for this reason that the Kirghiz Steppe is absolutely uncultivated, except in the neighbourhood of the River Ural and in the Cossack districts around. Pastures and poor meadow-land are only occasionally met with along the scanty water-courses, and give a meagre supply of fodder for the winter, when snow and ice cover the steppe for months. The hay crop is then barely sufficient to support the smallest number of cattle during the severe frost. Reeds grow plentifully in the vicinity of the brooks; they are called *kamish*, and are used for fuel and also for weaving mats. Only a few plants grow in the steppe itself, where it consists totally of sand and salt marshes; among them we may especially remark the absinthe, which forms the chief food of the frugal camel. The steppe grass grows only in a few tufts; it is hard and rank, and is only eaten by the native horses, sheep, goats, and camels. Forests are to be found only in the north, but they are very thin and rare. The whole steppe to the south supplies scarcely any wood for fuel. Stumpy brushwood, consisting of thorn and a kind of juniper bush, and a few little *saksaul* bushes scattered here and there, afford a meagre supply for a very modest camp-fire. The usual material for burning is dried camel-dung, which is to be found in great quantities along the caravan roads most frequently used.

Just as simple and primitive as the nature of the curious and barren Aral-Caspian plateau are the manners of its wild and unsettled inhabitants. All that the Kirghiz possesses consists of his *kibitka* or felt hut, his weapons and domestic animals, his camel, horse, sheep, and goat. The ownership of horned cattle is exceptional. The pastures, if the sandy desert strips scantily covered with brushwood may be dignified with the name, are the common property of the whole population, and are visited in turn at certain times by particular tribes, according to the season of the year. The domestic animals of which we have spoken are exclusively used for transport and

for the nourishment of the Kirghiz, who, however, only tastes meat on very rare occasions, as it is with him entirely an article of luxury. The nomad lives entirely on the milk with which the animals, including the horse and the camel, supply him. The women and girls are clever at making out of the milk the most varied kinds of cheese and butter, and the most diversified, but not always very dainty dishes, as the *airan* (curdled sheep and goat's milk), and the *irimchik* (small balls of cheese dried by the sun). As a beverage, very sour mare's or camel's milk, called *kumiss*, is very popular; in addition to its well-known intoxicating properties, it affords a good deal of nourishment and alcohol, and is, as a rule, very wholesome. As already stated, milk dishes form almost the sole diet of the inhabitants of the steppe, as there are no vegetables, with the exception of garlic and onions, which grow wild in these regions, and groceries, sugar, and tea (the usual caravan or *klinker* tea, pressed as hard as a stone) can only be procured by the poor nomads, with difficulty and at great expense, from the Russian colonies or the passing caravans. Bread and vegetables are entirely unknown. Tea is cooked with salt and mutton fat. Meat is only eaten on holidays and at banquets, in the very severe cold of winter, or on an extraordinary occasion, when perhaps some old and maybe sick camel or horse is found in the camp, which is of no further service for transport purposes. The flesh of the young camel only a few weeks old is very savoury, and can scarcely be distinguished from the best beef. The meat—smoked or pickled—and sausages serve as a provision for the winter, when the cattle, on account of the scarcity of fodder, give very little milk. The flesh of the sheep, called Fat-tails (the weight of the tails often reaches from 20 to 30 pounds), is the most delicious in the world, but is only consumed by the nomads on the rarest occasions.

How simple and frugal the wants of the nomads are, is shown by the fact that their enjoyment at *fêtes* and banquets is to make themselves tipsy with *kumiss*, their chief delicacy—a kind of butter—called *katyk* or *kaimak*, which is made, after a long process of shaking, of a mixture of sheep's cheese with

sheep's milk. This compound is kept for days by the horsemen, when riding, in long, narrow, leather vessels, which are generally made out of the skin of a horse's leg. The delicate morsel, which has become consistent from continuous riding, is then taken out with the greasy fingers. It is considered the highest token of friendship when such a delicacy is offered by the Kirghiz rider to the stranger, and served direct from hand to mouth.

The manufactures of the Kirghiz are of a primitive kind. They are confined to the preparation of felt from camel's hair, to the dressing of the skins of sheep, goats, and horses, and to the roughest and most ordinary weaving or spinning of sheep's and goat's wool. The Kirghiz maidens make a very fine knitting thread out of the sinews of the horse. The ordinary dress of men and women is simple. The notables and persons of rank mostly wear calico garments, which are brought from Orenburg, and on high days and holidays they are decked out in silk stuffs from Turkestan and Bokhara. The apparel of the common folk, which consists partly of the skins of sheep or horses, partly of camel's hair felt, is made by the women, as are also the headgear and shoes, which are of felt, or even leather. Beyond this, nothing is manufactured in the steppe, and there is absolutely no industry of any kind. The chief occupations of the Kirghiz and Calmucks are cattle-breeding, hunting, and, in the southern districts, plunder. Full-grown and active youths are all mounted and armed. They accompany the trains and caravans of their tribes as drivers, guides, and guards. Capital guides and warriors are trained in the service of the caravans, and are renowned among the people as particularly well-armed and brave men, who have a thorough knowledge of the country, and who then, as already stated, are called *djigites*. As a general rule, there is very little to be got by hunting. The steppe, it is true, is rich in wild duck, in geese, swans, ptarmigan, and steppe hens and cranes, &c., particularly in the neighbourhood of water, but on account of the little meat they supply, the Kirghiz does not consider it worth while to expend time and trouble on such winged game. The steppe antelope (Saiger antelope), the wild

goat, and the steppe or spring hare, are, however, eagerly hunted, and in the pursuit of these animals a peculiar kind of small falcon is used by preference, and with considerable skill. The steppe, moreover, is the home of bears, wolves, wild boars, foxes, and marmots, &c., the skins and hides of which are used and prepared by the nomads. Quantities of small tortoises inhabit the plain, and their eggs are collected in great numbers by the children. The Kirghiz races show much taste and liking for precious stones and ornaments of gold and silver. The inhabitants of the steppe, however, do not themselves know how to work them, although the precious metals are not entirely wanting here. The furniture in the household of the nomad is confined to what is strictly necessary. It is constructed for the most part of wood or leather, and the people are entirely innocent of the use of the spoon and fork.

We thus see that, as everything is on so primitive a footing, the country, as well as the population, could only occasionally offer to troops, from a military point of view, a slight support and a few resources, and that the troops, isolated in the small garrisons and steppe forts on the march and in short expeditions, would be left almost entirely to their own resources, and would have to depend on their communication with the north, the European district, and particularly the Government of Orenburg. A corps on the march can only rely on the steady supply of a very small quantity of green fodder in summer and of hay in winter. It will always have to take with it all it needs in the way of forage, oats, and barley, if special depôts and magazines have not been previously provided.* But, in general, the support and assistance of the Kirghiz, who are sharp and know the country well, is not to be despised when military operations are begun in the Orenburg steppe. The steppe has, with the exception of the few forts, no halting-places for the longer marches. The camp has every night to be formed close to some well, and the tents must be pitched and

* Wenjakow evidently draws too favourable a picture when he says that he never found any difficulty in getting fodder, except in winter. The contrary has been repeatedly proved.

struck every twenty-four hours. In assisting in these camp duties, in the pitching of the tents, in the packing and unpacking of the transport animals, in the guarding and management of the provender for the cattle, and in the collection and preparation of fuel and water, &c., the willing and generally obliging Kirghiz proved, on all occasions and in all military steppe operations, indispensable and invaluable for the strategical march to the south. All requirements have to be brought from European Russia across the River Ural. This includes all articles of equipment and clothing, arms, and ammunition. No powder or arms manufactory exists in the whole of Asiatic Russia beyond the Ural. The Orenburg fortresses receive all necessities, even those of subsistence, meat only in part excepted, from the other side of the Ural. If we consider the character of the steppe, in which there are no roads to keep up communication between the halting-places, and in which connection with other places can only be kept up for the greater part of the year by means of camels or draught animals on the Ural caravan routes;—if we reflect that carriages cannot be used for journeys in the spring and the autumn, as the soil of the steppe is swampy and soaked through with rain and snow, that they can only be used to a limited extent in summer, and that only sledges are available in winter, when the snow covering is frozen firm and hard;—we may imagine what immense expense and difficulty are entailed by the maintenance of the frontier troops of the south, and what great value the breeding of beasts of burden, horses, and camels, by the nomad populations has in the eyes of the Russian military authorities. According to Wenjukow, the expense of the transport of one chetvert, or about four bushels of meal, to the Emba posts amounts to nine roubles. The camel is always the best, safest, and most convenient means of transport; this animal is chiefly bred in the Calmuck districts of Astrakhan, and can carry, according to the season, from 12 to 16 poods weight. The cattle are hired from the population by the Government for transport, together with drivers and guides, the charge being, under ordinary circumstances in time of peace, on an average

from 10 to 12 roubles per month. As this question is one of considerable importance in the management of the frontier garrisons, a few details as to the capacities of the Kirghiz Steppe will not be uninteresting. According to the reports of the Governors, there are :—

In the Kirghiz Steppe, 1,045,000 horses, 6,360,000 sheep.

In the Calmuck district, 4,038 stallions, 65,691 mares

In the Kirghiz district, 42,367 stallions, 331,531 mares } for breeding.

In the Government of Astrakhan, the district of the Calmucks and Kirghiz, 26,000 camels.

In the foregoing figures, indeed, allowance must be made for the Government-General of Orenburg, as they partly include the districts which lie west and east, and which belong to the Governments of Astrakhan and Siberia.* The great value to the Russian military administration of the horse supply of the Kirghiz district will be shown in the description of the Kirghiz horse, which will appear in the section on Turkestan, to which we are about to pass on. This animal possesses the most excellent and useful qualities for the steppe service, namely, endurance, the faculty of living on very little, and speed. In earlier times the Kirghiz horse was unknown in the Russian army; only the self-mounted Cossacks preferred to ride this beast. But more recently the superiority of the Kirghiz as a light draught-horse has been recognised, and, as we shall see later on in the section on Turkestan, the regular field-troops in Turkestan, especially the artillery, are beginning to employ it. The favourable experience of this animal, especially with the artillery in the campaign against Khiva, will lead to the extensive use of the Kirghiz horse in Central Asian warfare.

In conclusion, one may judge of the condition of the finances of the Government-General from the costly administration of the broad steppe district of the Kirghiz which we have just described, and which brings in little or nothing to the State, and from that of the extensive Cossack lands, which are entirely free

* The transport capabilities of the Sea of Aral will be treated later on, with the description of the Government-General of Turkestan.

from taxation. The short notices on this subject contained in Suvorin's Calendar for 1875 might perhaps serve to give a correct idea of the financial position. According to the Calendar, the State revenue for the *kibitka* taxes of the Inner and Little Kirghiz hordes for the year 1873 only amounted to 149,350 roubles, for 1874 to only 173,607 roubles; while the revenue from taxation on real estate was 13,230 roubles for the Government of Ufa, and 11,840 roubles for the Government of Orenburg. I have unfortunately been unable to procure the much higher figures of the revenues from commercial duties, trade licenses, distilleries, &c., calculated especially for the Government-General of Orenburg.

CHAPTER VI.

III.—THE GOVERNMENT-GENERAL OF TURKESTAN, THE BASIS
FOR THE THIRD OR EASTERN DIVISION.

SCARCELY ten years have elapsed since Russia occupied the first city of any great importance in Turkestan, and thus began the conquest of an extensive territory, hitherto almost unknown, and quite devoid of any Slavonic element. One is struck with astonishment, from the rapidity of these acquisitions, at the rare ability of the Slavonic race in thus establishing itself in a strange country as ruler, administrator, and civiliser, and in blending the most heterogeneous populations, under the authority of a skilful Governor-General, into a Russian province, in spite of the most difficult social conditions! The campaigns of the Russian troops were glorious but sanguinary. And yet, as in hardly any other land, the unavoidable severities and horrors of war were mitigated and ennobled by principles of humanity which made the Russian soldiers appear, to a certain extent, as the pioneers of science and culture in the heart of Central Asia! This little known but highly interesting country was no sooner conquered by the Russians than they began to make themselves thoroughly acquainted with it; quietly and undisturbed, the topographer worked in the cause of science by the side of the advancing warrior. The blindest fanaticism, the most refined cruelty, the most unlimited despotism, combined with the direst oppression, had flourished uncontrolled under the indolent tyranny of the Mahommedan Khanates in Central Asia, isolated as it was from general intercourse with the rest of the world, until the middle of the present century. The inhabitants, accustomed for the most part to a nomadic life, ill-treated by tyrants, disunited, and morally ruined, plundered and fought with one another. Was it then any wonder that the Russians, though conquerors, were greeted as

saviours by the more quiet, settled, and peaceable portion of the inhabitants?

If we consider both the enormous changes which have crept into that land in the few years during which the Russians have been in possession of it, and the comparative order which the Russian authorities have established amidst this chaos of races, and which flourishes marvellously under the influence of trade and barter, we must in sincerity give the Russians the credit of having entered the country, not as harsh, vindictive conquerors, but as gentle mediators and true apostles of civilisation. Siberia and the Caucasus had made Russia an Asiatic Power. The steppes of South Siberia, as far as China, the Caspian Sea, and the Turanian deserts, to the east of the Caucasus, had hitherto limited her influence on the culture of Inner Asia, reducing it to a minimum. But during the last ten years, Turkestan has indeed become the first station of civilisation, and Russia is certainly destined to bear it far east into the very heart of Central Asia.

This disturbed country, overrun for the most part by wild and plundering nomads, as it then was, could scarcely offer to the Russian Crown any material advantages beyond those of a military and strategical character. As soon as the exertions of the Russian authorities have succeeded in establishing perfect peace and order in the country, and in giving it such a good and practical administration as will induce the nomadic population to adopt regular and settled habits, so soon will Russia be able to indulge in the hope that from the possession of Turkestan she may derive in the future much material and economical benefit, and that it may prove a most important base for trade between Russia and Asia. If Russia were able, by transferring the centre of her foreign market to Central Asia across Turkestan, to find an inexhaustible outlet for her goods, and also to appropriate the export and import trade of the whole of Central and Eastern Asia, she would be well repaid for the immense sacrifices which she has made of late years, and still makes, to civilise Turkestan.

In the historical sketch we explained how the Russian

possessions in Central Asia sprang from the first small territory on the mouth of the Syr-Darya in the year 1840, developing by degrees into what is now the extensive province of Turkestan. It only remains for us to give a brief description of the territory included in the Government-General of Turkestan, and of the state of affairs there at the beginning of the campaign of 1873. It is necessary to consider all that has recently occurred, as the entire administration and organization are still so new and incomplete that frequent changes are taking place, and what was correct for one year would not be so for the next. An entirely new organization of the administration of Turkestan has lately been elaborated at St. Petersburg, and will speedily be introduced. As to the campaigns of 1873, only the conditions then prevailing can here be taken into consideration.

GEOGRAPHICAL SITUATION, POPULATION, AND DISTRICTS.

The limits of the Government-General of Turkestan were not everywhere defined, even at the beginning of the year 1873.* Even in the latest maps of the Russian chief staff the precise frontiers on the side of the Sea of Aral and those of the territory of Khiva are not given. The colours of the Russian frontier-lines are traced on the other side as far as Bokhara, round the entire desert of Kizil-Kum, which belonged to the robber bands owing allegiance and akin to the Khivans, and which had never been trodden by the Russian troops. It has hitherto been also impossible to find a proper frontier on the south in a desert which is utterly destitute of any kind of natural halting-point or limit, and is inhabited by nomad and marauding tribes. For general purposes the Sea of Aral may be taken as the western boundary. The frontiers of the Turkestan and Orenburg provinces meet at the Bay of Perovsk. The frontier-line runs from there northward as far as the border station of Djulyus, which we have already mentioned, on the great Orenburg and Kasalinsk

* See Ukase of the 11th (23rd) July, 1867, Chap. II, p. 61.

road, and proceeding thence in a south-easterly direction through the desert of Kara-Kum, reaches the *oblast* of Akmolinsk at Lake Saumal. From this point the northern boundary follows the course of the Chu, and diverges at the Balkash Lake to the north-west; it strikes through the very middle of this salt inland sea, and runs north almost as far as Sergiopol, in the West Siberian district of Semipalatinsk. China forms the eastern boundary of the Government-General, especially for the district of Semirietchensk. The frontier runs partly along the Ala-Tau mountain chain; it touches, after crossing the River Ili, the newly acquired district of Kuldja; and at last, after following the principal range of the Tian-Shan or "Heaven Mountains," it reaches the Khanate of Khokand at the sources of the Syr or Naryn. Khokand and the chain of the Kendyr-Tau form the southern boundary. Not far from Khojend the frontier again runs southward, crosses the Syr-Darya about 30 versts to the east of Khojend, and, further south, the Zerafshan valley, and finally separates the lately conquered district of Samarkand from the sovereign Khanate of Bokhara. The Aksai and Kamanbaran-Tau form a part of the natural southern frontier of the Zerafshan district as far as Bokhara. The Russian possessions follow the River Zerafshan as far as the city of Katta-Kurgan. To the west, with the desert of Kizil-Kum, the Nuratanyn-Kara-Tau and its spurs, which extend in a long line of hills as far as the Bukan mountains, form the extreme southern boundary of the province of Turkestan, on the side of Bokhara; at least, the colouring on the maps for 1873 of the Russian chief staff only covers this chain as far as the Bukan-Tau, and does not include the country as far as the Sea of Aral, which bounds the territory of Khiva.*

The district thus inclosed, which, exclusive of the newly conquered district of the Amu-Darya, according to the latest calculations of Strelbizki, covers an area of 16,037 German square miles, belongs half to the Iranian or Aral-Caspian lowland, half to the Iranian plateau. The importance of rivers and of

* See enlargement of the frontiers after 1873, as given in the notes belonging to the table of Turkestan, on pp. 255, 256.

water is in no country so great as in Central Asia. Civilisation, settlements, the whole life of peoples and of states, follow in their courses, and are closely connected with and sharply defined by them. Water is the primary condition for the whole existence of those populations. Where this is wanting, we have uncultivated, barren, and uninhabited deserts. An examination of the river system will not therefore be out of place, especially as the administrative division of the province of Turkestan depends to a large extent upon it.

The principal stream of the district is the Syr-Darya, which flows through the district of that name. The Rivers Chu and Ili, together with the inland lakes Balkash and Issik, are the special features of the district of Semirietch, and the Zerafshan, a tributary of the Amu-Darya, distinguishes the lately conquered district of Samarkand.

THE SYR-DARYA,* the Jaxartes of the ancients and the Souhun of the Arabs, rises on the south-eastern frontier of Russian Turkestan, amid the high plateaus and ranges of the Tian-Shan. The Naryn, the source of which lies to the south of the Issik-Kul,† and also upon Russian territory, is its most important northern tributary. The principal stream flows west, right along to the Khanate of Khokand, the irrigation and great fertility of which are entirely owing to the number of its tributaries. The main stream runs, almost to its mouth, in a deep channel, and the irrigation of the banks is consequently a matter of difficulty, so that all the cultivation, settlements, and towns are to be found at several versts' distance from the bank, on the small tributaries, the rapid rise and fall of which, owing to the constant influx of fresh water, are beneficial for irrigating purposes. The river, although promoting, with its network of tributaries, the cultivation and subsistence of the whole province of Turkestan, is barren, destitute of vegetation, and neglected along its banks. It presents this character throughout almost

* The terms "*darya*" (river), "*tau*" (mountain), and "*kul*" (lake) are generally added in our language, although this seems to be unnecessary.

† The name of the lake is "Issik," whilst "*kul*," as stated above, means "lake."

the whole of its course westward. The upper portion of the river is still little known. The place where it takes its rise has only very lately been discovered in the extensive travels of the indefatigable Baron Kaulbar. After leaving the territory of Khokand below Khojend, the Syr runs northward almost up to the city of Turkestan, and then flows with rapid and continuous windings to the Sea of Aral in a regular north-westerly direction. From Khojend it runs in only one broad and deep channel, with low banks, which it overflows far and wide when the water is high, as far as Fort Perovsk, without receiving a single tributary on its left bank. The few small streams, which, it is true, run northwards in spring from the Nuratany-Kara-Tau and Maigusar-Tau, soon lose themselves in the sand, and, after a short course, are quite dried up in the hot season. The banks of the Syr, as it nears the mouth, become more and more bare and barren; sandy wastes extend on its left bank as far as the desert of Kizil-Kum. In these sandy regions the river overflows the low banks and the surrounding country for an immense distance, often forming impenetrable reedy marshes and impassable swamps, which exhale pernicious miasmas, and reach for hundreds of versts out into the plain. It is only rarely that one sees in these barren districts little low sand-hills, which are overgrown with bushes of tamarisk, *saksaul*, and a sort of thistle. When the water subsides, luxuriant plains of grass spring up, which are used by the Kirghiz as pasture grounds during the winter months. Countless islands, some as much as three versts in length, and covered with dense jungle, divide the main stream; its width varies from 150 to 400 feet, with a depth of three to six feet; its average speed is from four to six versts per hour; its maximum speed seven versts. It is thick, and of a deep reddish colour, from the quantity of mud and sand which it brings down with it, particularly when the water is high. But the river water, when not running, soon becomes clear, and is then of a very pleasant and sweet taste, very wholesome, and well adapted to purposes of irrigation. From Chinaz the Syr is navigable, and small steamers ply on it without any particular impediments.

On the right bank the Syr receives numerous and important tributaries. The greater part of these flow into it from the Kendyr-Tau, which extends to the east of Tashkend, and the remainder from the Kara-Tau. Their character is the same as that of all those small streams of Central Asia, which, when the snow melts in the mountains, are almost impassable torrents, but in the hot season are often completely dry, or so low that they rarely reach the main stream, generally either losing themselves in the sand, or evaporating in the thousands of small canals which irrigate the fields and gardens of the towns and settlements. Out of the extensive river system which exists in the Tashkend district, and which mainly contributes to its great fertility, the Chirchik is the only stream which in all seasons reaches the Syr, just as the Arys is the only one of those flowing from the Kara-Tau. None of the others reach the main stream, being all dry or nearly so. Thus, for example, the Angiran and the Keles, two considerable streams in Tashkend, have scarcely any water in the hot season. They can then be crossed everywhere, but when the water is high, after a sudden storm, they become extremely dangerous torrents, and are often not passable for days together.

Beyond Fort Julek the tributaries entirely cease. The quantity of water decreases instead of increasing, as is the case with most of the interior waters of Central Asia. The curious delta formation now begins, the branching-out of numerous arms, some of which seek an outlet of their own, while others rejoin further on the main stream, and are in general subject to many unusual changes, which take place particularly in the region of the Amu-Darya, and even to this day present to the learned problems most difficult of solution. There are numerous traces of old canals which have branched off from the main stream, a sign that numerous settlements and cultivated spots once existed on its banks. Now that the canals are dry and partially destroyed, their banks are barren deserts of sand. They had formerly played the same part, though on a smaller scale, as the Amu-Darya in the Khanate of Khiva, cultivation there being entirely indebted for its existence to the delta of

this river and the canals leading from the main stream. Owing to the destruction or closing of the canals—the Russians have, as we have already observed, even filled up a great portion of the irrigating canals to increase the quantity of water in the river itself—all vegetation and cultivation have ceased on the lower part of the Syr.

A large arm of the Syr, the Yani-Darya or "New River," branches off about 11 versts beyond Fort Perovsk on the left bank, and runs partly through marly and salt steppes, partly through swamps and sandy wastes in a south-westerly direction to Irki-Bay, flowing thence, according to the state of its waters, either to the Sea of Aral, or, as is constantly the case in dry seasons, losing itself in the Kōkdche-Tengiz Lake, and, even more frequently, in the sandy deserts before reaching Irki-Bay. During the greater part of the hot season it seems to be quite dry, like the other old irrigating canals which the troops of the expedition discovered everywhere on its upper course in the year 1873. During floods, and when the Syr is exceptionally high, the Yani-Darya must be quite 350 versts in length, and the current then becomes so strong as to require reed ferries for crossing.*

About 20 versts further down on the left bank, the Syr sends off a second and smaller branch, the Kuvan-Darya, which flows towards the Sea of Aral in a due westerly direction, but does not reach it after all, as it loses itself in swamps and dry sandy wastes. Even this arm is generally dry in summer, but its bed contains numerous wells and pools of fresh water, and in the upper part even cultivation and settlements are found. Between these two chief branches there are still several small tributaries, the existence of which is very changeable and of no importance at all, and which are always quite dry in summer. The Djaman-Darya, or "Bad River," the main stream of the Syr to the north, flows from Perovsk to Fort Karmakchi (No. 2), making in its course numberless narrow bends and windings, and sending off

* This statement of Wenjukow probably refers to a former time. Now both arms of the river are for the greater part dry, and have only a little water at their sources.

again to the right several tributaries which partially reunite before Fort No. 2, and rejoin the main stream not far from that fortress. The chief of these northern tributaries is the Kara-Uziak, which forms the dreaded swamps, thickly overgrown with reeds and rushes, of which mention has already been made* as lying between Fort No. 2 and Perovsk, to the north of the Tashkend road. Through the numerous branches, the main stream loses an immense quantity of water between the two forts just named, so that the river here is narrow, and often scarcely more than from three to four feet deep. In consequence, therefore, of the narrowness and tortuousness of the channel, navigation is here very difficult, and only diminutive flat-bottomed steamboats, drawing from two to three feet of water and easily managed, are able to ply on the stream. Below Fort No. 2 the Syr, although still somewhat narrow, again becomes a good navigable river until close to its mouth in the Sea of Aral, where extensive sandbanks run out into the sea, and the channel is often scarcely three feet in depth. The river flows in three branches into the great inland sea. It is only the middle one, a sluggish stream from three to four feet deep, which runs into the Sea of Aral, between green and flowery fields, that is of any importance. The two other branches are deficient in water, and are not suited for navigation, being nearly everywhere easy to cross. Although, owing partly to its trifling depth and partly to the innumerable bends and alterations in the soft banks, as well as in the muddy channel, it is not particularly adapted to navigation, the Syr is navigable, for about three-quarters of the year, by the Russian vessels from Chinaz right down to its mouth. From the 20th of November to the 20th of March, as a rule, the river freezes and the ice bears; there are no special crossings anywhere. Communication between the two banks is kept up by ferries at Chinaz, Julek, Perovsk, Karmakchi, and Kasalinsk, and in many other places by small canoes and ropes, but often in the upper course punts, called "*salas*," are used, which are usually dragged across by Kirghiz horses, which swim the stream.

* Page 240.

In earlier times there flowed south of the Syr-Darya the Little Kizil or Yani - Darya, which ran from the Zerafshan mountains right through the desert of Kizil-Kum. Traces of this river, which has long been entirely dried up, are still found in the desert. The Syr-Darya and its various tributaries are the only streams in this district between the furthest Russian borders on the east and the Sea of Aral.

THE SEA OF ARAL was very little known before the foundation of the Russian shipping in the year 1847.* First, from the adventurous voyages and important discoveries of Admiral Butakoff, more complete information respecting the inland sea and its shores, particularly the north and west coasts, was obtained. Although Butakoff was driven by a lucky chance into an arm of the delta of the Amu, the south and east coasts, and especially the mouth of the Amu-Darya, which is all-important for shipping, remained so little known that, in the plan of operations for 1873, the Sea of Aral was scarcely taken into account as a favourable line of communication and basis of operations. Some ships were, it is true, despatched from the mouth of the Syr to the delta of the Amu, but so little was expected to come of this measure, that but little attention was paid to their fitting out and equipment. The small flotilla had rather the character of a reconnaissance, or exploring expedition, than that of a tactical support given to the advancing columns. It was generally considered very doubtful whether the ships would be able to reach their destination, and every one was therefore the more astonished to find them later on at anchor in the Ulkun-Darya. The events of the campaign of 1873 proved that the Sea of Aral is navigable everywhere in the south, and that the delta of the Amu even contains several channels large enough for ships of considerable size.

The area of the Sea of Aral, according to the latest Russian statistics, is 1,216.74 German square miles, exclusive of that of its islands, which amounts to 22 German square miles.† Its

* See "Historical Sketch," Chap. II, p. 46.

† The figures given by Suvorin here again do not agree with those of Strel-bizki. According to Suvorin the area of the Sea of Aral is equal to 1,267.38 German square miles (p. 185).

greatest length from north to south is 57 German miles, its greatest breadth from 35 to 40 German miles. It is only on the western coast of the sea that the banks are well defined. Here the precipitous Chink, the western slope of the Ust-Urt plateau, comes down to the sea, or is only separated from it by a narrow belt of sand. Only in a few spots, where the Chink forms broad terraces, is communication between the heights of the plateau and the bank possible. Low hills are to be met with in a few localities along the northern shore. The northern islands also contain very little high land, while the remaining portion of the south and west waste is flat and sandy. The water is shallow for a great distance from the shore. The banks are not at all defined, and the sea, often only a few inches in depth, here spreads over the flat level wastes of sand, the extent of its inroads depending on the state of the water and the direction of the wind. The surface of the water seems to the eye to be on the same level as the barren and desert steppe by which it is surrounded, and which appears as if it had itself been under the sea not so very long ago. In these regions the depth, even far out into the sea, is scarcely to be measured by feet, but usually by inches. It is only on the western side that the sea is of any considerable depth. Here, in some places, there is a depth of 250 feet of water. The depth in the middle is quite 100 feet. The statistics of the soundings, taken at different times, do not generally agree, a fact which is usually to be accounted for by the circumstance that the level of the sea is subject to continual fluctuations.

This gradual filling or drying up of this inland sea, which is shown by several unmistakeable signs,* seems to be due to the

* The Sea of Aral has ever been a problem for science. No doubt it has once been much larger, and, in prehistoric times it was probably connected with the Caspian Sea, and both seas perhaps with the Black Sea. The Orenburg and Cis-Caucasian steppes, as well as the formation of soil in all the steppes of the Aral-Caspian lowlands, look like sea ground. It is further evident that the Caspian Sea and the Sea of Aral are continually diminishing in water on all their coasts. Former islands of the Sea of Aral now form part of the shore; but no one has hitherto been able to give a satisfactory explanation as to the enormous difference in the depths of the two seas. Regarding the depths we have little authentic data,

evaporation being usually more considerable than the increase of water from the Syr and Amu Darya and atmospheric influences. The signs of filling up with sand are particularly noticeable on the south and east sides, where broad sand-banks run out into the sea, and where objects which have formerly been observed by travellers on the shore, are now high and dry on the land. The eastern shores can be waded over for many versts, and with a strong east or south wind, which drives the water far out to sea, they can be crossed dry-shod. The shore can only be reached here with the small flat canoes of the natives. The Sea of Aral has no ebb and flow, and its water, in spite of the decline of its level, is less salt than that of the ocean. If the natives are to be believed, animals, especially horses and camels, will drink the sea water.*

From the peculiarities of the shores, and the depth of the water to which we have just referred, it may easily be seen that the Sea of Aral is, as a rule, not particularly adapted for purposes of navigation. In summer, when the weather is calm, beautiful and lovely are the deep blue waters of the Sea of Aral, so called by the natives on account of its superb colour, and softly and quietly do the unruffled waters, clear as crystal, ripple on the sandy shores; but in autumn and spring, when hurricanes blow from the north and north-east, fearful storms and boisterous weather disturb the surface of the little basin. These storms make this small inland sea to the mariner one of the most perilous waters in the world. The equinoctial storms are particularly dreaded; they begin with the most terrific violence towards the end of September, and, blowing over the cold bare steppes of the north, sweep over the surface of the sea with inconceivable fury. Like the Syr-Darya, the northern part of the sea freezes in the winter months, during which season

and the statements given as results by many expeditions differ, and appear doubtful. New soundings will certainly do much for the solving of the problem of depths and also of levels. Slight differences will, however, always be found when new soundings take place, as part of the waters evaporate from year to year.

* Many persons doubt this, but it might only refer to the beasts of the Kirghiz, and certainly only to the sea water in the neighbourhood of the mouth of a river where the fresh water extends for many versts into the sea.

navigation is of course altogether stopped. In the north, it is chiefly the small fishing-boats of the natives and even of Russian fishermen, and in the south, the canoes (*kajik*) of the Karakalpaks, which are seen upon the sea. But the fishermen are usually only accustomed to spread their small sails near the coasts; they never venture out on the open sea. The vessels of Perovski were the first to traverse the whole extent of this virgin inland sea. Vessels making voyages for trade or transport purposes are naturally quite out of the question. The trouble of bringing ship material down from the far north being too great, the Russian flotilla has since its formation increased but little. It has, up to the present time, been of little use, except to protect the Russian fishermen. The barren and desert banks in the north and west totally isolate the sea on every side, and render all communication with Russia or the Caspian Sea practically impossible. But this state of things will be entirely changed as soon as navigation is opened up on the Amu-Darya. The Sea of Aral has only a few spots suitable for harbours. The estuaries of two rivers are not particularly favourable, as we have already seen. On the north coast is the Tchubar-Toraus in the Bay of Perovski, and on the south coast the Bay of Tushthelius, the only place fitted for a good harbour, and the only one where drinking water is always to be found.

The islands of the Sea of Aral are wild and barren, like the continent which surrounds it, and render navigation much more dangerous owing to the neighbouring sand-banks, without being of the slightest use, in the matter of safe anchorage, during the sudden and hurricane-like storms which burst upon them. The most important of these islands are: Kos-Aral at the mouth of the Syr (inhabited by a few Kirghiz), Yermoloff, and Nicolai, which are of considerable importance on account of their fisheries. In spite of the central position of the Sea of Aral in the midst of the Russian territory, and its communication with the Syr, which is navigable for a great distance, it has hitherto been but little thought of for military purposes, for trade, or colonisation. In addition to the various obstacles to navigation cited in the preceding pages, to the want of harbours, to the difficulty of

access to the mouths of the rivers, to the particular build and cost of shipping, to the dangers brought about by hurricanes, and to the scarcity of water and the numerous sand-banks, the utter sterility of its shores seems to render all permanent settlements and civilisation quite impossible.

The broad districts of the Syr-Darya province extend from the Sea of Aral, on both sides of the Syr-Darya, as far as and beyond the mountains of the Turanian or Turkestan highland. The plain of the Syr, which belongs to the Aral-Caspian basin, stretches in a northerly direction to the River Chu, right into the broad Siberian plain. The Kara-Tau range, which runs from east to west parallel to the Syr, and is a prolonged spur of the high mountains of Turkestan, divides the eastern part of the district from the Siberian steppe, and to a certain extent preserves it from the waste-like character of those barren salt plains. The nature of this plain is threefold. The largest part of it is of the real desert type. The districts to the south of the Syr-Darya are almost exclusively of this character; they are known and dreaded as the deserts of Kizil-Kum. The plains on the north of the Lower Syr and the Kara chain have also almost universally the same features. In the extreme west, the arid and sandy desert of Kara-Kum, of which mention has already been made, extends from the Sea of Aral eastwards far into the steppe, the easternmost side of which, bordering on the Semirietchensk district to the south of the Balkash Sea, is occupied by the extensive desert of Myin-Kum and Ak-Kum. Only the banks of the Syr-Darya and parts of this steppe are covered, like oases, with strips of land, which are sought out during certain months by the herds of the nomads as luxuriant meadows and pastures. In the summer and autumn the whole vegetation is dried up and burnt. The very same steppe which, in spring, formed a beautiful green carpet covered with the most fragrant and the loveliest flowers, now remains for months a yellow, arid, and dusty desert, until a fertilising rain brings back like magic that charming natural carpet. These fertile spots are often only a few feet in breadth on the left bank of the Syr, so that the desert of Kizil-Kum approaches very close

to the river. In the south the desert of Kizil-Kum extends as far as the Nuratany-Kara-Tau and its spurs to the Bukan mountains, but only leaves a small margin capable of cultivation close to the slopes, which are scantily watered by the little mountain brooks (amongst which is the River Kly, about 10 feet in breadth, often mentioned in the campaign of 1873), and then goes, under the name of the Hungry Steppe, far into the region of the Uratiube between the Middle Syr and Zerafshan. The Hungry Steppe, which is for the most part a plain, but is hilly on its edges, has not, it is true, the barren character of the waste districts already described. The ground, which is hard, clayey, and loamy, is in spring overgrown in places with steppe plants. Traces of earlier civilisation and irrigation are still to be found, particularly in the neighbourhood of the Syr, as also in that of the Yani-Darya, but the wells are rare, and their water is for the most part salt and bitter. The few Russian post stations between Chinaz and Jizak are the only permanent settlements here.*

The really fertile and rich land, which has long been praised as the paradise-like Turkestan, and as one of the most productive regions in the world, is limited to the small districts on the right bank of the Syr-Darya, which extend to the southern slopes of the Kara-Tau or to the western slopes of the Turkestan chain, the Boroldai and Kendyr Tau, and to the plains which are intersected and watered by the tributaries of the principal stream. The districts of the Itchik and Aryss (the towns of which are Turkestan and Chemkent), of the Angiran and Chirchik (Tashkend), and of the Akan (Uratiube), which flows from the left, are the most considerable and the most fertile in the province of Syr-Darya. These cultivated and inhabited regions never form, however, a connected whole. A mixture of steppe and desert extends between the fields of the agriculturist, so that the really fertile land only lies close upon the rivers and

* The traces of former irrigations and culture have given the Russian Government the idea of bringing water back by canals into the Hungry Steppe, thus introducing fertility and colonisation once more into the country. This plan has already been partially carried out.

canals, where irrigation is possible and only lasts as long as the artificial system of irrigation is kept in good condition. The slopes of the mountain chains are thickly overgrown with wood and fruit trees, and the ground is everywhere fertile. Further eastward in the mountain range, vegetation is again confined to the banks of a few small streams.

As regards the mountainous part of Turkestan, which is situated in the eastern portion of the district, it is formed by the branches of the Tian-Shan or Heaven Mountains, which extend regularly from east to west, and which, according to Wenjukow, form eight principal chains, all of which have a sharply defined profile, and are divided either by narrow valleys, meandering streams, or by broad lowlands. Among these is the Kara-Tau, the extreme western summit of which is named, after the Sea of Aral, Kara-Murun. Its highest peaks, without reaching the snow-line, are quite 7,000 feet high. A flat piece of ground, in the neighbourhood of which rises the little river Ters, separates the eastern side of the mountain from the Urtak-Tau ridge, which lies to the south, and is also called Aksai-Tau, being joined a little further to the west by the mountain range of Boroldai, which rises to a height of 3,500 German feet, and divides the two small rivers Aryss and Boroldai. The Urtak-Tau range reaches the snow-line; its highest peak is 14,800 feet high. It forms the largest but least known mountain chain to the north of the Syr-Darya, and is the watershed between Chirchik and Talas. The principal path over the range is the Karaburyn pass, at an elevation of more than 1,000 feet.* To the westward the mountain chain gets gradually lower, until it reaches the plain of the Aryss. To the north of the Urtak-Tau, and almost parallel to its main course, the fine snow-capped chain of the Kirghiz Ala-Tau stretches eastward; it is 360 versts in length, and is generally called the Alexander Mountains, extending as far as the Semirietchensk territory, and contributing a number of tributaries to the Chu and Talas. The summits of this chain are from 12,000 to 14,000 feet high. The remaining mountains of the Syr-Darya district

* Wenjukow.

are, as far at least as their height is concerned, of slight importance, and are topographically but little known. The most easterly of all these chains, which run in parallel lines in a south-westerly direction from the Urtak, is the Tchatkal range, which separates the Naryn and the Syr-Darya from the Chirchik, terminating to the west in the Tashkend plain in several spurs, which are known by the names of Kurama, Mongol, and Kendyr Tau, and which border those regions of the Syr-Darya province that have already been noticed.

Between the principal chain of the Tian-Shan and the Balkash, and divided from the Syr-Darya district by the Kurogat, a little tributary of the Chu, the district of Semirietchensk extends in a north-easterly direction. It is not, however, as regards its Central Asiatic situation, of great strategical importance. The northern part belongs to the great Siberian plain; the whole southern portion is mountain country, the south-east boundary of which forms the mighty mountain chain of the Tian-Shan, with its snow-covered peaks rising from 18,000 to 20,000 feet. To the north of this range the Semirietchensk district is intersected by other but lower chains, which descend sometimes abruptly, sometimes gradually, to the lowlands of the steppe, with a mountainous foreland. Beginning at the west, one first of all meets, beyond the Ili, the double chain of the Ala-Tau, on the north side of which lies Vernoó, the capital of the district, and in the midst of which the three-peaked, snow-covered giant Tolgarnin-Tal-Tcheku rises to the height of Mont Blanc (15,000 feet). All the passes from which it would be possible to command the chain of the Ala-Tau from Vernoó are situated from 8,000 to 10,000 feet above the level of the sea, and would thus be scarcely available for large masses of troops. The Chu and Ili receive numerous tributaries from this chain. To the south of it lies the Lake of Issik-Kul, which is surrounded by mountains, and is more than 4,000 feet above the level of the sea. Its banks are bordered by settlements, forming a veritable oasis in the midst of the highlands. The margin of the lake is fertile and cultivated. At some distance from the lake, the plain by which it is surrounded resumes the

bare character of the steppe. The lake itself is fed by the countless rivulets and brooks which flow down from the mountains that project very near its banks, but its overflow into the Chu is very slight. The greater portion of the surplus water which runs into it, and which is only slightly brackish, and drinkable when nothing better is to be procured, evaporates in the hot season. The district south of the lake, as far as the River Naryn and the borders of Turkestan, is intersected by several mountain chains of the Tian-Shan, of an average height of from 12,000 to 12,500 feet (up to 16,000 feet). These contain the sources of the Chu and the Naryn. The prevailing features of these highlands are lofty plateaus 5,000 to 10,000 feet in height.* In spite of their immense elevation, which is far above the snow-line, there is but a small accumulation of snow and glacier, on account of the very great dryness of the air, which, however, enables the flora of the northern steppe to grow close up the mountain range.† Up to the height of 7,000 feet the vegetation consists almost exclusively of the steppe plants belonging to the Aral-Caspian flora. Only the northern slopes are covered with a belt of wood, above which, on the high plateaus and peaks, nothing but the poorest Alpine vegetation is to be found.

Proceeding further from the Issik-Kul in a north-easterly direction, the traveller reaches the Tarbagatai range, which belongs to the Altai system, and the so-called Semirietchensk Ala-Tau, the height of whose ridge is 6,000 feet, while its summit reaches the snow-line. The last-named range is the watershed of the so-called "Land of the Seven Streams" (Semirietchensk), which comprises the most inhabited and important part of the lowlands of the province. This district, which stretches in a south-easterly direction from the large salt lake of Balkash (600 to 700 feet above the level of the sea), is intersected by numerous streams which flow to the lake. The chief of these is the River Ili, which is navigable and flows down from

* Expedition by W. A. Poltaratzki and Baron von Osten-Sacken (Hellwald : "The Russians in Central Asia"), 1867.

† Wenzukow.

the Kuldja district; but the territory has much of the character of the desert and the steppe, a feature which increases as the borders of the lake are approached. The brooks here usually degenerate into extensive swamps, which exhale dangerous miasmas and render the climate extremely unhealthy. The Chu is the chief boundary of this district on the west, but it soon leaves it, and before terminating in the Saumal-Kul, forms the boundary between the Syr-Darya and Akmolinsk districts. The fertile region of the province, in which also the most considerable towns, such as Vernoé, Kopal, and Sergiopol, are situated, is in the eastern portion of the Semirietchensk plain, which lies higher up. The whole plain is the territory of the great Kirghiz horde, even now mostly nomads, who inhabit this district in company with the Russian Cossacks and settlers.

In conclusion, the pearl of the Russian possessions in Turkestan is the valley of the Zerafshan, which belongs to the water system of the Amu-Darya. It contains the newly acquired district of Samarkand, and formerly belonged to the Khanate of Bokhara. Only the upper stream, comprising the greater part of the river, belongs to Russia. The lower stream, with its numerous canals and branches, runs through the fertile valley of Miankale, and, further south, through the country of Bokhara. The Zerafshan, which is 87 miles in length (the word signifies "gold-giver"), rises, as the Abramoff expedition states, in a glacier, about $7\frac{1}{2}$ German miles long, somewhere in the meridian of Khokand and in the snow-line of the Fan-Tau range. The river flows in an equatorial direction as far as the city of Pianjakent, in the narrow valley formed by the two parallel ridges of the Asmut and Fan-Tau. To the west of the town it enters a broad valley, which, beyond Samarkand, the ancient residence of Tamerlane, widens out into an extensive plain. A few versts to the west of Katta-Kurgan, the river enters the Khanate of Bokhara. Already before reaching Samarkand it divides into the two arms of the Ak and Kara Darya, which, with their numerous branches and irrigating canals, make the Samarkand district the most fertile and

flourishing in the whole of Russian Turkestan; and the Russians justly call it a paradise. Owing to the complete water system and the countless canals of Bokhara, the fertility of which is completely dependent on the Zerafshan, so much water is taken from the lower portion of the river, that it rarely reaches the Amu-Darya, and then only as a small stream, which usually terminates in the little lake of Kara-Kul (Tergis).* The height of the range which separates the Zerafshan and the Syr-Darya is, in the eastern part, from 15,000 to 16,000 feet, while that of one of the principal passes, the Amschy Pass, is estimated at 11,200 feet. The junction of this range on the north with the Syr-Darya district, across the Hungry Steppe, forms the Tamerlane Gate, which has already been described. The road from Tashkend to Samarkand is quite practicable for waggons as well as for troops.

We have now reviewed in short stages the geographical position of the Government-General of Turkestan, dividing it into sections, which are naturally formed by the system of its rivers. The administrative distribution of the Government-General has in like manner, as a rule, been based upon these sections, in the division of which Nature has had so large a share. It has undergone numerous changes of late years, and seems even likely at the present moment to be subjected to fresh alterations. According to the latest details, which we find in Strelbizki's tables for 1874, the distribution is as follows :—

* According to the newest maps the River Zerafshan is not a tributary of the Oxus, but an inland river. This seems, however, to be very doubtful.

GOVERNMENT-GENERAL OF TURKESTAN.

GOVERNOR-GENERAL: ADJUTANT-GENERAL VON KAUFFMANN I.

Districts (<i>okrug</i>).	Circles (<i>ujezd</i>).	Inhabitants of the chief towns named after the districts without garrisons.	Area* Geographical sq. Miles.	Nomad Population.	Settled Population.
1. Syr-Darya district. Capital: Tashkend. Governor: M. General Golovitschev.	1. Tashkend 2. Aulie-Ata 3. Kasalinsk 4. Perovsk 5. Turkistan 6. Chirchikent	78,165 1,000 9,950 3,400 8,490 8,000	816-98 1,247-93 1,156-97 1,998-71 1,467-72 1,123-00	Kazaks and Kirghiz,† Small, Middle, and Great Hordes. Kirghiz with 5 individuals. 13,600 K. = 120,000 24,000 K. = 120,000 12,000 60,000 20,000 100,000 31,000 155,000 100,600 K. = 503,000	Sarts, Tadzhiks, Uzbeks, Russians, &c. (Town) ... 78,100 (Kurama) ... 169,000 ... 1,400 ... 3,400 (Klojend) ... 66,500 ... 35,000 Sarta. Russians, &c. Uzbeks, Sarta, Tads. Russians and Kazaks. Ditto. Uzbeks, Tads, Russ. Sarta. 363,400 In towns ... 14,000 Cosack <i>stanitzas</i> 14,000 New settlements 1,700 39,700 Circle Jizak. (Individuals of both sexes and nomad population).
2. Semirietchenak ... Capital: Vernoe (ex- cluding Ili district, with capital Kuldja; = about 1,398 Ger- man square miles). Governor: Lieut.-Gen. Kolpakovski.	1. Kopal 2. Vernoe 3. Isik-Kul 4. Sergopol 5. Tokmak	6,426 12,637 ... 1,340 1,398	1,977-70 1,378-03 782-30 1,456-10 1,730-32	108,000 K. = 540,000 Calm., Turc, and Uzbeks = 21,500 208,600 = 1,064,500 Together = 1,505,600 settled and nomad population.	Russians, Kazaks. Sarta. Russians. Circle Jizak. (Individuals of both sexes and nomad population).

* Between the figures on the area (inclusive of inland seas) by Strelbiski and those given by Lerch, there are again slight differences.

† These Kirghiz (the so-called Kara-Kirghiz) must be distinguished from the Kirghiz-Kazaks.

‡ According to Strelbiski, Tashkend is a *district*-circle; according to Terentief, there is a *town*-circle of Tashkend, and a *district*-circle of Kumara.

Districts (<i>okrug</i>).	Circles (<i>ujdu</i>).	Inhabitants of the chief towns named after the districts without Garrisons.	Area,* Geographical sq. Miles.	Nomad Population.	Settled Population.
3. Zerafshan district Capital: Samarkand. Chief: Major-General Abramoff.	1. <i>Samarzand</i> ... 2. <i>Jizak</i> ... 3. <i>Katta - Kur-gon</i> ... 4. <i>Planjakent</i> ...	30,000 8,845	98-74 477-59 90-68 924-95	Kaisak and Kirghiz,† Small, Middle, and Great Hordes. Brought forward 1,605,600 settled and nomad population. 163,000 (excluding circle of Jizak). (For 1870 = 271,000 individuals of both sexes).	Sarts, Tadzhiks, Uzbeks, Russians, &c.
Exclusive { Ku'dja district = 1,593-53 German sq. miles } { Amu-Darya District = 1,890-29 " " } Total of the Government- } 16,087-31 Ger. sq. miles, with 1,668,600 individuals of both sexes. General of Turkistan ‡ ... }					

* Between the figures on the area (inclusive of inland seas) by Strelbiski and those given by Lerch, there are a gain slight differences.

† These Kirghiz (the so-called Kara-Kirghiz) must be distinguished from the Kirghiz-Kaukaze.

‡ Strelbiski considers the Amu-Darya district (*Okrug*), acquired in 1873, as a special district of Turkistan. The principal inhabited spots of this district are the Forts of Nukuss and Petro-Alexandrovsk. Near the latter already a small town has sprung up, in which officers, married soldiers, and tradesmen live.

It will be seen from this table that in the statistics of population given by Lerch, the old distribution of circles is still in vogue, according to which the circles of Kurama and Khojend were parts of the Syr-Darya district, and the circle of Jizak was included as well. The distribution which Strelbizki takes for his calculations of area appears, as it is the latest, to be authentic. I have intentionally omitted the newly acquired districts of Kuldja and Amu-Darya, in the foregoing table. The Ili district is not included in the tables of Strelbizki, and, moreover, the fact of its remaining in the administrative circles of the Government-General of Turkestan appears doubtful. As to the organization of the Amu-Darya district, this was only the result of the Khivan campaign, which I am now about to describe. If we add together the area of both districts, we shall find the total area of all the countries under Turkestan dominion at the present time, 1874-75, to be $3,173.81 + 16,037.21 = 19,211.02$ geographical square miles, including the Ili district, or without it, $17,917.50$ geographical square miles.

At the beginning of the year 1873 the three districts of Syr-Darya, Semirietchensk, and Zerafshan, or Samarkand, were, as shown by the appended table, united into the general province of Turkestan, under the almost uncontrolled command of the Governor-General, Adjutant-General von Kauffmann I. The residence of the Governor-General, as well as the seat of the central administration, is the city of Tashkend, situated in the river system of the Chirchik. The administration is the most recent of all the Governments-General in Asiatic Russia, and is, in its present form, to be considered to a certain extent as only a provisional one, adapted to the political situation in which Russia finds herself placed for a while with regard to the sovereign States of Central Asia by which the Government-General is surrounded. The conquests and acquisitions of territory, which followed so closely on one another, the continual expeditions and small campaigns against the restless border tribes, the moulding of so many new and entirely foreign elements, and the difficulty of communication with European Russia, all combined, threw many obstacles and impediments in the way of a

completely organized system of administration. Turkestan, separated as it was from the mother-country almost more by the barren desert waste than it would have been by the ocean, still maintained on the one hand the character of a remote foreign colony, and on the other, the abnormal conditions produced by the troublesome character of the nomads, who could not be accustomed to a regular administration, being composed of the most diverse elements, and the multitude of small expeditions just mentioned kept the administration, as well as the military garrison by which it was almost exclusively conducted, in a continual state of activity. As in all newly occupied countries, the government here was necessarily of a purely military kind. However much the general principles of the Asiatic administration are followed, even in Turkestan, the purely uncontrolled character of an occupation is more clearly stamped, more sharply defined, than in the Caucasus. Posts in the government are almost entirely occupied by army men, so that there is scarcely any distinction between the civil and the military power. Everything is centred in the Governor-General, who receives a fixed sum to defray the expenses of the administration, and is so little controlled in its disposal that the appointments, and even the pay, of the few civil officials are left entirely to him. Distinctly marked spheres of government do not really exist, as the military chiefs of the troops who are quartered as garrisons in the towns of the circle govern the surrounding territory independently, as a general rule, as far as this is practicable. As has been stated, the civil and the military power are here connected more closely than in the Government-General already described, both being completely vested in one man, and being really identical.

The mission with which the Governor-General is intrusted with respect to the neighbouring Central Asian Khanates, and which an increased political activity demands in the name of diplomacy, lends a special and exceptional character to the position occupied by Adjutant-General von Kauffmann. Ambassadors from Bokhara and Khokand* are constantly accredited to

* The name of the ambassador from Khokand, a very clever and amiable Asiatic, who was brought up in the European style, is Mirsa-Chakim.

the Governor-General at the residency of Tashkend, and a diplomatic division is added to his staff. Numbers of political agents belonging to Central Asia pass in and out of Tashkend. The distance from St. Petersburg and the difficulty of certain and speedy communication were bound to confer on the position and the political status of the Governor-General, as regards the Asiatic sovereigns, a certain independence and privileged authority, which are denied to the other Governor-Generals of Russia. The Mahomedan customs, which lay particular stress on externals and ceremonial, and which demand a certain personal splendour on the part of the ruler, if he wishes to be respected and revered by the people and the neighbouring states, also render a certain pomp indispensable to the Governor-General. This therefore invests Adjutant-General von Kauffmann rather with the character of a direct representative of the Emperor than with that of a simple official. It is therefore not surprising that, in the common parlance of the Asiatics, the Governor-General receives no less a title than that of "*Jarin*," or "*Pol-Padishah*," which means Half-Sultan, or Vice-Emperor. In like manner, in the conquered and occupied districts of Khiva, he is greeted and honoured as the direct and immediate representative of the "White Majesty," a fact which substantially improves the position of the Governor with regard to the Asiatic population, accustomed as it is to the Oriental tyranny of absolute Khans and Emirs.

Difficult as it was for the clear-sighted Chief of the Government, who knew the country well, to colonise the newly acquired territory from the distant mother-country, all the Russian skill was besides equally needed to reconcile the inhabitants, who were accustomed neither to order and law, nor to an impartial, stable administration, and who were generally unsettled and nomadic, to the regular action of the authorities. Before the Russians came into possession the government had always been despotic. The fate of the individual depended on the uncontrolled whim and character of an Asiatic ruler, who had been corrupted by tyranny and cruelty, and by the harem life, which is so ruinous to the morals. Fearful punishments,

tortures contrived with the greatest refinement, mutilation, executions accompanied with the most horrible sufferings, the most fearful modes of death which can be imagined, awaited the unhappy subject who fell into disgrace with the Emir. Indeed, real guilt and disgrace were not always necessary for many of the cruel tyrants, corrupted as they were by their frequent excesses. For mere pleasure, for the gratification of senses weakened and satiated by every species of crime, the ill-fated victims, who were regarded by their ruler as below the level of his poorest charger, were mutilated before the greedy eyes of their despot, and tortured to death. In the least cruel cases the unlucky ones escaped with their lives and with sound limbs, but even then they were punished by dishonour of every kind, by sudden want and the loss of their possessions. The individual indeed could scarcely be styled a proprietor, as property was altogether at the disposal of the fickle tyrants, who only in the most rare cases thought it even worth the trouble to cloak their despotic will under the legitimate pretext of righteous punishment. To this tyranny might be added the intrigue and corruption of the higher officials, who stood at the side of the ruler as assistants and counsellors, and who had particularly to superintend the collection of the taxes and duties, in doing which they took every manner of trouble to imitate, in their own way, the behaviour of their lord. The people, so long groaning beneath the yoke of the oppressor, and completely ignorant of European civilisation, could certainly only regard the new conqueror as a new despot, and recognise in the new dominion merely a change in the old tyrannical persecution—for they knew no other form of government than that of tyranny. The measures of the Russian authorities were therefore at first received with nothing but mistrust, and it was only by degrees that they began to perceive the blessing and the great advantage which a well-regulated European administration had already brought with it, after the lapse of a few months. Trade and cultivation, freed from excessive imposts and restrictions, now began to revive. Taxation was properly settled, and a large number of duties were abolished, which had formerly filled the purses of the fraudulent

officials, and had ruined the prosperity of the agriculturist and the tradesman. Distrust soon began to disappear; the people learned to do justice to the exertions of the Russian administration, and to support it by their obedience. The Russian Government has to thank these circumstances and the administrative wisdom peculiar to the Slav, in regulating and forming with extraordinary discretion—one might almost say with self-denial—the position of the newly acquired subjects, for the fact that, in spite of all the difficulties which we have enumerated, it was after a few years established easily and comfortably, and was already, so to speak, quite at home in the new country. The system of military colonies, with their peculiar arrangements and administration, was admirably tested in this work of colonisation and Russification, since rapidly and without resistance it amalgamated in the Russian State the nomad Tartars, Calmucks, Kirghiz, &c., and accustomed them by regular taxation to recognise the supreme power of the Government. Even if the supreme authority still remains entirely in the hands of the military, new civil elements are annually introduced from the Russian official world, and these begin one after the other to fill up the separate branches of the military administration. Shortly after the first conquests—those of the year 1867—there passed through Orenburg alone 250 officials destined for the carrying on of the Turkestan Government. For the years 1874-75 extensive and separate bases of government have been planned. In the central administration there are to be especial divisions for the medical, engineering, building, forest and mountain departments, and particular police and circle magistrates are to be appointed to the subjugated districts and circles.*

One great difficulty the administration has hitherto had

* At the request of the Government, Adjutant-General von Kauffmann, had sent to St. Petersburg proposals for a reorganization of the Turkestan administration at the beginning of the year 1873. According to his project the administration was in general to assume a European form, which he held to be very advantageous, as it would bring the people of Turkestan into still closer amalgamation with the Russians, considering that there was no anti-Russian feeling to be found there (except with the fanatic priests). But in 1874 these proposals were rejected.

to contend with is that the greater part of the military, as well as of the civil officials, are ignorant of the language of the country. Although the profession of interpreter is a very numerous one in the countries of Central Asia—according to the custom prevalent there, no personage of fairly high rank, although thoroughly conversant with the language, will ever speak to a common man except through an interpreter, as to do so would compromise his dignity—it is no easy task for an official to adapt himself to, and correctly appreciate, the circumstances of a strange country without the necessary knowledge of the language. Nevertheless, the traveller in Turkestan is astonished to find, in a land which, as regards its inhabitants, customs, and external appearances, gives one everywhere the impression of Asiatic wildness and want of civilisation, the universal stamp of Russian power, administration, and dependence, which enables him to travel in his *telega* across the sandy steppes, amid the wild and for the most part cruel and predatory nomads, almost as quietly and safely as in the governments of European Russia.* That Turkestan, being under a purely military government, is naturally still far from being endowed with a perfect system of administration, in the European sense, and that many restrictions, irregularities, and acts of injustice are to be met with in this absolute military organization, can excite but little wonder. The population, which is so little accustomed to the civilisation of distant Europe, can moreover, scarcely be in a position to detect and feel privations and hardships therein, and the more so as it, and particularly the nomad portion, has been left, with great moderation, in almost entire possession of its traditional, national, and distinctive rights, its commercial administration, and the choice of its authorities, beys, &c.

Besides the military command, which culminates in the person of the Governor-General, Tashkend is the centre of the civil government. Although the most important posts of the central administration are occupied by the higher military

* It must, however, not be forgotten that the impressions which the author received, date from the period directly following the successful campaign against Khiva.

officers, who generally have attached to them well-qualified Prefects, chosen from the native races and honoured with military titles and distinctions, and very useful, owing to their knowledge of all matters relating to the country and the people, particularly from a statistical point of view, yet the principal branches of the government are, in addition, entrusted to a large staff of civilians, scientific men, &c., who are especially employed in compiling statistics, in acquiring geographical knowledge, &c. An official newspaper is published at Tashkend; the Imperial Geographical Society of St. Petersburg has a branch here, and clubs and casinos promote active social intercourse among the Russian soldiers, who, far from European civilisation, are toiling here, in the extreme East, for the honour of their country. Ample provision is made for schools, churches, &c.; even an orphanage and a Turkestan "Charitable Association" (founded in 1871) exist in the young but quickly growing capital. A large new church is being built, for which alone the sum of 20,000 roubles is set aside annually.

The Military Governors of the Syr-Darya and Semirietchensk districts are under the Governor-General's orders. Being superior officers, and usually Generals, they have their headquarters at Tashkend and Vernoé respectively.* The district of Zerafshan had even in 1873 no independent Governor, and was placed directly under the Governor-General. The heads of districts are under the Military Governors, and act as Prefects of the districts mentioned in the preceding table. They are Staff-officers of superior rank, and reside in their respective capitals, with younger officers attached to them as assistants. Particular officers preside over the courts established in the district capitals, for the settlement of suits and quarrels arising between the nomads and the natives, whenever they cannot settle them among themselves. In every district town there is thus an administrative staff on a small scale, like the head-quarter's staff in Tashkend, comprising a large native element, and entrusted with the control and statistics of the nomad races,

* See *Ukase* of the 11th (23rd) July, 1867, Chap. II, p. 61.

especially with the collection of the *kibitka* taxes. The prefect is the head of the independent government of the settled population. Under him, and immediately dependent on him, there come the elders, judges, or "beys" elected by the nomad tribes, especially those of the Kirghiz-Kaïssaks and Kara-Kirghiz. The independent administration of the Kirghiz is conducted on purely communal principles. From 100 to 200 *kibitkas*, or felt tents, which, however, are not necessarily very near one another, form an *aul* or nomad village, which is to a certain extent a commune, and is governed by a self-elected elder, after the fashion of our communal authorities. Several *auls* form a *volost* or circle, and these again choose their own magistrates or *beys*, who are directly under the prefect. The settled or agricultural population (Uzbeks, Tadjiks, &c.) chooses, in each commune or village, in much the same way, their so-called *aksakals* or "gray-beards," who look after the communal police and administration. The larger towns often elect several of these. The settled population have no higher chief, like the Kirghiz. They elect, however, in a similar manner, their own judges, who are called *kasi*. Trivial and civil cases are decided by these domestic judges. Criminal cases, on the other hand, are judged by Russian law. The assessment of the land, income, and trade taxes still remains among the settled population according to the ancient custom of the country. The agriculturist pays the *haradj* tax, or one-tenth of the whole crop, and besides this a special land-tax called *tanap*; the merchant pays the *zkat* tax, or two and a half per cent. on exports and imports. The nomad population in like manner pays, as in the Government-General of Orenburg (see page 69), a tax of from 2 roubles to 2 roubles 75 kopecks on each *kibitka*.

As regards the character of the COUNTRY, the TOWNS, and their INHABITANTS (see pp. 228, 229), Turkestan resembles all other parts of Central Asia, with the exception of the Semirietchensk district, which is entirely unlike the Central Asian type, and reminds one rather of the Orenburg Government, although belonging administratively to the Government-General of Turkestan. The following description of Russian Turkestan,

therefore, will, with few exceptions, also include the characteristics of the Khanates of Khokand, Bokhara, and Khiva.

When the Russians came into possession of Turkestan, they found there that aboriginally Asiatic mode of life which existed in Khiva in the year 1873. It may, therefore, be interesting here to consider how far Russian administration and colonisation were influential in changing, after a short period, the former condition of the country.

It has, as a rule, been the aim of the Russians to adapt themselves as much as possible to the Asiatic character, so that outwardly no great change has been perceptible in the appearance of the country. The inhabitants of the plains, the occupants of the towns, set about their business and their work just in the old style, following their former customs and habits. The towns and villages retain their old Asiatic aspect, as before, and are only partially modified in their appearance by a few buildings erected after European models, and by a few regular well-constructed lines of Russian modern fortification.

The character of the Central Asian cities is almost everywhere the same. High, broad, crenelated mud walls, usually surrounded by a much neglected dry ditch, and only entered through wooden gates protected by towers of mud, enclose a more or less extensive collection of small, low, box-like mud houses, with flat roofs, which are separated by a labyrinth of tortuous narrow streets. The streets are generally so narrow and intricate that only a pedestrian can with difficulty make his way through them, and even then he often loses his way; the Russian vehicles are obliged to keep to the principal streets. Numbers of canals, which run for the most part along the narrow streets, intersect the town, and although the odour which they emit is not always of the sweetest, they combine with the trees planted on their banks to produce freshness and coolness. It is only very rarely that these mud buildings can boast of windows. The few window-like openings, the verandahs and open halls, all are round a kind of court-yard, which is planted with trees, and affords to the occupants shade and protection against the penetrating dust, with which all the streets, and the whole town and

its environs, are filled far and wide during the summer months. The buildings have seldom any other outlet but the low door into the gloomy but pleasantly shaded street, and give one the idea of large mud chests, uniform in shape, built close to each other. The lofty trees of the inner court, generally elms and poplars, lend to the towns, from a distance, the appearance of extensive gardens, out of which there rise, at intervals, tapering minarets and *medressés* (schools), high cupolas of mosques and churchyards, adorned with painted arches. These all contribute to invest the landscape with a most charming and poetical character. Most of the towns have in their midst, or in one of the corners of their outer walls, large citadels which, perched on elevated positions, tower above the town. Of the more extensive public buildings, besides the mosques and schools, the bazaars and *caravansaries* are the most remarkable. Both are capacious edifices with immense courts, warehouses, and stables, which serve for the shelter of goods and conveyances belonging to the trading population, and form the centre of the whole life and business of the town. All the inhabitants of the country round collect there on certain days, to sell the agricultural produce of the country, and to make purchases, the articles being exposed for sale in the most seductive way, both in the bazaar and open street. The towns are not generally built on large rivers, but are situated among small mountain streams, which are particularly adapted for canals. They are surrounded by extensive plantations, gardens, and country houses, the lofty foliage of which entirely shuts them in, and hides them from the traveller until their very gates are reached. The churchyards, with their numerous monuments and lofty structures, between which all kinds of shrubs and thickly tangled plants flourish luxuriantly, thus forming the most romantic spots in Central Asian scenery, are situated partly in the town itself, partly amid the gardens round the town, without any order or arrangement.

Most of the larger cities of Turkestan, such as Tashkend, Turkestan, Chemkent, Samarkand, &c., wear this purely Asiatic appearance. Only the little forts on the Syr-Darya, erected by

the Russians on the site of the Khokand fortifications after their destruction and burning, look like those steppe posts which have been previously described. In Kasalinsk the *enceinte* of the fortress is entirely filled with one-storied houses of European pattern. Large and handsome Government buildings, after the Russian model, rise prettily out of the small collection of houses, and the straight, broad streets, with their mat shops and booths, give quite a European character to the little town, which can even boast of a small, but cleanly kept, hotel.

The villages consist of small mud huts, which are surrounded by little store-rooms for grain, and by miserable winter stabling for the cattle, and are built, without any arrangement or order, on that portion of the country which is watered by canals. They are enclosed by a circle of cultivated fields. Between the houses of the villages and towns are everywhere to be found the *urts* and *kibitkas* of the nomad population, whose dwellings are also partly used by the settled inhabitants. The *kibitka* camps of the nomads, which often consist of hundreds of tents, are situated on the best pasture lands, without any particular order or division. Each chooses his place, just as it suits him, in agreement and peace with his neighbour. The site of these camps changes with the season, and as soon as the grass begins to fail. But a fixed rule is observed by the nomad races in the choice of their camps, and the limits of their pastures are also defined, so that, although each camp moves every autumn hundreds of versts away, the different tribes may nearly always be found again in the very place where they had previously pitched their camp. For since the steppes, as we before observed, and even the desert districts everywhere encroach on the cultivated and irrigated country, the nomad tribes live in their tents side by side, and associate with the settled population in the permanent habitations.

The most important cities, which are also destined to acquire considerable note in future years, are Tashkend, Samarkand, and Khojend. Tashkend, situated some versts to the north of the Cherchik, which flows into the Syr-Darya, and watered by

numerous canals in connection with this river, is one of the largest and oldest cities of Central Asia. The population of the town is estimated at from 75,000 to 80,000, while the wall of nine gates by which it is surrounded attains a length of one and a half German miles = about 10 English miles. The ground thus enclosed runs in a long oval from west to east, and embraces a curious mixture of old Asiatic civilisation, combined with the elements of modern Russian colonisation and European cultivation. Both elements are, however, evidently still rivals here; but there can be no possible doubt as to which of the two must ultimately prevail. Near the old box-like mud hovel of the Uzbeks rises a splendid Government building, adorned with the Russian eagle. Past the heavy, creaking, and groaning two-wheeled *arba* of the Asiatic hurries, as if on wings, the fleet three-horse team of the Russian officer, dashing through the wide streets and *allées* of the European quarter, which is beautifully planted with trees. This so-called European quarter, which has hitherto occupied only a small corner in the southern portion of the town, is filled with the dwellings and barracks of the garrison, the administrative buildings, and store-houses, their symmetry, and the straightness of the partially paved streets, quite giving one the impression of being in a small Russian provincial town. It is only the canals which run along the streets that remind you of its Asiatic origin. On the south end of the city lies the Russian citadel. From the Russian quarter northwards, all traces of European civilisation soon disappear, and one again meets the previously described medley of narrow, winding, and dusty lanes and crowded houses, as is the case in the really Asiatic portion of the capital. But even here progress is in the ascendant; for already the speculating and business-like Sarts of the old town are beginning to build houses in the European style, on the plan of the Russian quarter, for the purpose of letting them out at the highest possible rent to the families of those officers and officials who require them. The Russification of the Asiatic quarter is thus also progressing vigorously, and every year a large number of new European buildings are constructed, which

vie with each other more and more in comfort and tasteful appearance. The Satchaulin Square, for example, but a short time ago a dusty, barren wilderness, which quite maintained its Asiatic character, and was chiefly used for the drilling of the garrison, now lies in the middle of the Russian quarter, and promises, in the form of an elegant quadrangle, to become the most beautiful part of the city. The quantities of trees planted by the Russians near all their buildings now form splendid walks, and penetrate far into the dusty, squalid district of the old town. The grand point and centre of the European quarter is the house and garden of the Governor-General. The handsome park, adorned with all the vegetation of Central Asia, and at the same time with the most graceful plants and the loveliest flowers of Europe, which grow here in exceptional beauty and luxuriance, with its shady paths and waterfalls, is much patronised by the elegantly dressed wives of the officers, who stroll about and enjoy the music of the military band, which plays here three times a week, and makes the enormous distance from Europe, the home of so many of its inhabitants, almost forgotten. The garden, which contains charming pleasure-grounds, ponds, and pavilions, is always open to the garrison, and serves in no small degree to alleviate the miseries of a residence in Turkestan during the oppressively hot and dusty summer months. The sum of 6,000 roubles was lately granted for the embellishment of the garden alone.* A casino provides for the wants of the officers and their families in a style which is scarcely inferior to the European. Balls, concerts, and entertainments of every sort bring together the social elements of the Tashkend garrison, and, in the originality of their surroundings and scenery, may justly be said to surpass those of many a Russian provincial city. Even the stranger will find all he wants at Gronow's spacious hotel, which has a fine garden, and is the furthest hostelry on the eastern side for travellers to Central Asia.†

* *Russian Invalide*, 1874.

† Mr. Ker, in his "On the Road to Khiva" (1873) gives a very humorous, even if not attractive, description of the "*El-Dorado*" in question of a Central Asiatic hotel.

The centre of the Asiatic quarter, with its small low mud buildings, its hot and dusty squares, its cool and shady lanes, forms the Tashkend bazaar, and the large *caravansaries* which are used as warehouses. Here are concentrated the life, the trade and commerce of the city, as well as of the entire neighbourhood. The bazaar forms a small quarter of itself, and consists of an extensive series of spacious halls and numerous small streets and passages, which are roofed over in summer with poles and *kamish* mats,* as a protection against the sun, and present, with the motley collection of gaudy goods, a very original and picturesque appearance. Each of the streets of the bazaar, with its halls, has its particular articles exposed for sale, so that the goods are to a certain extent arranged in the respective quarters according to sorts and species, and can thus be easily found by the purchaser, in spite of the indescribable noise and confusion. Although the sellers at the bazaar comprise a medley of Bokharans, Persians, Afghans, and Jews, the Sarts always form the predominant element among the mercantile population. The Sart is naturally adapted for trade and bartering, and has but little interest or aptitude for anything else. "If one looks," says Ker very graphically, in his description of the Tashkend bazaar, "at the endless stream of heavy, expressionless countenances, and loose, enervated limbs, one begins to understand how it was that so many thousands of these Sarts fled before a handful of Russian rifles; and one is reminded in the most vivid manner of the classical saying: 'Many persons, but few men.'" Thanks to its bazaar and *caravansaries*, Tashkend is already the centre of Asiatic commerce, and will become still more so in the future. Besides the principal bazaar, there are many smaller ones, which are always open, and provide for the daily needs of the inhabitants. They usually contain articles of household furniture, such as pots and wooden goods, leathern articles, fruits, grain, &c., and are situated partly on the open streets, partly in small mud shops, which open on the street. Tashkend thus possesses, in addition to the public

* Mats, which the Kirghiz work very neatly out of rushes (called "*kamish*"), and which, with the poor, replace the carpets of the rich.

buildings which we have named, 13 larger *caravansaries*, 700 mosques, 16 higher educational establishments (called *medressés*), 700 lower schools, two bazaars, and a multitude of shops and inns (called *kalanterkhans*), where the begging dervishes pass the night, and where opium is smoked.

After Tashkend, the most important city of the Turkestan district is Samarkand, once the residence of Tamerlane, whose tomb is here—the “earthly paradise,” as Persian poets have termed it. Samarkand is the capital of the newly acquired and fertile territory of Zerafshan, and comprises about 30,000 inhabitants, for the most part Sarts or Tadjiks. This city, which as far back as in Timour’s day was renowned for its splendour and size, now retains but little of its former magnificence. The small low mud houses crowd even here the inner town, which is dusty and monotonous, and the numerous mosques and gaily painted cupolas and minarets of which, as well as the huge palaces of its ancient rulers, begin more and more to lose their original character, being, as a general rule, transformed into magazines, warehouses, and barracks for Russian military purposes. Some of the mosques do duty as Russian churches. Even here a Russian quarter is beginning to rise in the western part of the town, containing the casino and the dwellings of the garrison and commandant. As a commercial centre, and as the most southern fortified point, Samarkand is of considerable importance to Russia. Of the other towns, those which one may especially mention are Khojend, with 18,000 inhabitants, Chinaz, the best spot for the passage of the Syr-Darya, on the high road to Tashkend, Samarkand, &c. These resemble, in general, the Asiatic cities which we have already described, and their importance, as we shall see later on, is peculiarly military and strategical. The most important of the small towns are also given in the tables as capitals of circles.

Essentially differing from the usual character of the Central Asian territory is the Semirietchensk district, with its five circles. It has nowhere any of the stamp of the original Asiatic civilisation of the southern Uzbek states, but it bears very close resemblance to the districts of the West Siberian and

Orenburg Governments. The inhabited and cultivated spots owe their origin chiefly to Russian colonisation, which began here much earlier than in Turkestan. Prior to this the nomad race of the Kirghiz-Kaissaks of the Great Horde, who have no settled abode, ruled alone in these regions. The Russian settlements in the midst of the nomad populations are formed by Cossack and military colonies, which are scattered throughout the small towns and villages. According to the latest statistical tables,* the Semirietchensk district possesses five towns of circles, six *stanitzas*, eight larger villages, five peasant villages, and three military pickets on the Chinese border, amounting in all to 28 inhabited places. In these localities there were, up to the year 1873, in all, three higher schools, 11 village schools, one mission school, two Tartar *medressés*, one commercial school, with a total of 18 schools and 15 churches. The same table estimates the nomad population at 510,000 for the year 1870, consisting of Kara-Kirghiz and Calmucks, about 21,000 Cossacks, and 6,400 Russian settlers, exclusive of a garrison of about 5,750 men.† Little is as yet known concerning the future, from an administrative point of view, of the Ili district. The district, containing 1,293.52 German square miles,‡ seems still destined to remain for a time under the administration of the Governor of Semirietchensk.

As regards the POPULATION of the Turkestan district, a clear and concise description of it is hardly possible. It has for a long time been, and still is, the object of the most profound and brilliant studies and inquiries, which, as in the case of the Caucasus isthmus, have not, however, yet found their complete

* *Investiya* of the Imperial Russian Geographical Society, 1873.

† Among the Russian settlers were reckoned—

Veteran soldiers	..	..	..	..	1,149
Noblemen	..	..	..	..	244
Priests	..	..	..	..	82
Russian tradesmen	..	..	..	..	466
„ citizens	..	..	..	..	2,995
„ peasants	..	..	..	..	1,464

‡ See “Population of the Globe,” by Behm and Wagner.

solution.* The Russian occupation of the country has hitherto exercised but little influence on the character and mode of life of the old population. European colonisation makes but slow progress, and the Russian inhabitants, including the garrison, form a small and decreasing element among the old Asiatic inhabitants. Let us now cast a passing glance at the population of Turkestan, the elements of which are, on the whole, much the same as those of Khiva.

The population of Turkestan may be classed under two separate heads, according to their origin and their mode of life. Their habits characterise them as a nomad and a settled population, distinctions which are of particular importance from an administrative and military point of view, and thus especially serve our purpose. Regarded ethnographically, the inhabitants may be said to be composed of two primary races, the Turco-Tartaric and the Indo-Persian or Arian (Iranian). The tribes which belong to the former race, and which include the Kaissaks, Kara-Kirghiz, Uzbeks, Kuramas, and Turcomans, live chiefly on the Syr and its tributaries, whilst those of the latter inhabit mainly the river district of the Amu-Darya (Zerafshan). The Iranian race, which may be comprised under the name of Tadjik, represents the old aborigines of the Iranian country. It was subsequently subjugated by the Turk races, particularly by those known as the Uzbeks. The Uzbeks spread over several Khanates of Turkestan as far as Khiva, and have since remained the dominant race. Constant intermarriages between the conquerors and the earlier inhabitants and nomad Kirghiz resulted from this change of sovereignty. The numerous ramifications of these two chief races, and the tribes which have sprung from their union, have produced a confusion which it would puzzle the most skilful ethnographist of the present day to completely unravel. A regular classification of the races is therefore hardly possible, and the same race appears to be called indiscriminately Sart, Tadjik, or Uzbek, according to the district to which it belongs. Of the various tribes which at the time of the Russian

* See Lerch: "The Russian Turkestan, its Population and External Relations." *Russian Review*, 3rd volume, 1872.

occupation formed the old population of the country, the following are particularly conspicuous:—the Kazak or Kirghiz-Kaïssaks, the Calmucks, the Kara or real Kirghiz, the Uzbeks, Sarts, Tadjiks, Kuramas, and Turcomans. A classification of these different races would be very simple, if one were only to class them, according to their mode of life, under two heads, nomad and settled, although from an ethnographical point of view this would not be exact, as the races mentioned above do not belong exclusively to one or other of the two categories, but partially to both.

To the nomad portion of the population the Kirghiz-Kaïssaks, Kara-Kirghiz, Calmucks, and Turcomans in particular belong. Only a few Uzbeks lead a wandering life. The settled portion of the inhabitants—that is to say, the occupants of the towns, villages, and farms—are chiefly represented by the Uzbeks (Kurama), Tadjiks, and Sarts. In the Syr-Darya and Zerafshan districts the Russian settlers (exclusive of the garrisons) form but a small and rapidly decreasing population. In the Semirietchensk district the colonies of peasants and Cossacks, as we have previously seen, have already greatly increased. A few Kirghiz-Kaïssaks are to be found settled in the towns.

The KIRGHIZ-KAÏSSAKS, or KAZAKS, as they are called to distinguish them from the real Kirghiz, with whom they have often been confounded, form the greater part of the nomad population in the Government-General of Turkestan. The historical development of the three principal races of the Kaïssaks, the Great, Middle, and Small Hordes, has been already recorded in the historical sketch, while their mode of life has been, to a certain extent, described in the Orenburg section. The Kaïssaks who belong to the Turkestan districts do not differ at all from the nomads already mentioned, who traverse the barren regions of the Kirghiz steppe, with their herds and *felturts*, from the Caspian Sea far into the steppes of Siberia. They all belong to a Turk race, which, it appears, received in process of time a strong admixture of Mongolian elements (Calmucks), a fact to which their strongly marked features, reminding one of the Mongolian type, their massive cheek-bones and their long

oval eyes bear ample testimony. But the most different types, according to races and pasture-grounds, are found among the Kaïssaks, some showing the Mongolian element strongly, and others not at all. The Kaïssaks, as well as the Kara-Kirghiz, profess the Mahommedan faith (Sunnites), although they possess neither churches, mosques, nor regular priests.* Travelling dervishes and mollahs, who play a great part among the settled population of Central Asia, are but seldom to be met with among the *auls* of the Kaïssaks, and offer here less spiritual consolation than physical aid in cases of sickness among man and beast, as, owing to their great piety, they are famed for the possession, in addition to their medical knowledge, of supernatural secrets for the healing of wounds and sickness by prayers, imposition of hands, &c. As Russian subjects, the Kaïssaks are divided into *volosts*, the administration of which is conducted on the same system as that of the steppes of Orenburg and West Siberia. The greater portion of the race leads a nomad life, and only a few individuals live either in, or in the neighbourhood of, the Turkestan towns, in houses and tents, cultivating the land on a small scale. The Kaïssak is passionately attached to his wandering life, and it is only the most abject poverty or the want of camels and cattle which can persuade him to relinquish his beloved, ever-changing home on the broad steppe, in order to till the soil and lead a quiet settled life. As soon as he can find the means, he forsakes his scanty plantations, and again sallies forth with his tents and his little flock. Agriculture is repugnant to the Kaïssak, who despises a settled mode of life. The name of "Sart," which on the Syr-Darya gives one the idea of a townsman, is for him the most opprobrious epithet. The Turkestan Kaïssaks usually remain in the mountains during the summer, when heat and drought have parched and burnt up the steppe pastures; in the autumn and spring, they take to the plain, and in the winter, they retire to the districts of the Syr-Darya and its tributaries, which are overgrown with rushes and *saksaul*, to pitch their winter quarters in a place where they can, at all events, find a small quantity of firewood as well as fodder

* But they are not so lacking in religion as many writers have made out.

for their flocks and herds. On account of the proximity of the Turanian mountains, the distances which the Turkestan Kaïssaks traverse in their wanderings are but trifling in comparison with those which the Orenburgers get over, who, for example, annually leave behind them upwards of 1,000 versts. Their *auls* consist of *urts*, which lie scattered far and wide on the steppe, and of which more than from 20 to 30 seldom stand together; their sole occupation is that of cattle-breeding. The nomad portion of the Kaïssaks is generally rich, so that one may reckon, on an average, one camel, one cow, one horse, and 40 sheep to every *urt*.^{*} The *kibitka* tax amounts, as in the Government-General of Orenburg, to from 2·75 to 3·50 roubles per annum. The settled agricultural Kaïssaks, also called Ijintshi, are poorer; but particularly those who roam along the left bank of the Syr and the desert of Kizil-Kum. Amongst the latter the taste for robbery is therefore most strong, and the more so as it is constantly being supported and encouraged by the Khivan rulers. One of their number is the well-known robber Sadyk, one of the worst enemies of the Russians, a man who also played a part in the last campaign.

The Kirghiz-Kaïssaks of the Turkestan district belong for the most part to the Great Horde, but also, to a certain extent, to the Middle, and only exceptionally to the Small Horde. If we except the circle towns and forts, the Kaïssaks of the Small and Middle Hordes form the exclusive population in the north-western portion of the Syr-Darya province, and in the districts of Kasalinsk and Perovsk. In the Perovsk district a quarter only of the entire population is said to be agriculturist, and that to no great extent. The remaining nomad population of the Syr-Darya province is principally composed of the Great Horde. The plains of the Semirietchensk province are inhabited exclusively by Kaïssaks of the Great and Middle Hordes, while these share the mountainous southern districts with the Kara-Kirghiz. In the Syr-Darya province it is estimated that there are 93,400 *kibitkas*, or 467,000 members of both sexes belonging to the Great, Middle, and Small Hordes;

^{*} Wenjukow: "The Russo-Asiatic Frontier Lands," by Captain Krahmer, 1873.

in the Semirietchensk district, 80,000 *kibitkas*, 400,000 members of both sexes belonging to the Great and Middle Hordes, thus making a total of 867,000 persons of both sexes.

The KARA-KIRGHIZ, the true Kirghiz, are called by the Russians Black, (Kara-Kirghiz) or Wild Mountain, Kirghiz, (*Dikokamenngi*), and by the Chinese *Burnts*. They are alone entitled to the name of Kirghiz, which the Russians who pressed eastward later on, wrongly applied also to the Kaïssaks. The Kara-Kirghiz are a mountain people, extending far beyond the southern borders of Turkestan, across the Tian-Shan and the Pamir plateau as far as the western districts of the mighty Kuen-Luen chain. They are a people of Turkish race, which, being allied in origin with the Kara-Kalpaks and the Uzbeks, has remained comparatively pure, and especially free from admixture with the Mongolians.* They are distinguished by the regularity of their features from the Mongolian Kaïssaks. The kindred Kara-Kalpaks, who wander about in the Khanate of Khiva, and particularly in the Amu delta, are even renowned for the beauty of their race, especially for that of their girls. In common with the Uzbeks, they form in the Khanate of Khokand the tribe of the Kiptchaks. The language of the Kara-Kirghiz is a Turkish dialect; their religion, like that of the Kaïssaks, is the Sunnite form of Mahomedanism, but they have neither mosques nor priests. The name of Kara-Kirghiz, *i.e.*, Kirghiz of black, common, body, has been given to them, because they possess no aristocracy like the Kirghiz-Kaïssaks, whose Sultans all profess to be, if not the direct descendants of Djenghis-Khan, at all events, those most nearly related to him by blood.† They are divided into two principal branches, the right "*On*," and the left "*Sol*," which are again split up into numerous tribes and families. Those who dwell in the Syr-Darya district belong for the most part to the former, and are the race of the so-called Sults. These live chiefly on the slopes of the mountains and in the mountain valleys of the Turkestan highland, partly in the Syr-Darya, partly in the

* Petzholdt: "Turkestan," p. 30.

† Wenjukow: "Russo-Asiatic Frontier Lands," by Captain Krahmer.

Semirietchensk provinces, and do not lead quite such a nomad life as the Kaissaks. They are more or less firmly established in the mountain range, and are given to agricultural pursuits. The nomad Kirghiz, who breed cattle, also lead a more regular and less restless life than do the Kaissaks, pitching their tents or *auls* in greater numbers together in the same mountain valleys. They represent here, to a certain extent, the Swiss of the Turanian highland, and are ruled by their elders or *manaps*, who, at the same time, fulfil judicial functions. The character of the mountain Kirghiz is very rough, coarse, impetuous, and wayward. They form, beyond dispute, the most uncultivated and the wildest element of the Turkestan population. Their warlike and indomitable propensities give rise to unceasing robberies and contests with their neighbours and among themselves. Courage, a spirit of enterprise, and a sharp natural instinct, cannot, however, be denied them. Although Terentieff describes them as rude and heartless, wanting in every moral perception, in principle and honour, he nevertheless praises their wonderful talent for epic poetry, and their liking for the story-tellers and verse-makers, who recite to their warriors, collected in a curious circle, the heroic deeds of the great men of foreign lands. The interest displayed by those nomads in the news of recent events is marvellous, and much is made of the man who brings a bit of foreign news or an account of some recent occurrence into the *aul*. He is received *en fête*, and as a reward is presented with a huge piece of beef, the great dainty of the tribe. Every one, therefore, endeavours to be the first in spreading a report, and thus is explained, thinks Terentieff, in his charming and graphic sketches, the mode by which news is disseminated with its well-known incredible celerity in the otherwise inaccessible steppe.* On the whole the Kara-Kirghiz are poorer in cattle than the Kaissaks. In the eastern part of the mountain range they breed a very useful animal, which the latter do not possess, the Thibet ox; the Turkestan Sults confine themselves to camels, horses,

* The author himself had not the opportunity of coming into contact with the Kara Kirghiz; he took the above details chiefly from Terentieff's work on Russian Central Asia.

and sheep. In the Syr-Darya province the mountain Kirghiz roam about but little, and then indeed in the districts of Tzakh, Aulie-Ata, and in the former circle of Khojend; they form, on the other hand, the principal population of the mountainous southern part of the Semirietchensk province (the circles of Tokmak, Issik-Kul, and Vernoe). In the Syr-Darya province there are, according to Lerch, 7,200 *kibitkas*, and in the Semirietchensk 28,000 *kibitkas*, thus making a total of 35,200 *kibitkas*, or 176,000 persons of both sexes.

The CALMUCKS, who belong to the same race as those of the Calmukow and Astrakhan districts, already described in the Orenburg section, and who profess Lamaism, are of Mongolian origin, and remind one forcibly of the Chinese type. They are called by the Russians there Chockly, *i.e.*, pigtails, or pigtail-people. They wander about in the Semirietchensk district exclusively. Only a few follow the regular life of the towns and settlements. Their number is estimated at 13,000 of both sexes. It is substantially increased by the addition of the Calmucks of the newly acquired Ili district, who are now reckoned among the subjects of Russian Turkestan.

The TURKMENS, or TURCOMANS, as the name itself denotes, belong in like manner to the Turk race of which mention has previously been made, and are related to the Uzbeks. Their particular home is the Trans-Caspian steppe, to the north of the Atrek and of Persia, stretching into the Khanate of Khiva. We must, however, except a few, their number is variously estimated, who live as nomads in Russian Turkestan and in the Zerafshan district, especially in the circle of Tzakh, whence they extend northward, but not beyond the mountain line, which runs westward as far as the Bukan mountains. The same may be said of the nomad Kara-Kalpaks, whose special home is the Khivan district on the southern part of the Sea of Aral. These tribes will not be described.

UZBEK, TADJIK, and SART—these three names mainly represent the settled population of Russian Turkestan. The use of these three denominations has, however, as we have already stated, not always been kept properly distinct. Many persons

consider the Turkestan inhabitants, who bear these names, to be three separate, independent races. But the latest investigations show that, ethnographically, only the Uzbeks, as belonging to the great Turco-Tartaric family, and the Tadjiks—that is to say, the old settled Iranian aborigines, who were conquered and reduced to subjection by the Turkish element are to be regarded as separate races, and that the name of Sart has no ethnographical, but rather a civilised and historical signification, and has no reference to their origin, but only to their mode of life.* The name of Sart was given by the Kirghiz, as a term of disdain, to all the races which led a settled life, in contradistinction to the nomads. Thus, the name of Sart can as well be applied to Uzbeks as to Tadjiks, but it in no way denotes any peculiar race of people. The designation of Sart, as applied to settled populations, dates particularly from the period when the Kirghiz nomads came into contact with the settled inhabitants of Turkestan, especially on the Lower Syr and in Khiva, while on the Upper Syr and Amu-Darya the dwellers in towns and villages were almost everywhere denominated Tadjiks. An interchange of the names must inevitably often take place in both districts, so that accordingly Uzbeks, Tadjiks, and Kuramas, and even the Kirghiz living in the towns, may be called Sarts. Thus, among the settled population of Russian Turkestan, one would from an ethnographical point of view only have to distinguish between Uzbek and Tadjik—between the dominant Turco-Tartars and the subjugated aboriginal Iranians.

The UZBEKS, or OESBEGS, form the dominant population, which, when victorious, reduced to slavery the Iranian or Tadjik race, which was settled in the oasis or river districts of Turkestan. They, too, compose no particular nation or special race, but belong to the great Turco-Tartaric family, in which the Kaïssaks are also included. The name of Uzbek† first appears in the history of Central Asia in the fifteenth century, at the same time as that of Kaïssak, the signification of which is “vagabond,”

* This assertion is based on the following sources: Fedtschenko, Marthe, Lerch, Radlow, Wenjukow, Petzholdt, and Robert Shaw.

† Lerch; and also “*Russian Review*.”

but by it no peculiar tribe was understood. The Turk races and tribes which formed the dominant class in the Kiptchak empire in Western Mongolia, at that time called themselves Uzbeks, but they in no way represented any particular people, being composed of a mixture of several Asiatic populations. Since the sixteenth century, the Uzbeks have ruled in the Turanian highland, as also in the Khanates of Khokand, Bokhara, and Khiva, and cannot even here be regarded as a particular nation, but rather as a mixture of various Turco-Central-Asian elements, which only formed an entire whole by means of political union, and not on account of their origin, and which differ from the other inhabitants of the country in language, customs, and physique. Their rule over the native Tadjiks was founded neither on numerical nor on mental superiority. They were the conquerors, and the vanquished continued to look upon them, in their quality of mighty warriors, as their superiors, both from a political and an administrative point of view. Their language became the dominant one in the land except among the learned. They thus, for instance, even to this day, form the aristocratic military element of the Central Asian population in Khokand, Bokhara and Khiva. The higher officials and functionaries of state especially in the departments of taxation and duties, as well as the army and police, were recruited from them, as were also the chiefs of the administration, the governors, and the leaders of the troops, the beys, &c., being taken from them. Thus they had, both politically and administratively, the power and influence of the country exclusively in their hands, a circumstance which even rendered them dangerous to the rulers of the Khanates, and enabled them to promote numerous risings against the sovereigns. The religion of the Uzbeks is Sunnite Mahommedanism. They have always been notorious for religious fanaticism; and this has made them particularly hostile to the Christian strangers generally, and especially to the Russians.

The Uzbeks take great pride in their genealogy, and the various races and families into which they are divided enjoy different ranks and honours. Some of those, which have chiefly

furnished the heads of the nation and the rulers, consider themselves better than the others, and so form a kind of aristocracy. Thus their intermixture with the subject Tadjiks was slight, although these latter are socially—and particularly as far as property is concerned—their superiors, owing to their industry and talent for trade and commerce. Polygamy and the power of the Koran, according to which all True Believers are equal, have also had here an injurious effect on the exclusive tendency of the aristocratic Uzbek families, so that in Khiva particularly the Uzbeks have mingled not only with Kirghiz elements, but also with the Tadjiks, who are there usually called Sarts. One might divide the Uzbeks into three classes, according to their modes of life. The inhabitants of the towns and villages form, with the Tadjiks, the largest portion. Only a small number, the warrior element, follow the wandering life of the Kirghiz. A third, but small, division combine the mode of life of both the nomad and settled population. These latter are agriculturists; and as long as the cultivation of the soil retains them, in summer and winter, in the watered districts of the rivers, they lead a settled life, partly in *kibitkas*, partly in small farms and stables built of mud, like the winter quarters of the Kaissaks, and during the other seasons they emigrate into the steppes, with their herds and felt tents, leading the unsettled, adventurous, but attractive life of true nomads. The Uzbek character generally resembles in this respect that of the Kirghiz; he loves a warlike and wandering life, and lives only in the towns with a view to money-making. The inhabitants of the city, who are in easy circumstances and possess wealth, often leave their homes to wander about the steppe. The mode of life of the Uzbek in general resembles that of the Mongolian steppe, which is also peculiar to the Kaissak. Every kind of work and care is hateful to the Uzbek. In public life he makes this over to the energetic, diligent, and intellectually superior Tadjik or Persian; in his own household, to his slaves, among whom may be reckoned his wives, according to their position. He never troubles himself about the bringing up of his children until they are able, when grown, to bear arms or to manage a horse.

They are then taken by their father on his expeditions, and trained into warriors or hunters. Hunting, particularly with falcons, on the small steppe, and the chase of the steppe antelope, with war exercises, sham fights, and horse races, often for prizes of great value, form their favourite occupations. The rearing of dogs is their especial delight. The greater part of their life is, however, spent in a certain contemplative, thoughtful idleness peculiar to the Oriental, in the circle of their harem, an idleness which is only broken by the smoking of the narghili or by the eating of opium, which is taken there in small sticks as a *bonbon*. A great deal of bathing or washing, which is enjoined as a strict religious exercise by the precepts of the Koran, and copious meals, at which, according to European ideas, an incredible amount of meat is consumed, form their almost exclusive occupation. They are, as a rule, good-hearted, hospitable, and comparatively honourable; at least compared with the treacherous character usually to be found among Orientals.

Although originally of the same blood as the Kaissaks, their external appearance bears less resemblance to the Mongolian type. They are higher in stature than the former, have a stronger growth of hair, especially on the face, and are, as a rule, rarely so hideously ugly in appearance as the Kirghiz. Their complexions are more brown than yellow, their eyes long, oval, and drooping; the body is generally devoid of muscle, and is often of beautiful and symmetrical shape. Externally they remind one rather of the Tadjiks, among whom ideal, lovely forms are often seen. This circumstance may almost be accounted for by the presumption that the Uzbeks of the present day are to a great extent sprung from an intermixture with Iranian elements.* As regards the number of the Uzbeks in Russian Turkestan, it is scarcely possible to speak with any certainty, as in the country itself, as already stated, the name of Uzbek is very loosely applied; so that, on the one hand, many

* In the harems of the Uzbek nobles the Persian female slaves are renowned for their beauty. In the Khanate of Khiva they are frequently raised to the rank of legitimate wives. Kara-Kalpak girls are likewise much prized on account of the regularity of their features. The favourite in the harem of the ruling Khan of Khiva is the daughter of a Kara-Kalpak Khan.

Uzbeks pass for Sarts, and, again, many Kuramas pass for Uzbeks. The nomad Uzbeks are not numerous in the Syr-Darya district; they would appear to have been driven from their pasture grounds by the Kaïssaks who were dominant in Tashkend in the seventeenth century.* These are now only found in the former circle of Khojend, and in the circle of Jizak, in the Zerafshan district, and number about 1,000 *kibitkas*, or 5,000 souls. The remaining Uzbeks form, together with the Tadjiks, the greatest part of the town and country population in the Syr-Darya and Zerafshan districts, but never inhabit the Semirietchensk district. The inhabited spots of the Kasalinsk and Perovski circles are an exception to this rule. The Uzbeks are best represented in the former circle of Khojend. No certain estimate of their number in that circle can be given, as the particulars derived from various sources are still very contradictory.†

The TADJIKS represented, as we have already several times stated, the aboriginal Iranian population of the country, which is closely connected with the Persians, but much mixed up with other elements in Russian Turkestan, and in the Khanates of Central Asia. The name of Tadjik is chiefly used in its correct meaning on the Upper Syr and Upper Amu districts, while on the Lower Syr and the Lower Amu, particularly in Khiva, the name of Sart is applied to the Tadjik population. The Tadjiks form the most important element in Russian Turkestan, and in numbers, are only inferior to the Kirghiz-Kaïssaks. Although they are the conquered race, subject to the Uzbeks, they are, owing to the greater prosperity which they have acquired by their energy, their attention to business, and zeal for trade, the most influential portion of the Turkestan population. The Tadjiks are the best agriculturists, and spare no pains in their work; they are the most skilled artisans, and at the same time the most indefatigable commercial and trades-people. They are therefore, in comparison with the abject indolence of the Uzbeks, in every respect the representatives of Central Asian civilisation

* Lerch; and also "*Russian Review*."

† Wenjukow reckons for the Syr-Darya district (inclusive of Zerafshan) 115,000 inhabitants.

and education. With but few exceptions the Tadjiks lead a settled life, and live in the midst of the other populations, chiefly in the Zerafshan district in the south-easterly part of the Syr-Darya district, and especially in the towns of Tashkend, Turkestan, Chemkent, Khojend, Samarkand, &c.

The external appearance of the Tadjiks proves more than anything else their Aryan descent. They remind one forcibly of the Iranian type, although they are less brown in complexion than the Persians of the present day. Among the Tadjiks and the Sarts one finds perfect ideal forms, the regularity and perfection of which, particularly in the Khanate of Khiva, more than once surprised the author, and reminded him of the European race. The Tadjiks in Turkestan, and the Sarts in Khiva, have very handsome countenances, with high forehead, expressive, large, and often very beautiful eyes, well-formed and finely cut nose, small fresh lips, and fine, dark hair, with a particularly strong and luxuriant growth of beard. The types of the Tadjiks, however, as a rule, vary very much, and show traces of considerable intermixture with other elements. Besides the Persian, one sees traces of the Uzbek, Hindoo, Arab, Jew, and even Russian elements—a circumstance which may be explained by the fact, that the harems of the Sarts have been recruited by female slaves from all the neighbouring districts, and this to a comparatively greater extent than has been the case with the Uzbeks, as, on account of their wealth and usurious habits, they are able, to a great extent, to supply their harems from distant markets. Very different and conflicting opinions have been expressed with regard to the character and qualities of the Tadjiks. As far as my acquaintance with the Sarts in Khiva went, they formed, in my opinion, most decidedly, the portion of the Central Asian population for which I felt the least sympathy, and I much preferred the Kirghiz and Uzbeks. The Tadjiks, as far as activity is concerned, fill to a certain extent in Central Asia the position of the Jews in Europe; they live only for their own private interests and gains. Trade and barter are everything to them, and they willingly sacrifice to these their honour and their conscience. For the sake of the smallest profit,

they will undertake the longest journeys, make the most untiring exertions, and barter wife and child, honour and fatherland. At the same time, they are a prey to the basest vices which are to be met with anywhere, and are spiritually, as well as morally, corrupt, cowardly, devoid of courage and of energy (except for gain), and have an inconceivable dread of everything connected with arms and war. Compelled by the Khan to take up arms, they have always, wherever practicable, sought refuge in flight, and thousands were put to an ignominious rout by a few Russian bayonets. Although, in the presence of their superiors, they are apparently well disposed, ready for service and docile, they are, on the other hand, doubly tyrannical, relentless, and brutally cruel in their treatment of their slaves. From their general character, they appear nothing but false, treacherous, and grasping, cringing to and flattering their rulers, from whose favour they hope to derive advantage. Although, from their capacity for work and industry, they are quieter, and in political matters more indifferent and less partisans, than the Uzbeks, they are, notwithstanding, politically much less to be depended on than the latter, as they regulate their opinions according to circumstances, and are always a time-serving race. They are of great importance, owing to their wealth and their consequent ability to pay, a consideration which plays a great rôle among Central Asian rulers. By means of bribery and an enormous sacrifice of money, they even often attain to high positions in the state, in which they are then still less honourable, and still more intriguing, than the Uzbek officials.

The religion of the Tadjiks is Mahommedanism, although they, as it seems to me, do not lay more stress on its exercises than their worldly and material interest would appear to require. But, in spite of all this, the Tadjiks represent, unfortunately, the most civilised portion of the Central Asian population. They are not only the representatives of trade, industry, and commercial activity, but, quite as much, of learning, art, and science. They are skilled in languages, and most of them know how to read and write. The characteristics which Wenjukow gives in his description of the Tadjiks are very striking.

According to him, the feeling of nationality does not concern them much; the Tadjik is more cosmopolitan than the Uzbek and Kirghiz, and, in consequence, has the knack of adapting himself to a foreign yoke. The sentiment of national and personal honour is, therefore, poorly represented in him. He is swaggering, but not proud; he devotes all his powers exclusively to the pursuit of gain, and is not particular in his choice of the means of accumulating wealth, provided that he be not personally opposed by a decided and menacing rival, in which case he loses courage. He has a strange invincible dislike to fighting of every kind, and to arms—a fact which has given him, among the bold and warlike Turk races, the Uzbeks and Kirghiz, the disdainful epithet of “Sart” and “Sadyk,” which means “corrupted.”

Thus much respecting the general characteristics of a race which, in spite of its pleasing appearance, as compared with the often hideous, Mongolian-like countenances of the Turk races, and in spite of the many advantages which it possesses, in the matters of commercial activity, education, and enlightenment, which the author had opportunities of witnessing both in public and private life during his brief sojourn in Khiva, only inspired in his mind a feeling of disgust and aversion. In the public life of the capital of Russian Turkestan the Tadjik is mostly to be met. His zeal and energy make him appear full of business in every place; in all the streets and squares, in all the bazaars and *caravansaries*, he carries on his affairs, his barter, and his trade. But in private life he shuts himself within his earthen walls, so that one has seldom the good fortune to have a glance into the unsightly, dirty, and dark mud chest which serves him as a habitation. As in the case of the Uzbeks, it will be scarcely possible to give any satisfactory details as to numbers.*

The KURAMA or KURAMINZES take their name from the old Kurama, now Tashkend circle, in which the administrative

* Wenjukow reckons for all Central Asiatic countries about 900,000 Tadjiks, of which number 215,000 were to be counted for the Russian territory (inclusive of Zerafshan).

capital is situated. They form a curious mixture of the most varied elements, and, preponderating over the settled inhabitants of the Tashkend circle, they also partially dwell in the capital itself. They even give themselves out as Uzbeks, which they are scarcely justified in doing. They must have sprung from a mixture of the poor Kirghiz, who had not the means of supporting themselves by their flocks, and who settled in the neighbourhood of the Sarts, in the villages or suburbs of Tashkend, with the citizens; that is to say, the settled population both Uzbeks and Sarts, or Tadjiks. The number of the Kurama, who are neither to be reckoned as Sarts, nor as Uzbeks or Kirghiz, is estimated at from 50,000 to 60,000 *kibitkas* in the circle of Tashkend.*

The HINDOOS are scattered in small numbers over the countries of the Turanian highland, and are to be met with in Russian Turkestan, particularly in the towns of the Zerafshan district, where they are in trade, and amount, according to Wenjukow, to about 1,000 individuals. A portion of them wander about in the inhabited districts, occupying themselves with agriculture and handicraft, and forming to a certain extent the gipsies of Central Asia.

Of the Semitic race, the ARABS, AFGHANS, and JEWS remain still to be mentioned. The Afghans are chiefly found in the Samarkand district as traders or political refugees, and particularly in the city of Tashkend. The same may be said of a small number of Arabs, who are still the descendants of the first Mahomedan conquerors, and are occupied in the Zerafshan district with carpet-weaving, cattle-breeding, and horse-dealing. A good many are even said to take service in the army of Bokhara. Lastly, the Jews are scattered about in most of the towns of Turkestan as small tradesmen. They are to be recognised by their peculiar little curls, as well as by the characteristic *kaftan*, to which they are everywhere strongly attached. They are, as a rule, on a very low level, and are much despised by the natives. Indeed, so base are they considered in Central Asia, that they cannot even be converted into money as slaves in the

* According to Wenjukow = 49,000; according to Petzholdt = 60,000.

markets. The kidnappers of the steppe do not generally think it worth while to capture them for slaves, and let them go free. There are scarcely 1,000 of them in Russian Turkestan.

The PERSIANS only appear occasionally in the Russian district. They are, as a rule, slaves in Central Asia, and are caught in hundreds, particularly by Turcomans on the Persian frontier, and sent to the Asiatic slave-market. On account of their Shiite religion, they are so hated by the orthodox Sunnites that it is considered a work well-pleasing to God to torment and maltreat the Persian slaves as much as possible. In the Russian districts, where slavery is abolished and is strictly put down, many fugitive and emancipated Persian slaves have collected, who now, being naturally without any means of subsistence, seek a scanty and laborious livelihood. They came also partly from the Caucasus, and reached Turkestan by way of Siberia. The philanthropic principles of the Russians, who have everywhere most energetically opposed the system of slavery, have not been very successful as far as the Persians are concerned; for, reduced by want and misery to the direst extremities, despised and maltreated by the orthodox Sunnites, they have often been compelled to take to a predatory mode of life. Several organized Persian robber-bands have for years scoured the southern circles of the Syr-Darya district, and have already more than once attacked and plundered the Russian caravans. The ringleaders are partly liberated or escaped slaves from Bokhara and Khiva, partly prisoners from Siberia.*

We must, in conclusion, mention the RUSSIANS and EUROPEANS in general, who, exclusive of the garrisons and the few Russian inhabitants of the town of Tashkend, as well as of the Semirietchensk district, form only a small proportion of the Turkestan population. The Semirietchensk district has for the most part belonged for a number of years to Russia, so that there has been ample time by degrees to found villages and to establish permanent settlements. But, in spite of this, the Russian inhabitants have hitherto formed, even here, only a

* They committed the well-known robbery on the Russian caravan on the Khokand frontier in 1873.

trifling element of the entire population. As we have seen, the number of the Russian settlers in the country amounts to about 27,400. The Syr-Darya and Zerafshan districts have, up to the present day, had no Cossack settlement, or, if so, but a very scattered one; later on, one may reckon upon a species of colonisation from the discharged and married non-commissioned officers and soldiers. A great number of women and girls annually accompany the transport of the reinforcements from Orenburg to Turkestan. The Russians, not including the garrisons, form the majority of the inhabitants of Fort Kasalinsk (2,950 of both sexes), and Perovsk (3,400 of both sexes), as well as the little forts of Julek (16 of both sexes) and Fort No. 2 (8 of both sexes). Moreover, the population of the capital of the government is said to contain a considerable European element. According to Lerch, in the year 1868 the Asiatic portion of Tashkend included 76,092 individuals of both sexes,* among whom there were only 38 Russians and 610 Tartars from Russia. But the Russian quarter, according to a census of the year 1871, is said to contain 2,073 inhabitants of both sexes, among whom are 1,289 Russians, 110 Germans, and 18 Poles, not including garrison troops. Besides these, 46 individuals were set down as Danes, Swedes, Finns, Frenchmen, Englishmen, Grusins, Moldavians, Persians, and Bashkirs.†

In conclusion, it may be remarked that the statistics of the area and population given in the summary have to be amended, owing to the recent additions of territory in Turkestan and in the Zerafshan district, and the gain of the mountain country of Farab, Maghian, and Kishtud, which was the result of the Abramoff expedition in 1870, and also owing to the enlargement of the Semirietchensk district, by the acquisition of the Kuldja or Ili district in the year 1871. As far as our knowledge of the first-named mountain country enables us to go, about 640 houses, with their inhabitants, have been added to the administration of Samarkand; and, besides these, several districts in the imme-

* 41,377 males and 34,715 females.

† According to Lerch the Russian quarter contained altogether 2,073 inhabitants of both sexes.

diate neighbourhood have become tributary to Russia. Lerch includes in the peoples of the Kuldja district the so-called Taranchis, the Dungans, Chinese, Mantchus, Sibos, Calmucks, Kaïssaks, and Kara-Kirghiz. Their total may amount to about 12,000 families of the settled, and 10,000 tents of the wandering, population.*

If we combine all the statistics of the numerous and varied populations, we may estimate that of the whole of Russian Turkestan, at the beginning of the year 1873, at about 1,670,000 individuals of both sexes, inclusive of the newly acquired Kuldja district; and at 1,780,000 individuals of both sexes, if the nomad and settled populations are included.† According to this calculation, apart from the Ili district, there are about 104 persons to every German square mile; but it is to be borne in mind that the settled inhabitants are almost exclusively limited to the few towns and watered plains, while the whole of the remainder of the district, in its enormous extent, is only traversed by the wandering nomads, and has no fixed settlement. An endeavour has been made in the preceding table (pp. 255, 256), in accordance with the area details of Strelbizki and the division into government circles, to give the number of the population both nomad and settled. But this division could not be adhered to throughout, as—for example, for the Zerafshan district—statistical data were only to be found relative to the inhabitants in general, without any distinction between their settled and wandering habits. The numerical notes given in the table, which are chiefly taken from Lerch's list, aim only at presenting a general picture of Turkestan affairs, and cannot therefore lay claim to any precise statistical completeness—a thing which is still impossible, owing to the brief period of the Russian occupation and administration. The different sources of statistics on Turkestan, moreover, agree very little on this subject.‡

* According to Lerch, and also according to the "*Russian Review*" this would give a total of 100,000 inhabitants.

† These figures are only approximate, and are based on supposition.

‡ Strelbizki in his "Tables" of 1875; the *Suvorin Almanac* of 1875;

In spite of this motley mixture of populations and of their different interests, and their various customs, tastes, and habits, it may generally be said of the Turkestan people that, since its subjection to Russian dominion, it has yielded peaceably and quietly to the new order of things, and as a rule, if we except the fanatical priesthood, has learned to acknowledge the benefits which a European administration has conferred upon it. With a wise moderation, the nomad population has not been curbed in its instinctive leaning to freedom and independence; it continues to live according to its old customs and traditions, and now enjoys, under Russian protection, the assured possession of its property, which is at last removed from the cupidity of the steppe robbers and from the arbitrariness of oppressive tyrants. Even the Tadjiks and Sarts can only have gained by the change of the political situation. Owing to the stimulus lent to commerce and industry by the numerous wants of the Russian troops and settlers, their prospects of new barter and profit must have considerably brightened of late. Only the Uzbek families, which have been shorn of their power and influence, can have felt displeasure thereat. These, in order to avoid subjection to Russia, have partly returned to their beloved wandering existence, partly migrated to the still sovereign Khanates; the remainder, however, seem to have yielded to the inevitable, and live, as before, in the larger towns of the Russian district. Peace and order, contentment and submissiveness, prevail, as a rule, among the Asiatic population. The robberies and attacks, of which so much has been heard of late years from the south-eastern border districts, had no political importance, but originated, as has already been stated, principally among impoverished and ruined Persian refugees and liberated slaves. Moreover, as the Khanate of Khiva, once the permanent crater of disturbance and excitement, with its fanatical rulers, remains permanently under Russian influence and military supervision, it is to be expected that the very difficult task of assimilating the mixed and various populations of Turkestan, as well as of

Terentieff, 1875; and other sources, all disagree as to the figures, and all declare they cannot give them exactly, but only on supposition.

Russifying them, will proceed without hindrance, in future years, gradually and naturally. This ought to follow all the more quickly, as it is the destiny of Russia, by the impulse lent to trade and industry, and by the increase of agriculture and civilisation, which must follow from a system of irrigation and canal construction, as well as by the training and education which school instruction gives, to accustom the unsettled, wandering portion of the inhabitants of the country to the adoption of orderly and regulated habits and manners. That such plans and arrangements are earnestly kept in view by the Government is proved by the great activity which has been shown in every department of the Turkestan administration during the last few years.*

GENERAL CONDITIONS AND STRENGTH OF THE ARMIES IN THE MILITARY DISTRICT OF TURKESTAN.

We have seen, in the foregoing chapters, how the development of the military position in the two military districts of the Caucasus and Orenburg accompanied, *pari passu*, the historical events which resulted from the acquisition of the two provinces in the course of the last century. The organization, existence, and character of the provincial war strength of those districts were direct consequences of that kind of campaigning which was required and called forth by the greater or smaller capacity of resistance, and by the defensive powers of the wild country and inhabitants. The bold character, warlike disposition and tendencies of the fanatical mountaineers of the Caucasus demanded, in the impenetrable mountain land, the entire energies of a well-disciplined regular army. Even with such an army, it was only after long years, and after many a hotly contested battle, that it became possible to penetrate, step by step and by slow degrees, to the recesses of the mountain chain. The fights in the

* These are facts, in spite of the sharply critical and contradictory opinion of Mr. Schuyler.

Caucasus, in which the enemy were provided with fire-arms and guns of every description, some of which were the same modern weapons which the Russian army possessed, compelled Russia to despatch to the scene of action the cream of her regular forces. The army of the Caucasus has been formed out of these elements, and, thanks to continual fighting, has grown into a most serviceable and well-drilled corps. But the low standard of military attainments displayed by the steppe populations of the Orenburg district did not necessitate the employment of an organised regular force, to such a degree. As we have already seen, the Cossacks alone were at first sufficient to guard the frontier, and to penetrate still further in an easterly direction. It was more for purposes connected with the garrisoning, occupation, and administration of the newly acquired steppe districts that the border troops, the line battalions (cordon battalions), were employed, and they were raised not so much for offensive operations, as for the keeping of peace and order in the provinces. Even to this day the troops of the Government-General of Orenburg are not altogether to be considered as a regular army; while, on the other hand, the well-organized troops of the Caucasus compose one of the best, or, at any rate, most serviceable and complete, divisions of the whole Russian army.

The war strength of the Turkestan military district is between those of the other two provinces. While the regular forces preponderate in the Caucasus, and the irregular (besides the local troops) in the Orenburg district, Turkestan has the advantage of both, as it combines the ingredients of the Cossack army, of the frontier troops or line battalions, with those of the regular active army. The troops are armed with the newest weapons (Turkestan rifle brigade, artillery brigade, and sapper company), and are tolerably well prepared for active service, countless expeditions and campaigns having taught them to work well together. The development and organization of the Turkestan troops have also progressed in proportion to the growth of Russian conquest and territorial acquisition, which has taken place only during the last ten years, and is, therefore,

still far from being concluded. The military situation, as well as the civil administration, of the country must only be regarded as provisional, and it is in most cases difficult to pronounce a definite opinion respecting them. The account which we gave in the introduction of the progress of historical events shows the manner in which the Turkestan forces were gradually extended. At the first start, the warlike expeditions on the Lower Syr were undertaken with the troops of the Orenburg district, with the infantry of the Orenburg line or frontier battalions, and with the cavalry and artillery of the Orenburg Cossack army. But it was soon discovered that on the banks of the Syr, in the cultivated and thickly populated portion of Turkestan, the Russians had to deal with another and far more powerful enemy than they had met with before in the rude and undrilled horsemen of the steppe, who, without intelligence and without means of defence, sought safety solely in an offensive encounter with cold steel, and were totally unable to offer any effectual resistance to the fire-arms of the Russian infantry. With the occupation of the mouth of the Syr, and the advance of the Russians beyond that river, an entrance was effected into the region of the Khokand district, where the inhabitants had dwelt for centuries in well-built towns and villages, in strong citadels and forts, and were able to offer a tolerably well organized opposition to the Russian troops. Besides the wild cavalry bands of the hostile populations of the steppe, larger and compact masses of troops were here opposed to the Russians and they possessed also an infantry furnished with fire-arms, and even a kind of artillery with very primitive and home-made cannon. Although timorous in open field, in fighting for their religion and national independence they showed considerable capacity and energy when they acted as garrisons of the numerous small fortresses, which were even defended with cannon.

Although these forts, as far as the value of their fortifications and their impregnability were concerned, were scarcely on a par with those erected in the Middle Ages before the invention of gunpowder, they nevertheless formed very favourable points of

support for the defence of the Central Asian armies, which, like all Turkish troops, being only capable of work and resistance in defensive operations behind walls, offered at the outset several not inconsiderable obstacles to the advance of the soldiers of the Russian expedition, who were not to be despised either for their quality or quantity. Owing to the very unfavourable strategical position, particularly in the difficulties of communication with the rear—at the beginning of the campaign on the Lower Syr there had been no connection with the district of Semirietchensk, which at that time belonged to West Siberia—the Central Asian foe had allies which rendered him anything but contemptible; and even if he were not to be compared with the mild, brave, and obstinate mountaineers of the Caucasus, he yet needed the formation of a very serviceable and disciplined corps, and, later on, the permanent organization of a useful army of occupation, thoroughly capable of resistance, which, just like its predecessor in the Caucasus, had to remain constantly mobilised, and prepared at any moment for marching or battle.

The elements which could be taken from the Orenburg military district were very soon, as we have stated, discovered to be insufficient. New field battalions, taken and recruited from the European army and the European provinces, were therefore formed on the pattern of those which we have named, the organization and equipment of which grew more and more like those of the rest of the Russian infantry; and even rifle battalions quite on the European model were finally formed, and the Cossack artillery, which was insufficient in numbers, was strengthened by regular batteries. The strongholds of the country were often only taken after repeated and vigorous bombardments, and in many cases at first, only after a long siege, by storming. The arming of the captured fortresses, or of those erected to insure the communication and military occupation of the conquered districts, demanded a greater number of fort guns. Thus by degrees a larger artillery *matériel* was conveyed to and collected in Turkestan, which promises, in process of time, to form the basis of a very respectable force.

It was only the cavalry of the Cossack army which came up to the requirements of the Asiatic campaign; it consisted exclusively of the *polks* and *sotnias* of the Ural, Orenburg, and Semirietchensk Cossacks. The rapid conquest of the new district, and the abnormal and strange social conditions of the country, were too unfavourable to Russian colonisation to develop with any quickness a Cossack settlement in the Syrdarya district. Even to this day there are therefore no genuine Turkestan Cossacks. The reinforcements and recruits had, consequently, to be supplied almost exclusively from the European portions of the Empire, so that the armies in Turkestan and European Russia are similarly composed. If we also consider the influence which the warlike and eventful character of a Central Asian campaign must necessarily have exercised on the composition of the Turkestan officers' corps, we shall clearly perceive that the troops of the Turkestan military district, particularly the infantry, in intrinsic value and character resemble far more the regular field army of the Caucasus than the Orenburg frontier troops. The Turkestan army resemble the regular field or active troops as much in skill, drill, and discipline, as in composition, position, equipment, and training.

We might even almost assert that, owing to the policy adopted by Russia in Central Asia, the military affairs of Turkestan have of late years enjoyed a larger share of the attention of the chief military authorities at St. Petersburg than those of any of the other military districts. The fact of the expedition to Khiva having been long recognised as inevitable may even at that time have had something to do with the particular care which was bestowed on the development of the Turkestan army, while the further progress of Russia in Central Asia, which is still reserved for the future, and is unavoidable in process of time, must entail new formations, improvements, and extensions.

If we wished to make a critical comparison between the different bodies of troops of the three military districts, which, without any particular cohesion, yet possess, to a certain extent,

characteristic and peculiar qualities, and—in their division into “Caucasian,” “Orenburg,” and “Turkestan” troops—even in private intercourse, evidently take a certain separate interest as well as a kind of local pride in their military district, we should be led too far, and into too great detail. The student of the history of the Asiatic campaigns will be the best judge of their performances and skill in warfare.

We will therefore confine ourselves to only a few observations, bearing in mind that opinions differ greatly, even in Russia, as to the resistance offered to the Caucasus and Turkestan troops by the inhabitants of the country.

No doubt has, however, ever been thrown upon the obstinacy, valour, and warlike qualities of the Caucasian mountaineers, nor on the unspeakable exertions, toils, and perils, as well as importance of the battles, often hotly contested and disastrous, which the undaunted and hardy Russian troops vainly fought for a long time amid the pathless mountains and ravines of the Caucasus. The glory of the Caucasian troops has everlastingly been established by the fame of their mighty and brave enemies, throughout the whole of Europe. But the case is different as regards Turkestan. One often hears it stated that there could be here no mention of a serious enemy, and that the armies composed of thousands of Asiatics often fled, panic-stricken, before a few Russian bayonets. But this is decidedly going too far. Although the campaigns in Turkestan have no deeds of fame and heroism to boast of, like the protracted history of the Caucasian mountain war, the performances of the Turkestan army are, in their way, just as remarkable and glorious as those of the troops in the Caucasus. In drawing any such comparison, one must not lose sight of the particular circumstances which existed in both episodes of the extension of Russian dominion.

The struggle in the Caucasus lasted for more than half a century; scarcely ten years sufficed to complete the conquest of the Syr-Darya district in its present form. But while the troops in the Caucasus had to encounter the almost insuperable obstacles of the inhospitable mountains of the Caucasus, in

Turkestan, the districts of Khokand and Bokhara lay for the most part open in the plain before them, and a great, and partly navigable river, served as a favourable line of communication. On the other hand, the Caucasus was situated on the frontier of European Russia, and had, by the Black and Caspian Seas, easy communication with that country. Climate and vegetation were in general favourable to operations in the Caucasus. The Caucasus has no really desert districts. In Turkestan all strategical matters were far more difficult. Vast and barren steppes separated the scene of the operations from European Russia, even indeed from the inhabited portions of Russian Asia, so that there was either absolutely no communication with the rear, or communication presenting unheard-of difficulties. Districts poor in vegetation, barren, sandy deserts, which afforded throughout no point of defence to the soldiers, who were surrounded by the warlike mounted bands, obstructed the exertions of the weak and small expedition corps. In the Caucasus, European Russia, being the basis of the active army, could without any particular difficulty furnish fresh supplies and reinforcements, but in Turkestan the troops always acted in complete isolation, without any other communication with the rear than that supplied by the little forts which they had hastily erected here and there in the steppe. There was not the slightest basis for operations; all had to be furnished anew. Not only was there dearth of provisions of all kinds, but they even felt the need of the most essential of all necessities—drinking-water. It was only when the greatest part of the work was done, when they had penetrated along the Syr in a south-easterly direction as far as the mountain chain, that the aspect of things grew better, and they reached the well-cultivated and inhabited parts of Turkestan. Looking at all these difficulties, the less warlike qualities of the Central Asiatic people can hardly be taken into too great consideration. It cannot be denied that in the open field the troops and armies of Khokand and Bokhara, which were often from five to ten times the number of their adversaries, some of them being well armed, and, moreover, provided with fire-arms and cannon, their *sarbasses*

corresponding in some measure to regular European troops, always behaved in a cowardly manner, and, instead of offering firm resistance to the energetic progress of the diminutive Russian forces, always sought safety in a hasty and wild flight.* But the same may also be said of the peoples of the Caucasus; for even they held their ground but seldom in the open field, sheltering themselves rather in their mountain strongholds and fortresses, and from thence falling *en masse* upon the Russian troops, who were less favourably situated. In their castles, and mud towns, the inhabitants of Khokand and Bokhara perhaps defended themselves with quite as much energy and desperate courage as did the Caucasians in their mountains. But in no case did the numerical superiority of the enemy appear so overwhelming as in Turkestan, where deeds may be recorded which will bear favourable comparison with those in the annals of all other campaigns.† The advance of the Russian troops into the southern and more easterly districts, which belong to the Central Asian chain of mountains, invested the Central Asian war rather with the character of a difficult and troublesome mountain war, as that which occurred earlier in the Caucasus. If one compares the means and the strength of the troops engaged in both wars, the performances and rapid successes of the Turkestan troops may even call forth more astonishment than the triumphs won by degrees in the Caucasus, after a long and toilsome struggle.

Now, as regards the composition of the Turkestan army, it consists, as we have already stated, of the three elements which are particularly noticeable in the troops of Russian Asia—of regular field troops, on the European model; of frontier or “line” troops; and, lastly, of irregular troops of the Cossack army. But all the three different elements can, on occasion—when they are formed into detachments—be combined into one

* See p. 58. Romanovski, with hardly 3,600 men and 20 cannon, defeated the Emir of Bokhara with 40,000 men and 21 cannon.

† See p. 54: “The Defence of the Town of Turkestan;” and p. 62: “The Capture by Surprise of the Citadel of Samarkand.” Historical Sketch, Chap. II.

body for tactical purposes. The real active field army is represented by the Turkestan rifle brigade, with four battalions of four companies each; by the 1st and 2nd Turkestan foot artillery brigades, with four batteries of eight guns each; and, finally, by the Turkestan sapper company, with 225 men. Turkestan possesses 12 battalions of line or frontier troops, which bear the name of Turkestan line battalions, and are numbered from 1 to 12. Of real Cossack troops, Turkestan only possesses the small army of the Semirietchensk Cossacks, two cavalry regiments with six *sotnias* each; but from the Ural and Orenburg armies a large contingent is constantly quartered in Turkestan, and stands directly at the disposal of Governor-General von Kauffmann. This contingent supplies about 20 *sotnias* of Ural and Orenburg Cossacks, the 1st battery of the Orenburg Cossack horse artillery brigade, and from two to three battalions of Cossack infantry, which, like that of the Orenburg military district, is exclusively dispersed into local detachments among the small forts of the province, and forms the so-called district commands. It is but rarely that Siberian Cossacks are found in the service of the Governor-General. Besides these, there are in Turkestan two more governmental battalions—Tashkend and Vernoé—a numerous *matériel* of the fort artillery, the *intendance*, staff, trains, &c.

A precise distinction between field troops, local and garrison troops, with reference to their employment, cannot be made here as is the case in the Caucasus. Here all the soldiers belong to the field troops as circumstances demand, because all the soldiers are constantly on a war footing. Therefore, among the field troops, are to be comprised all the frontier battalions, the elements of the regular army, and the Cossack cavalry and artillery. For regular work as local troops, only the Cossack infantry, properly speaking, can be reckoned on, although it can, in case of emergency, also take the field. There is no connecting tactical union for mixed arms (as, for instance, in a Prussian "division") in Turkestan, either for peace or for war. The fact that various elements are represented in the different arms, and the necessity of distributing and

dividing the troops among the numerous little forts and fortified cities, in the frontier posts and stations, have rendered larger and permanent combinations of troops, under higher commands, impossible up to the present time. The single bodies of troops, besides the rifle battalions and the Turkestan foot batteries, which have a brigade connection, are immediately under the Chief of the district, or of the Commander-in-chief, the Governor-General respectively, who directly command them. The highest tactical unit for the line infantry is the battalion; for the Cossack cavalry the *sotnia* (the designation "Cossack regiment" is used in the Semirietchensk district, without, however, denoting any really tactical connection*); for the Cossack artillery, the battery; and for the Cossack infantry, only the company, without a battalion link.

Nevertheless practice has led, in the distribution of the irregular troops, to a kind of custom, which, without being an official rule or prescription, serves as a method in all military operations and divisions. There are, as we have stated, no regulations on this subject, and the author believed that he might trace this established rule to the general and repeated garrison and cantonment distribution in the principal garrisons, on the one hand, and to the marching distribution of the troops during the campaign of 1873, on the other. The necessity of these troop combinations was here, as everywhere else, imperatively demonstrated. As they were not formal according to regulation, they were provisionally drawn up at the instance of the higher leaders of the expeditions, subject to the Governor-General.

We find, for example, such connections of infantry, artillery, and cavalry, as garrisons of the capitals and forts. They do not form the real occupying force of these strongholds, as this is composed of the garrison and local troops, and of the fortress artillery. They are a kind of mobilised and combined force, which, to a certain extent, forms an united detachment under the command of the Commandant or of the highest troop-Commander, and comprises men of all arms, each with their own leader. They

* But now the Cossacks are linked into four regiments.

are in constant readiness for a march, and can at any time be sent into the field. The same kind of detachment formation is to be found in all the expeditions. Everywhere one may perceive the attempt to form small linkings of troops, detachments, *echelons*, columns, divisions, or whatever the small corps may be called; and, independent as they are, thus to place them under orders of superior officers, so as to make up for the want of a firm tactical connection.

As a basis for the combination of such mixed detachments which consist of all these arms, the author might take the battalion, which, in the case of the frontier troops, comprises five companies, and in that of the rifle battalions four companies. In one battalion of from five to four companies, about two *sotnias* of Cossacks (with a few rocket-mounts), and half a battery of artillery with four guns, are, as a rule, to be included. A body of troops thus formed, under a high Staff-officer, a Lieutenant-Colonel or Colonel, with an Adjutant and a small staff of Cossacks, might form the minimum of a little independent detachment or garrison troop. Most of the towns have larger garrisons, and the expedition columns possess a strength three or four times as great, but similar bodies of troops are linked together in the above proportion, viz., two Cossack *sotnias*, and half a battery to each battalion.

If it be at all possible to form definite categories from these indefinite and unofficial data, one may, according to the state of things which prevailed of late years in the Turkestan garrisons and warlike expeditions, draw up four special modes, which, however, are all founded on the combinations already given with respect to infantry, cavalry, and artillery. In the first place, the garrisons of the larger strongholds of which we have spoken, must be reckoned among them, which consist of about half a battalion as a minimum.

Besides these peace formations for garrison service, and for the occupation of the country, there are similar field formations for purposes of active operations. As the highest tactical unit, we have here to consider the genuine operation column, the expedition corps (called also "column" or *atryad*, pronounced

atrad). This is under the direct orders of the Commander or Chief of the operation-troops, who is placed, with a staff of higher troop officers and staff officers, directly over the respective arms. Each arm has, besides its field officers, a special leader; and this is also the case with the artillery and the cavalry. The senior field officer commands the infantry. If the column be united, there is no particular second in command besides the field officers; but the separate corps of troops are directly under the Chief-Commander. But on the march and during the operations there is a constant distribution of sub-divisions and detachments. Then single *échelons* are formed, which are in general, according to the circumstances we have named, composed of the three species of arms, which are, on every occasion, commanded by superior officers especially appointed by the Commander-in-chief. This amalgamation is, however, only provisional, and can, as well as the leaders, be changed every day by the Chief-Commander. The linking of troops only lasts as long as circumstances require. The battalion with two *sotnias* and four guns might serve as a normal average for the combination of such *échelons*, although the *échelons* are often of smaller strength, and are then otherwise combined. On the march over the steppes and through desert districts, when scarcity of drinking-water and fodder forces the column to take separate and different roads, they frequently take to the formation of *échelons*. Such troop-linkings often last only for a few days, according to circumstances. The *échelons* then reunite with the column, under the general supervision of the Commander-in-chief; the linking is at an end, and the leaders return to their old positions. It rarely happens that when, after the lapse of a few days, the *echelon* formation is again found necessary, the old linkings and the old commanders are restored. Very often quite different leaders appear, and other companies and *sotnias* are formed, which were previously unknown to each other and had not marched together. The Commander-in-chief very often selects his leaders from the higher officers of the staff who are attached to him, and who, as often happens, scarcely know the troops, while the higher

field officers of the respective field troops are placed under them. The smallest average for the *echelon* might be one company of infantry, with half a *sotnia* of Cossacks, and perhaps one train of artillery, with even, if possible, only one gun, two mitrailleuses, or one rocket division. If it can be avoided, cavalry are not sent alone on a march, but if, in consideration of the delay which must ensue thereby, they cannot be accompanied by infantry, a few guns, or, at the very least, a Cossack rocket division, are always attached.

Finally, a kind of small independent detachment may be cited as a third formation for special fighting purposes. The same principle applies to it as to the other formations. Such detachments can be converted into an advanced guard, used for outpost service, and for the occupation of particular important points before the principal column, at its flank, or in its rear. They are in time of peace devoted to special expeditions of less note, and in Turkestan are employed chiefly as frontier garrisons on the side of the Central Asian Khanates and steppes; they also supply to a certain extent a border *cordon*, and an outpost line of pickets and double posts on the boundary line.*

In the accompanying table we have endeavoured to give as good an idea of the military power of Russia in Central Asia as the ever-varying state of things will permit:—

* It will not be without interest to learn from these facts that, even in far Central Asia, it is necessary to employ small detachments of mixed arms against a wild uncivilised enemy.

GENERAL SURVEY of the Russian Military Strength in Turkestan for 1873.

(In round numbers, approximate to the war state.)

CHIEF-COMMANDER: GOVERNOR-GENERAL OF TURKESTAN, ADJUTANT-GENERAL VON KAUFFMANN I.					
Under-Commander in the Syr district.		In the Zerashan district.		In the Semiretshensk district.	
GOVERNOR MAJOR-GENERAL GOLOWATSEW.		GOVERNOR MAJOR-GENERAL ABRAMOFF.		GOVERNOR LIEUT.-GENERAL KOLPAKOWSKI.	
Description of Troops.	Arms.	Strengths.	Companies.	War Strength.	Guns.
				Men.	Men.
I. REGULAR TROOPS.					
1. Field army					
...	One Turkestan rifle brigade (the 4th batt. in Orenburg Government).	Of 4 battalions, with 4 companies each. About 813 men (without officers).	13	2,440	8 9-pounders. 32 4-pounders. 16 mitrailleuses.
...	One Turkestan sapper company	Of 225 combatants. About 45 non-combatants.	1	970	
...	1st and 2nd Turkestan foot artillery brigades, with 4 batteries each.	{ One 9-pounder battery Four 4-pounder batteries Two mitrailleuse batteries (exclusive of 1 mountain battery).	...	...	
...	Battery with { 8 guns. 8 ammunition waggons		...	...	
...	One mountain battery belonging to the 2nd Turkestan foot artillery brigade (16 ammunition waggons).	{ With 8 3-pounder mountain guns, bronze breech-loaders.	...	2,135	8 3-pounder mountain guns.
...	Twelve Turkestan line battalions, Nos. 1-12 (with about 1,150 men each).	With 5 companies each, of about 250 men (officers and non-combatants).	60	13,800	
2. Border troops					
...	One Turkestan reserve battalion	(?) (Tsaikeul-Vernod), with 700 and 800 men respectively.	4	860	8 3-pounder mountain guns.
...	Two Turkestan governmental battalions, with 5 companies each.	Four companies	8	1,900	
3. Local troops					
...	Turkestan fort artillery	...	4	700	8 3-pounder mountain guns.
...	(Local troops with battalion-linking) officers, staff, train, intendants, sanitary, &c.	About 6 companies of Cossacks	6	1,860	
		In sum about ...	96	64	52,900

Description of Troops.	Arms.	Strengths.	Companies.	War Strength.	Guns.	Total.
II. IRREGULAR TROOPS.	i. Of the Orenburg and Ural armies are detached in the Government-General of Turkestan— (1.) About 20 <i>soisias</i> of Cossacks... (2.) The 1st battery of the Orenburg Cossack horse artillery brigade. (3.) About 6 companies Cossack infantry (besides the above-named circle detachments).	Included in the Government of Orenburg. Reckoned among local troops, about 4,500 men. Two cavalry regiments, with 6 <i>soisias</i> each (in peace 4½ <i>soisias</i>).	Sotnias. 20	Mca.	8 4-pounder rifled bronze breech-loaders. ...	1,800
	ii. Semirietchensk army (1,794 men in war strength, 676 men in peace strength).		...	13		1,800
Total war strength in Turkestan : about 95 companies, about 32 <i>soisias</i> , and 73 field guns =						25,700

According to this table, which is tolerably correct, the troop strength for the entire Government-General of Turkestan would thus amount to 25,700 men, inclusive of non-combatants, artisans, trains, &c. In this estimate, as already stated, the Cossack troops belonging to the Orenburg Government are not included, although, as they are continually serving in Turkestan, they must really be considered as belonging to the Turkestan army. In order to avoid the confusion which would be caused by counting this number again in the table of the fighting strength of the three military districts, the Cossack troops are brought together in the Orenburg list, as well as the 4th battalion of the Turkestan rifle brigade; this latter battalion is once more to be included in the Turkestan military circle, as, since the campaign of 1873, it has been stationed in the newly built Khivan fort on the Amu-Darya, Petro-Alexandrovsk, which belongs to the lately established Amu-Darya district. The 20 *sotnias* of Ural and Orenburg Cossacks, the 1st battery of the Orenburg Cossack horse artillery brigade, the six companies of Cossack infantry, and the 4th Turkestan rifle battalion might amount to about 4,300 men, who are further to be added to the above troop strength, thus giving a total of about 30,000 men. The difference which, for all that, exists between this calculation and the data of the *Suvorin Calendar* for 1875, which gives 32,010 men, may be explained, if one takes into account the crews of the Aral fleet (whose strength is given as 460 marines), the reinforcements which have arrived in Turkestan since 1873, several garrisons and circle commands formed in the interim in the Zerafshan district, and some small Cossack infantry establishments, which, owing to their mutability and undefined character, are not particularly known.

This number of about 30,000 men would have to be distributed among the three districts of the Turkestan military circuit, Semirietchensk, Syr-Darya, and Zerafshan. Although the Semirietchensk district belongs, administratively, to the Turkestan Government-General, it is, as we have already explained, strategically, completely separated from the real Turkestan section, and is scarcely to be reviewed in the Central Asian

circle of operations. The Semirietchensk district, which is divided by the Turkestan mountain-chain from the Syr-Darya district, belongs rather to the Sibero-Chinese section, as the guarding of the frontiers of China and Kashgar devolves more upon it. But for our observations, especially as regards the Central Asian scene of war of the Government-General of Turkestan, only the provinces of Syr-Darya and Zerafshan are of any vital importance. Only a few *sotnias* of Semirietchensk Cossacks and a few border troops are quartered in these districts. The Semirietchensk district troops of about 5,000 men would therefore have to be reckoned separately, and we thus have, for the real Central Asian field of operations, at least as far as we are specially concerned, for Syr-Darya and Zerafshan, the number of something like 25,000 men.

Thus, as we shall perceive further on, the great majority of these soldiers must be constantly devoted to the military occupation and guarding of the frontiers of the country on the south and south-east; and there remains but a small proportion of troops at the absolute disposal of the Governor-General, for service as field troops in independent operations. Wenjukow is of opinion that only 6,000 completely disposable field troops are to be reckoned on; but, according to our calculation of 25,000 men, this proportion would give the number of 7,500, which indeed might be about the real figure. The number seems at the first glance very small, according to European proportions and requirements with regard to field employment, but in respect to the military situation of Central Asia this is by no means the case. For, on the one hand, the character and capabilities of the Asiatic populations, which in that region constitute the enemies of Russia, are to be considered; and, on the other, the abnormal strategical position of Central Asia must be borne in mind. The Russian infantry and artillery, armed in the modern style, are in their European tactical formation so thoroughly superior to the undisciplined and unorganized bands of the Central Asian peoples, that even small columns composed of the three arms are able to cope with the large armies of the hostile Khanates. The independent *atrjads*, of which mention has

already been made, consisted, as stated in the history of the war of the conquest of Turkestan, for the most part, of 3,000 men, rarely of more than from 3,000 to 5,000 men. The same may be said with regard to the last expedition to Khiva.*

Just as for Turkestan in the campaign against Khiva scarcely 5,500 men at the most were employed, so in future operations in the south and east larger bodies of troops will rarely prove necessary; and thus the number of 7,500 men might answer all demands, if Russia were attacked on several sides at once. In comparison with the small war strength with which operations were commenced in the year 1860 and the following years on the Lower Syr, the number of the troops of the present day might even appear very large. In the year 1862 there were under the orders of the Commandant of the Syr line, who at that time was still placed under the Governor-General of Orenburg, only the Orenburg line battalion No. 4, the second half-battalion of No. 5, and two *sotnias* of Cossacks, giving a total of about 1,570 combatants with officers and staffs. Out of this modest detachment has grown in little over ten years the fine Turkestan army, which now is double the contingent of the Orenburg Government-General.†

INFANTRY.—The different strengths, as well as the general formation of the rifle and line battalions, have already been discussed in the chapter on the Caucasian military circuit. What was said there may be repeated here. The Turkestan rifle brigade, which has grown out of the former Turkestan rifle battalion, and out of the 2nd, 3rd, and 8th army rifle battalions, is now at war strength, and has thus, per battalion, 672 combatants, 48 privates without arms, on the ordinary full strength, which will, however, never be approximately reached in Turkestan. According to the normal strength, the battalion has 23 staff and superior officers, 72 non-commissioned officers, and 21 buglers, thus giving a total of 836, with 3 officers'—and 60 train—horses.‡ Moreover, for the peace strength a number

* See "Historical Sketch," Chapters I, II, III.

† See "Imperial Russian Army in Peace and War," by Lieutenant Brix.

‡ In fact, the normal strength of a battalion is never reached in Turkestan.

of non-combatants, physicians, clerks, professionals, train and officers' servants, with a total of 98 men, must also be taken into account. In a company there are, therefore, 168 men, with 5 buglers, about 5 officers, and 18 non-commissioned officers, 12 men without arms, and 8 non-combatants, to be reckoned. These figures correspond in general with the maximum of the really disposable strength; in the campaign of 1873, for example, the strength in the Turkestan column was, per company, about 140 men, 12 to 14 non-commissioned officers, 5 to 6 staff and superior officers, and 10 train soldiers and artisans. The normal battalion staff consists of a Colonel, or Lieutenant-Colonel, as Commander, one younger Staff-officer, one Adjutant, one Paymaster, one Quartermaster, and one instructor of arms (of rank between a Second Lieutenant and a Staff-Captain), one or two physicians, and one battalion bugler. As regards the Turkestan reserve battalion, which is mentioned in several military works on the formation and completion of the rifle brigade, I have been unable to discover anything accurate respecting its constitution. Whether this has been disbanded with the disembodiment of all the reserve forces, must remain uncertain. But as the Turkestan military district has of late remained exceptionally destitute of all reorganizations of the European army (compare artillery and Cossacks), one may assume that the reserve battalion survives to this day in some form or another, and the more so, as the unfavourable means of communication render the recruiting of the Turkestan field troops a peculiarly difficult task.

The formation of the 12 Turkestan line battalions is exactly the same as has been described in the section on the Caucasus. The strengths of the battalion staff have in like manner been also given. While the rifle battalions have four companies, the line battalions number five, of which the 5th forms the so-called rifle company (*strjelok*). The battalion would thus contain 2 staff-officers, 1 adjutant, 5 captains, 15 lieutenants, 5 cadets, 5 sergeants, about 80 non-commissioned officers, &c., with 900 privates and lance-corporals. The battalion staff consists of 65 men. The normal "maintenance strength" (war strength)

of the company is 1 captain, 3 lieutenants or second lieutenants, 1 cadet, 1 sergeant, 16 non-commissioned officers, 1 *capitaine d'armes*, 180 men, 6 musicians, and 6 train soldiers, thus making a total of 215 men.

The Turkestan field sapper company has a permanent strength of 225 privates, 112 sappers, and 113 miners, 5 staff and superior officers, 20 non-commissioned officers, and 6 musicians, with officers' servants, train, professionals, &c., at a normal strength of 276 men. The real field strength of the company is, however, much smaller, as a large proportion of the ordinary strength remains behind in the garrison. In the campaign of 1873 the sapper company marched out with about 170 men, 14 non-commissioned officers, 6 officers, and 10 artisans, making a total of 200 men. The company has no regularly formed engineer park. The necessary material is to be found in the dépôt of Tashkend; pontoons and other trains are especially formed for field service, and, for the most part, with hired camels and other beasts of burden.

FORT ARTILLERY companies, and fort artillery administrations of the second class, are to be met with in Tashkend, Vernoe, and Chinaz. The war strength of the company is about 200 privates, with five officers and ten non-commissioned officers. In Fort Perovsk there is, moreover, a fort administration of the third class, with one company of 150 men. The fort artillery administration has four officers, or officials, and 25 men. The companies we have mentioned are under the fort artillery administration, and form the service of the guns, and, partly, the occupying force of the strongholds, where they also work in the laboratories.

For the performance of home service, police, &c., there is a GOVERNMENTAL battalion of 700 men, with four companies, permanent strength, in Tashkend, and one of 500 men, with two companies, in Vernoe. The Military Governors of the respective districts superintend the service as chiefs of battalion; and, besides these, the battalion has three captains and three superior officers. The circle or local detachments in Turkestan are almost exclusively formed of Cossack infantry. In the

Semirietchensk district, there are three detachments; in the Syr-Darya district, seven detachments. The latter are formed of the Cossack battalions of the Orenburg military circle. Their composition is not a particularly fixed one, and it would be difficult to give any accurate details respecting them. Of the Orenburg Cossack army, there are about two to three battalions in the Syr-Darya district without any battalion connection.

The regulation equipment of the Turkestan foot soldier is like that in general use in the whole Russian army, and, as we shall perceive later on, a distinction is only made between the various arms, by different facings and buttons on the coats, and by different leather material. The men of the rifle battalions have, as particular marks to distinguish them from the field infantry, collar, stripe on the cloak, and trimming of dark green, epaulets of crimson, with the number of the battalion, yellow buttons, and black leather. Besides this regulation dress, the Turkestan infantry has an especial summer attire, which is quite different to the light dress of the Caucasian army already described. While there the linen smock-frock of officers as well as of privates is almost exclusively worn, when they are off duty, they, moreover, retaining all the remaining prescriptive articles of equipment—the Caucasian troops, with the exception of the officers and a portion of the non-commissioned officers, did not take their smock-frocks with them in the campaign of 1873—the summer equipment of the Turkestan infantry, which according to regulation is worn on service, consists of a very peculiar dress, which is a deviation from the usual form. The abnormal conditions of the climate, especially the great difference between the day and night temperature of the Central Asian districts, have here procured for the Russian soldiers many reliefs and deviations from rules which are otherwise very strictly observed in the Russian army. Here we shall briefly confine ourselves to saying that the field attire in summer (as in the campaign of 1873) consists of red-coloured broad leather trousers, pantaloons such as the Kirghiz wear, which are

stuck in shank-boots, and of a white, or rather grey, tick smock-frock, of the length of a short shirt, like a German waggoner's smock-frock, which is provided on the shoulders with flaps, on which the marks of the company and battalion are placed. The smock-frock is bound about the hips with a black leather thong, on the front of which the two cartouch pockets are held, one on each side. The head-dress is composed of a *képi*, with a very long, broad top, cut in an angular form, according to the French pattern, which, if of cloth, is provided, for protection against an Asiatic sun, with a white covering of linen, but often consists entirely of a kind of ticking. For the defence of the nape of the neck, a so-called neckcloth (Russian travelling-cloth), also of linen, can be knotted on to the back part of the *képi*. The infantry soldiers thus equipped have no side-arms, with the exception of the sappers, who, however, generally carry field axes or other camp instruments, and a larger forage bag of linen, at their side. The remaining articles of equipment, as knapsacks, liquor-flasks, &c., are similar to those of the whole Russian army.

As regards the arming of the Turkestan military circuit, this is the best of all the three circuits of which we have treated. The Turkestan rifle brigade and the sapper company are provided with the Berdan weapon, of the newest make and of small calibre (range of shot, 1,500 paces). The line battalions carry the Carle weapons, which have been partly changed from old Minié muzzle-loaders to breech-loaders (range of shot, 600 paces); the rifle companies, the so-called Strjelki arm (range of shot, 1,000 to 1,200 paces). All the local troops, as the governmental battalions and circuit detachments, are armed with smooth-bore muzzle-loaders, which are mostly taken from the old stocks of the European field army. Particularly in the Cossack infantry does one often find a curious mixture of different old systems. The bayonet is, as a rule, constantly borne fixed to the weapon, but an exception is afforded by the rifle battalions, which, since the introduction of the new Berdan arm, carry the bayonet in a small leather sheath at the side, and by the sapper company, which carries as a side-

arm the *tessak*, a two-edged knife, without the sheath. The musicians and non-commissioned officers also have the *tessak*. Sergeants and musicians carry pistols instead of the gun; and the former, as well as all the officers, revolvers and trailing sabres in black leather sheaths.

ARTILLERY.*—The equipment and arming of the artillery are, for the two Turkestan foot brigades, as well as for the single Orenburg Cossack horse artillery battery, similar to those previously described; the men have also here the shortened dragoon sabre, or the Cossack *shashka*, and pistols with ten cartridges of ammunition. The Cossack battery has eight bronze rifled 4-pounder breech-loaders, with wooden side carriages. The two Turkestan foot artillery brigades have four batteries each, with eight field-pieces. The 1st foot artillery brigade has a battery of 9-pounder bronze breech-loaders of the newest pattern, with the German rifle system, the simple prismatic Broadwell match-lock, and iron side carriages; two batteries of 4-pounder cast-iron breech-loaders of the Krupp system, with the cylindro-prismatic round bolt-hold; one battery of mitrailleuses or quickly firing guns, Berdan model, calibre 0.42 inch, with 10-inch steel barrels, and the newest improved Nobel model, both systems with very light and easily transportable steel carriages and high wheels of steel. The 2nd foot artillery brigade is composed in the same manner, only that instead of the 9-pounder battery it has a mountain battery with eight mountain guns, 3-pounder rifled bronze breech-loaders, with conical hold and iron carriages. The mountain battery has, differing from the remaining batteries, 16 ammunition waggons with 14 chests packed on beasts of burden. The guns of both 8-pounder batteries have iron side carriages. The shot used by the Turkestan artillery is like that mentioned in the Caucasus section: ordinary grenades with percussion fuses, the so-called "field fuse," according to the German model, shells, shrapnel, and cases of grape-shot (partly grape of the old pattern with a separate charge).

* The artillery of the Turkestan and East Siberian districts was excluded from the reorganization of 1873.

The fort artillery in Turkestan have no particular rules for arming the guns. What material comes to hand is made use of as well as can be. Modern fort guns, owing to the abnormal and difficult conditions of communication, can scarcely be transported into the far East; in isolated fortresses there are even to be found Bokharan and Khokand cannon of very old type, which were captured in the Turkestan war, and are of about the calibre of the Russian 12-pounder, being bronze smooth-bore breech-loaders, manufactured by the Asiatics themselves according to the Russian model. The fort artillery consists almost entirely of $\frac{1}{4}$ -pood or 10-pounder unicorn (Yedinorog) guns, smooth-bore bronze muzzle-loaders of the old system, $\frac{1}{2}$ -pood or 20-pounder bronze muzzle-loading mortars, and 4-pounder rifled bronze breech-loading cannon of the La Hitte system, called on account of an improved carriage "lightened guns."

The mounting of the artillery is not essentially different to that of the German. The Orenburg horse battery is drawn by Cossack horses. The two Turkestan foot batteries had formerly Cossack horses, but they have lately begun to harness to them Kirghiz horses from West Siberia, which, particularly for campaigning in the steppe and the desert, are far more enduring and ready for work than the Cossack horses. The normal number is—for the 9-pounder, six horses; for the 4-pounder and mountain guns, four horses; for the quickly firing guns, three to four horses; and for the two-wheeled ammunition waggons, three horses. But for campaigns in the desert twice the number is often barely sufficient, and teams of camels must even often be called into additional requisition. In the campaign of 1873 the 9-pounders were drawn by eight to ten or twelve horses, the 4-pounders by six to eight horses, the light smooth-bore 4-pounders by four to six camels. Only mountain guns and mitrailleuses needed no addition to their teams. I even saw mountain guns drawn by a single horse.

The rocket batteries play a very important part in the field artillery in Central Asia. These are not, in ordinary times of peace, formed according to any particular strength. The

material, the wooden rocket frames, the rockets, ready manufactured in European Russia, as well as the leather cases for transport by means of the cavalry, are all prepared beforehand. In case of war the Cossack cavalry are equipped with them. In the field one troop of Cossacks under an artillery officer generally receives eight frames, which then form a rocket battery of two divisions with four frames each. Eight troopers carry the frame; the remainder carry the rocket shot in leather cases slung in thongs over the shoulder. When the battery is engaged, the troops dismount from the frames as if for battle on foot, while the rest of the train, holding the horses of the dismounted Cossacks, at the same time form a cover for the battery. These so-formed rocket batteries and divisions afford the most indispensable arm in the Central Asian campaigns, and make the Cossack cavalry, in general the Asiatic cavalry, a really independent and efficient troop. Of late it was repeatedly proposed in Russia to arm the Cossack cavalry with the light and easily-moved mitrailleuse, instead of with the rocket battery. But although the quickly firing cannon, which is much prized in Russia, and from which, in field service in a greater war, much may be expected, is, when drawn by two or three horses, as easily transported by the cavalry as any other field-gun—it does not appear to me calculated to supply the place, in any definite way, of the rocket battalions in Central Asia. The effect of the rocket shot is, on the Central Asian scene of war, above all things a moral one. The whole arming, but especially the mode of using fire-arms among the Asiatics, consists, as we shall see later on, in the endeavour to strike terror into the enemy rather by a display of fire, by noise and bustle, than by real accuracy of aim. The shots of their fire-arms, as well as of their cannon, are provided with particular contrivances, which, thoroughly prejudicial as they are to a regular flight, to the penetration, and accuracy of aim, are only intended to cause, in their course, as strange and loud a sound as possible. Regarded from this point of view, the rocket alone entirely fulfils its mission with the inhabitants of the steppe who are ignorant of war. The execution of a few well-aimed rocket shots in the

campaign of 1873 was truly striking. From three to four such shots, which make a great deal of noise in their mere progress, but especially as they soar up and burst, are, though very frequently but slightly effective in their action, often sufficient to send hundreds of troopers away in the wildest flight. Throughout the whole campaign I never perceived any real injuries or mortal wounds inflicted by them. As I have already said, this moral execution, which is by no means to be underrated, would never be brought about by the mitrailleuse, the shot of which only produce a more intensified and a stronger infantry fire.

The CAVALRY in Turkestan is exclusively supplied by irregular troops, and consists of the *sotnias* of the Orenburg, Ural, and Semirietchensk Cossack armies. A description of the Cossacks was superficially given in the Caucasian section, and more fully in that on Orenburg. The Orenburg and Ural Cossacks there described form, as already stated, the principal portion of the Turkestan cavalry. The Orenburg military circuit, to a certain extent, represents the place of its training, formation, and perfection—the kernel and the reserve, from which indemnification and relief are effected—while Turkestan forms the field of their activity and their application. For as the Syr-Darya and Zerafshan districts possess no Cossack colonists, the Semirietchensk army cannot supply a sufficient number of cavalry, and therefore the Cossack countries of the neighbouring military circuits must be called into requisition for the same. The Cossack *sotnias* of the Ural and Orenburg army thus ordered away are always mobilised, their period of service in Turkestan being fixed at two years. At the end of this time a relief from the Orenburg and the Ural circle respectively takes place. The reliefs must at home be formed, practised, and kept ready for the appointed term, and must compose half of the ordinary and one-third of the full strength. Thus the number of *sotnias* belonging to the Orenburg military district quartered in Turkestan alone amounts to 20, namely, 17 *sotnias* of Orenburg and three *sotnias* of Ural Cossacks. Accordingly, to the 17 *sotnias* of active Orenburg Cossacks

belong $8\frac{1}{2}$ *sotnias* of reliefs, which are mobilised every two years, and march in full mobile order to their respective relief grounds. The marches there and back of the reliefs occupy about half a year. The men of the reliefs do the march on their own horses, so that the two years' relief extends also partially to the Cossack horses. A large portion of the Cossacks, on entering the service, possess themselves by purchase of the old horses, which is certainly for the good of the service, as the horses which have been two years in the Turkestan service are more active and enduring than the new-comers, which can only with difficulty be accustomed to the new and strange conditions of climate, fodder, and water. The Kirghiz horses are, as a rule, more fit for steppe and desert duty, which leads to their being more and more employed in the Turkestan Cossack *sotnias*. Lately, too, they have begun to use, as very serviceable, the Turcoman horses of Khiva and the southern Turcoman steppes (Argamak thorough-bred and Karabag half-bred). It is the intention of the Governor-General to establish a breeding ground at Tashkend, where the cavalry horses intended for service in the steppe will be bred. Then there will be a cross of the Cossack horses with the Kirghiz and Turcoman horses of the steppe. During the campaign of 1873, General von Kauffmann bought up, for this object, a great number of stallions and mares of the Turcoman breed (Argamak), so celebrated for their endurance and swiftness, particularly from the studs of the Khan.

The reorganization of the Cossack army, which was lately concluded in European Russia (Don Cossacks), has hitherto had no influence on the Cossacks of the Turkestan circuit, although on several sides the pressing necessity of introducing numerous changes in this quarter as well, has been recognised.* The two years of service and relief are considered particularly unfavourable. No sooner have the men warmed to service in Central Asia, which is so unlike what they are accustomed to at home, than they are ordered to return to the Orenburg Government, to be relieved by young Cossacks, to whom Asiatic conditions and

* In the first place only the Ural Cossacks were to be reorganized in a similar way to the Don Cossacks.

Asiatic service are utterly strange. On the one hand, the Cossack colonisation in the Syr-Darya district, so ardently desired by the Government, is thereby rendered impossible; and, on the other, domestic affairs, cultivation, and the administration of property at home are prejudiced in a most critical manner through the two years' absence of the Orenburg Cossacks in the far south and east. The necessity of dividing the trifling number of Cossack *sotnias* as an occupying force for the numerous small forts of the Syr line, as outposts, border pickets, and flying detachments, and of separating them into a quantity of small troops, which, even severed from the *sotnia* linking, often at hundreds of versts' distance from one another, performed their duties, and for months never set eyes upon each other, had, until the beginning of the year 1873, rendered impossible the regimental connection of isolated *sotnias*. Thus the union of the Cossack troops was entirely lost, and discipline, training,—in fact, the whole service, suffered immensely. The Cossacks had, moreover, been for a long time accustomed to regimental linking, they liked it, and old traditions bound them to their respective regiments, to their deeds of prowess, and especially to their banners, of which the chivalrous Cossack is very proud, and with which he only unwillingly dispenses. Therefore, in the course of the year 1873, the regimental linkings were again introduced for the Orenburg and Ural Cossacks, so that now the 20 *sotnias* form four regiments of Cossacks. The number and the distribution of the single *sotnias* are, however, not yet definitively fixed upon, but are to be regulated according to local circumstances and the estimates of the commander-in-chief. For the present (1873-74) the provisional distribution of the Cossack cavalry stationed in the Syr-Darya and Zerafshan districts is as follows:—

- 1st Orenburg Cossack regiment, of four *sotnias* Orenburg Cossacks, in Fort Petro-Alexandrovska (in the newly-acquired Amu Darya district).
- 2nd Orenburg Cossack regiment, of five *sotnias* Orenburg Cossacks, in Fort Kasalinsk, Fort No. 2, and Fort Perovski—Syr-Darya district.
- 3rd Orenburg Cossack regiment, of five *sotnias* Orenburg Cossacks, in Tashkend, Aulie-Ata, Fort Julek, and Turkestan—Syr-Darya district.

4th combined regiment, three Orenburg and three Ural *sotnias*, of which the three Orenburg *sotnias* in Fort Katta-Kurgan, Fort Kljutschewoje, and Fort Kamennisnoest—Zerapsban district.

5th. The Semirietchensk regiment, with 4½ *sotnias*—in the Semirietchensk district.

In all there might thus be in the Turkestan military circuit 24½ *sotnias* in service, without counting reliefs. This number is, however, only correct for ordinary conditions during peace. In the campaign of 1873 *sotnias* were exceptionally despatched thither by the Governor-General from Semirietchensk and West Siberia, so that at the time when I travelled in the province, there were as many as 33 *sotnias* on service. As already mentioned, the Turkestan Cossack cavalry, which, according to their strength, might form about a division, had no higher cavalry leader. The question of appointing such an one, a kind of war *ataman*, as also of forming a cavalry division under a higher cavalry officer of the Russian field army, has often been discussed, as one of urgent necessity, in leading military circles.

The effective strength of the Turkestan *sotnias*, with reference to Cossack regiments, can be scarcely stated definitely.

As a pattern for the strength of an out-marching Orenburg or Ural cavalry regiment we have—6 *sotnias* with 21 Staff or commissioned officers, 56 non-commissioned officers, 798 Cossacks, 19 musicians; total, 894 horse or combatants, with, besides, 30 non-combatants and 3 pack-horses. Accordingly, the following might be given as the total amount of the normal strength of the *sotnias*:—150 horse (combatants), among which one *essaúl* (cavalry captain), two to three *sotniks* and *chorunshis* (lieutenants and ensigus), and seven *wiadniks* (non-commissioned officers) are to be included. But the mobilised field *sotnias* are hardly ever up to this strength. During service in the steppe, as, for example, during the campaign to Khiva, the *sotnias* contained from 100 to 125 horse, and even fewer still.

The general situation, as the development, equipment, arming, and dress of the Cossacks, was thoroughly examined in the Orenburg section (Chap. V). With respect to the dress, we may mention here that the usual summer attire, particularly in

Turkestan, is almost exclusively worn by the Cossacks, for the greater part of the year, in garrison as well as in the field and in *cordon* service. This consists, as with the infantry, of broad pantaloons of red leather (the stuff, as well as the dye, is a speciality of the local factories), which are stuck into high shank-boots without spurs. Instead of the uniform coat the Cossacks wear, like the infantry, smock-frocks partly of blue or grey tick, partly of a half-woollen greyish-black stuff, which looks like the cotton stuff called "mixed lustre" so much worn by the German people, and is very durable and effective, particularly against moisture. A leathern girdle, to which, as in the case of the field infantry, cartouch bags are attached, holds the smock-frock together in folds about the hips. The smock-frock has epaulets of the colour of the particular Cossack army. As a head-dress the Cossacks have tick caps with a peak, like the Russian officers' caps, to which, in the field, the neck-cloth already described is appended. As for the horses, their equipment consists of the Cossack saddle already described, which is a kind of block-saddle, with high double seat-cushions, very short bows; and the baggage, which comprises under-covering, housings, cloak-bag, two leather bags, forage cord, and a few tools for camping.

On the bridling (simple head-gear with a small snaffle) no value whatever is placed; the bit of the snaffle hangs, for the most part, under the horse's throat-thong, and the Cossack directs his horse almost entirely with the mouth, the feet, and, more than all, with the *nagaika*, or whip, which is generally cruelly used. The Cossack cavalry, as already remarked, when on active service, usually enter the field in connection with the cavalry rocket batteries, which are sometimes formed into small detachments. Equipped with the convenient and practical smock-frock, the broad leather trousering, the boots without spurs, the Cossack sabre borne over the shoulders on the shoulder-belt, and with a gun provided with a bayonet little inferior to the infantry arm, the Cossack fights almost as skilfully on foot as the infantry soldier. We thus recognise in the Cossack cavalry a very useful and ingenious combination of all

the three arms—cavalry, artillery, and infantry, such as is scarcely anywhere else to be found, and which is particularly adapted for steppe warfare! I was astonished to observe, and this more than once, in 1873, that the Cossack attaches an extraordinary importance to infantry tactics, and is almost more of an infantry than a cavalry soldier. At critical moments, when the enemy were vastly superior in numbers, the Cossacks always leapt from their horses, and then, making use of their bodies as a kind of wall of defence, threw themselves behind, and so, with the help of their quickly-firing weapons, were enabled to make head against the cavalry bands which poured in from all sides upon them, and which often out-numbered them a hundredfold. Even when acting on the offensive, and in pursuit, and even when fighting against Khivan infantry, I saw the Cossacks leave their horses, only to fight with greater energy on foot. This curious circumstance, which is opposed to all that is known of the essential characteristics of the Cossack cavalry spirit, may perhaps be explained by the fact that the cavalry bands of the Central Asiatics, Uzbeks, Kirghiz, and Turcomans, as regards horse material, numerical superiority, knowledge of the country, and even skill in the use of arms, are greatly superior to the Cossack cavalry. Only by fighting on foot, and by the combination already mentioned of the character of all three arms, can the Cossack become a match for the enemy's cavalry. Moreover, it was striking to remark how the Khivans, although filled with the terror of panic and with intense respect for the Russian infantry and artillery, thought little of the Cossacks, and attacked them with energy on more than one occasion in spite of their superiority. Without infantry and artillery, the Cossack troop would not be able to hold its own for any length of time in the steppe. Indeed, the Russian commanders abstained from placing outposts or *reconnaissances* in the hands of the Cossacks. Patrols never went further than, at the most, from 10 to 20 versts from the main body. That this weakness of the Cossacks was recognised and criticised by the infantry is proved by a joke, which I have often heard repeated in the tents of the foot-soldiers. The

Cossack troopers are called, in mockery, "Koschomki" by the soldiers, the word being derived from *Koschma*, like *Woylach* (a woollen horse-cloth), because, instead of being on the alert on outpost duty, they prefer to sleep under the above-mentioned cover.

As to the organized MILITIA, Turkestan has just as little as the Orenburg Government-General. What has been said of the nomads of that country may also, to a great extent, be said of those of this. However, it has grown more of a practice, year by year, for the nomad populations, who are naturally of a warlike character, such as the Kaissaks, Kara-Kirghiz, and Uzbeks, to take service with the Russian troops, and particularly with the Russian officers. Almost every officer has a *djigite* (guide); guides and serving warriors are to be found in all staffs, even the smallest. Higher Kirghiz chiefs also occupy posts with officers' rank. Only a few agree to enter, as Cossacks, the real strength of the *sotnia*. The Kirghiz always loves his freedom, and it is with difficulty that he can accustom himself to the severe restraints of military discipline. But these people are of great use in the service as *djigites*. The Turkestan *djigite* can worthily be compared with the Caucasian. He is far less of a servant than of a faithful brother in arms, a defender, and serving warrior, who, as a squire, voluntarily follows his *tiura** or lord, well armed and mounted, and is even ready, at any moment, to sacrifice his life for him. As orderlies and express riders the well-mounted *djigites*, who know the country well, and of whose courage, endurance, and devotion much has been related,† are of enormous utility. In the service of the Russian officers they learn Russian very quickly, and are then useful in many ways as interpreters. As coachmen (*jemtschiks*), as the *personnel* of a train, and also, more rarely, as a convoy for the transport of goods, &c., the Kirghiz are also most serviceable. Sarts and Tadjiks are, for the most part, only good as tillers of

* "*Tiura*" is the general expression by which the Central Asiatic nomads designate the Russian officers.

† See "Life in Turkestan" by Ivanow; and "Description of Russian Customs" by Karasin.

the ground, artisans, interpreters, spies, &c., and find a variety of occupation in the staffs and in the *intendance* and store offices.

The organization of the head staff in Tashkend, and of the Government and circle staffs in the principal provincial places, has been previously described. The military and civil officials attached to them are very considerable, and can scarcely be specified in definite figures. All staffs have a large crowd of orderlies, *djigites*, servants, &c., who, for the most part ready for service, holding their horses by the bridle, camp before the residence of the all-powerful Chief of the Staff, ready for the slightest sign. The higher officers hardly ever ride out without a small following. Even the younger officers are almost always accompanied by a *djigite*. In this respect the Turkestan officers cultivate, even to a greater extent than those in the Caucasus, an Oriental luxury, an Asiatic taste for splendid display. The Governor-General of Turkestan has an especial body-guard or escort *sotnia*, composed of 180 troopers from the *élite* of the Cossack cavalry, who are continually at the beck and call of the General, and some of whom constantly follow his carriage when he drives out, either at a gallop or a trot.

THE NAVY OF THE TURKESTAN MILITARY CIRCUIT.

The Aral flotilla, which finds its principal employment in ship transport on the Syr and the Amu-Darya, consists of the following ships:—

Steamers.	In service since—	Built in—	Guns.	Horse-power.	Tons.	Draught (Russian feet).
<i>Perovski</i> , small paddle-wheel	1853	Sweden ... with	3	40	140	3
<i>Samurhand</i> , paddle-wheel ...	1866	Belgium ... "	6	70	154	2
<i>Obrutscheff</i> , long-boat ...	1852	Sweden ... "	...	12	16	2-3
<i>Aral</i> { screws ...	{ 1862 }	Liverpool ... "	{ 2	40	149	5
<i>Syr-Darya</i> { screws ...	{ 1863 }	" ... "	{ 1	20	70	4½
<i>Tashkend</i> , paddle-wheel ...	1870	Russia ... "	1	35	95	Over 5
Total: 6 steamers with	...	...	13	217	624	

Old Sailing-ships.	In service since—	Built in—	
<i>Astolans</i> , old sailing-ship, wood ...	1847	Orenburg ...	First ship on the Sea of Aral. Butakow expedition. With 156 tons.
<i>Constantin</i> ...	1849	" ...	
<i>Michael</i> , trade vessel ...	1847	" ...	
Floating-dock ...	1860	" ...	

Nine long-boats or barges as train-ships for the six steamers (in active service, with one gun each).

Total:—19 ships, but among them only 6 steamers, with 217 horse-power and 624 tons, and 9 barges with 13, or 22 guns (if the latter 9 are included), which are fit for active service, and form the real flotilla. The normal strength for the equipage is 460 marines; not including sailors and officers. The ships which compose the Aral coast-flotilla are not war-ships, but simple war transports for coast defence, for the transport of troops and army material, and for the support of military operations on the Aral Sea, the Syr, and the Amu-Darya. The steamers are scarcely to be distinguished from the ordinary passenger river steamers which are in use on most European rivers. The guns stand free upon deck, the crews have no covering beyond bulwarks, ammunition and powder-magazine lie above the water-line, and the boilers of the machines free and open above deck (the *Aral* and *Syr-Darya* partially excepted). The *Syr-Darya* and the *Amu-Darya* are both very shallow, at their entrance into the Sea of Aral, particularly in a dry season, there is often not more than three feet of water, and even this, owing to the numerous sand-banks, is not to be depended on; for the navigation of such rivers, the employment of small, broad, and very flat ships, with a draught of from two to three feet at most, is an absolute necessity. These flat and, for open sea under normal conditions, quite useless vessels must be ex-

clusively used for service on the Sea of Aral. Considering the slight use which has hitherto been made of the flotilla in Turkestan, and the immense difficulty and cost of bringing ships, in pieces, from England and Sweden, the construction of special sea and river ships would not, under such circumstances, have been advisable. To put into active service really seaworthy transports with considerable draught, which would only be serviceable on the Sea of Aral and would not be able to enter the Syr, would have been a matter of impossibility, because the Sea of Aral, up to the present date, possesses no adequate harbour, not even one inhabited spot on its coasts where ships could winter. With the beginning of winter all the ships have to run into the Syr-Darya, in order to winter in the roads of Kasalinsk. Repairs can only be executed in the dock of Kasalinsk, where alone the arming, equipment, and provisioning of the ships is practicable. If the reader remembers, in the description of the Sea of Aral which we have given, the wild character of this inland sea, rendered doubly unfavourable to shipping through terrific storms and the strong roll of the waves, he can easily understand the trifling value of the Aral flotilla, and the inhospitable conditions to which the local marine is exposed. Coal is, indeed, not wanting in the Turkestan district. But the mines are as yet little worked, their *exploitation* is scarcely begun, and the expenses of the transport of coal from the distant Khojend district are still so great that this commodity has not come into use for the heating of the vessels in the Lower Syr and on the Sea of Aral. There are no real forests. The only material for burning is afforded by the tough, knotty wood of the *saksaul* shrub, which is to be found in sufficient quantities, but which, owing to its speedy consumption when burning, and to the comparatively small degree of heat which it sends out, must be taken on board to such a large extent, that the ships, even when accompanied by a barge laden with *saksaul* alone, can only make short independent voyages, and, without it, are kept fast bound at the indispensable wood-stations, which are looked after by isolated Kirghiz on shore. This is bad enough on the open sea ; but in the shallow waters

of the Syr, which are intersected by countless so-called shifting sand-banks, and particularly in those of the Amu-Darya, it would be very serious, as only a small overload, caused by wood for burning, hinders the free passage of ships which draw scarcely three feet. In the latest voyage of discovery on the Amu-Darya, in the summer of 1874, the whole cargo had often to be disembarked in order to render further progress possible. Although the *saksaul* is in every respect an insufficient heating material, the cost of procuring it is considerable in consequence of the necessity of establishing and keeping up numerous wood-stations. In the Syr-Darya district a pood of *saksaul* is sold for 5 to 7 copecks, and in the Khanate of Khiva 5 or even 10 to 15 copecks per pood were asked. Perovski on the Amu-Darya, in the Stalyetoff expedition, used daily 150 to 200 poods, which thus amounted to 20 roubles. From Fort Nukuss on the Amu to Kasalinsk Perovski bought, in the country alone, 7,000 poods of *saksaul*, thus entailing an expense of 600 to 900 roubles.* As the principal duty of the Aral flotilla will be to keep up communication by means of the Sea of Aral, between the Amu-Darya and Syr-Darya, the newly erected fortresses of the conquered Amu-Darya district, Petro-Alexandrovsk and Nukuss, and the Government of Turkestan, and thus to free the land of Khiva, which is surrounded on all sides by impassable deserts, from its isolated position, the disadvantages we have mentioned with respect to the draught and the construction of the ships of the local administration will bring about real and serious difficulties, if Russia be not ready to sacrifice immense sums, to build harbours, and to construct special Aral, Syr, and Amu flotillas, each independent one of the other. The attempt to navigate the Amu-Darya as far as Fort Petro-Alexandrovsk with the *Perovski*, not far from the capital of Khiva, was actually crowned with success in the summer of 1874. But, in spite of the small draught of the ship, the experience was so disagreeable, and the difficulties, particularly with regard to burning materials, were so great, that it will be neces-

* Lieutenant-Captain Brjukow: "Correspondence from the Amu-Darya," 1874.

sary to abandon the regular employment of the Aral ships already existing, and to proceed to the building of special Amu ships. So long as this is left undone, it would be useless to think of a profitable ship-traffic on the Amu-Darya. Of the ships belonging to the Aral flotilla which we have named, only the *Samarkand* and the *Perovski* are good for sailing on the Amu-Darya, as all the others draw too much water. Besides, the old *Perovski*, which, as already stated, opened, with the little long-boat *Obrutscheff*, in the year 1853, the traffic on the Syr-Darya, and for long years—latterly together with the *Samarkand*—almost alone performed the river service (in 1873 and 1874 on the Amu-Darya), is already so worn and battered, that for the future the *Samarkand* will be the sole means of transport for the Amu-Darya, although, on account of its great size and width, it is even less adapted to this work than the *Perovski*.

For the real sea service the *Aral*, *Syr-Darya*, and *Tashkend* are exclusively employed. But how far these ships are seaworthy, although they are all still serviceable, might appear a matter of doubt. I have not been able to see any of the ships on active duty; some lay in the roads at Kasalinsk. In any case it seems curious that none of these ships were sent in the Khivan expedition, as well as in the expedition of 1873-75, and in the scientific expedition of the year 1874, although they might have been employed in keeping open communication between the Syr-Darya and the mouth of the Amu-Darya. Since the year 1873 this important service between Kasalinsk and Khiva has been exclusively performed by the *Samarkand* and the old *Perovski*.

The mode in which these two war-steamers, which were really only constructed for river traffic, are managed is, in consequence of the unfavourable state of things produced by the necessities of a small draught and by shallow water, totally different to that usually pursued. The ships are scarcely in a position to undertake independent voyages, but are accompanied by one or two barges which they take in tow. Crew, arms, provisions, and fuel must, most exactly computed and counted,

be disposed on the barges, so as to remove the load from the principal ship and keep it at a light draught, a thing which is absolutely necessary for entering the Amu delta and the main stream. The larger portion of the crew, marine troops, provisions, and fuel must be taken in the barges. These are about 50 feet in length—open towing boats with iron plating, fitted with two masts and the rigging of a sailing vessel. They have no particular stowage room for crew, horses, and material. In the transport, especially in that of horses, wooden partitions and scaffolding are introduced. The barges are, when on ordinary peace service on the Amu-Darya, armed with one 4-pounder each. The cannon stands on the small fore-deck on the side, mounted on a small, raised iron carriage.

The arming of the war-steamers consists of 4-pounder bronze rifled muzzle-loaders (*La Hitte*), which stand on a moveable block carriage free upon deck. The *Perovski* and *Samarkand* have, besides, smaller rifled cannon of lesser calibre, like the 3-pounder mountain guns, with grape-shot. The 4-pounder marine guns have grenade and grape-shot. The crew consists of 460 men, only two-thirds of whom are combatants, with about 20 officers. They are armed with rifled 7-line arms and cutlasses, and their summer costume resembles the summer dress of the Turkestan infantry, which we have already described. The linen attire of the sailors is like that everywhere in use. Heat, night dews, the noxious exhalations of the river lowlands and swamps, but, above all, the countless poisonous mosquitoes and flies, make the marine service in Central Asia very severe work indeed. The condition of the health of the sailors is therefore said not to be good, and the men suffer very much from fever and eye-diseases. Chief of the Aral flotilla, with residence at Kasalinsk, is the second class* Captain Sitnikow, so well known from the campaign of 1873, who, on his part, is directly under the Governor-General of Turkestan. Kasalinsk offers the sole station for the flotilla, and here are to be found fleet depôt, arsenal, wharf, docks, &c. The place for the repair of ships in Kasalinsk has a steam-

* With the rank of a Lieutenant-Colonel.

machine in action. The admiral's ship is to a certain extent represented by the *Samarkand*, which is, in an elegant and luxurious manner, provided with every conceivable comfort, and can compare with any European ship. The principal fuel for the Aral river flotilla, the *saksaul*, is procured by means of wood-stations ranged along the course of the Syr-Darya, and the coals are got from depôts, which are established on the mouths of the Aryss. For the service on the Sea of Aral and the Syr-Darya about 350,000 poods of *saksaul* and 40,000 poods of coal are consumed yearly.

In order to give an idea of the management of the Turkestan war-vessels, we shall here mention the formation of the small flotilla, which, under the command of the undaunted Captain Sitnikow, took part, in the year 1873, in the campaign against Khiva, and luckily penetrated into an arm of the Amu delta, the Ulkun-Darya, as far as the neighbourhood of the Kuschkana-Tau, about 50 versts from Kungrat.

The flotilla consisted of the gunboat *Samarkand*, with one barge, and of the *Perovski* with two barges in tow. The *Samarkand*, a paddle-wheel steamer, of broad, flat build, and constructed exclusively for river traffic, carried the ammunition and powder-magazines above the water-line, and the boiler of the machinery free above deck. She reached the Sea of Aral for the first time in the year 1873, and was armed with six guns. The two 4-pounder rifled bronze breech-loaders (La Hitte) stood each on one side, placed free upon the fore-deck; four little 3-pounders above on the paddle-boxes. The barges, two-masted, had two 4-pounders.

The *Perovski*, also a paddle-wheel steamer, is of longer and narrower build than the *Samarkand*. She was also armed with two 4-pounders and two small 3-pounders, and had two barges in tow, each of which was again provided with two 4-pounders. She was manned by a crew of 60 (full strength) and by 260 marines, supplied with new arms and revolvers. The charge per cannon was 175 shots; per arm, 250 shots. The flotilla thus comprised :—

	Rifled 4-prs.	Small 3-prs.	Horse- power.	Tons.
<i>Samarkand</i> , with	2	4	70	154
1 barge, „	2	..	..	30
<i>Perovski</i> , „	2	2	40	140
2 barges, „	4	..	..	60
Total : 5 ships, with ..	10	6	110	384

With about 260 men.

The historical sketch has shown in Chapter II (pp. 46 and 49), how, in the year 1847, the traffic on the Sea of Aral, which was followed, in the year 1853, by that on the Syr-Darya, was called into existence by Perovski. Although Butakoff, in the *Constantine*, succeeded in pushing into the western arm of the Amu, into the Ulkun-Darya and Kitschkin-Darya, almost as far as the Aral flotilla did in the years 1873 and 1874, yet he was prevented from reaching the head-stream at Nukuss (a feat which is only practicable by taking the eastern arm of the Yani-Su and Kuwandj-Dsherma along the Daukara lakes), by the huge blocks of stone, which narrowed the water in the neighbourhood of the lakes to such an extent, that the *Constantine* could proceed no further, so Butakoff was compelled to content himself with again following the single-mouth arm in a small boat. Since the time of Butakoff, the exploration of the Amu delta from the side of the sea has entirely ceased. The ship traffic extended principally only to the northern portion of the sea and the Syr-Darya from Kasalinsk, beyond the forts of the Syr line as far as Chinaz (see p. 240). There were no real harbours, as we have stated, on the coasts of the Sea of Aral. In the north the Bay of Perovski (Tschubar-Toraus), and in the south that of Tushtelius, form the only favourable anchorages; into the latter bay pours the only navigable, eastern arm of the Amu-Darya, the Yani-Su. It was not until the year 1873 that the successes of the Aral flotilla in the last campaign, and the establishment of Russian fortresses on the left bank of the Amu-Darya, extended

the *rayon* of traffic as far as the Amu delta—penetrating since 1874 even up to Petro-Alexandrovsk. As a partial entrance serves the middle arm of the delta, the Ulkun-Darya, which is reached through its western arm, the Kitschkin-Darya, from the side of the sea.* Large ships can only go as far as the Kara-Kul (lake) in the neighbourhood of the Kuschkana-Tau, from which, partly by land, partly with the small *kajiks* or flat wooden boats of the natives (particularly Kara-Kalpaks), which are propelled with difficulty up the strong river, communication can be kept up with the Kungrat district on the one hand, and with the Tschimbaier district and Nukuss on the other. A permanent station for the fleet has therefore been formed at the Kuschkana Mountains since the spring of 1873. The second real entrance to the head-stream of the Amu-Darya leads through the Bay of Tushtelius, up the Yani-Su, as far as the Daukara lakes. Through the Kara-Tum and Kungrat lakes, past the small and old fortress of Kilidsch-Kala, goes the road to the broad Kuwandj-Dsherna, and reaches this point up the Amu-Darya, a few versts to the south of Nukuss, somewhere parallel with Khodshaili. From here the navigable channel becomes very shallow and dubious, although, in the year 1874, the steamer *Perovski* succeeded, after many efforts and difficulties, in steaming up to the neighbourhood of Petro-Alexandrovsk. For the establishment of stations, especially for wood and provisions, in this district, the mouth of the Yani-Su in the Bay of Tushtelius, the Daukara lakes, Kilidsch-Kala, and Nukuss might be used later on. But the district would only attain to importance if steamboats specially constructed were able to overcome the difficulties of the unfavourable depth of the navigable channel. Absolute hindrances would in this case be spared to traffic up the Amu, which may now, thanks to the numerous *kajiks* of the Khivans, be considered very considerable.†

* See Map.

† Of the rapids near Kiptchak, of which Vambéry speaks, the author, in 1873, did not find any traces, nor do the reports of the scientific expedition of 1874 mention them.

The excessive importance of the communication between the Syr-Darya and the Khanate of Khiva by means of the Amu-Darya leads one to expect great changes and reforms in the little Turkestan marine, and recently, a number of iron boats, specially built for the navigation of the Amu, are said to have been sent, by way of Orenburg, to the Syr-Darya.

After having endeavoured to give a survey of the collective land and sea forces of the Turkestan military circle, it only remains, in conclusion, to say a few words respecting the general condition of the local garrisons and cantonments. The Russian garrisons in Turkestan are the youngest in the Russian Empire. Their formation dates from the last ten years. Here, too, there are everywhere circumstances and conditions which are only in the state of origin and development. We have already seen how the distant and isolated situation of the province, and the numberless obstacles to the procuring of war material, and to the keeping the full complement of the army for the development of military affairs, caused exceptional difficulties to the authorities. Only the greatest sacrifices rendered it possible to bring the Turkestan army even to its comparatively very small temporary strength, and to retain it at this standard after the most pressing demands. The uncertain hold upon a very mixed and newly subjected population, among which the Russian element is totally insignificant; the vicinity of the Uzbek Khanates, the attitude of which towards Russia has never been very trustworthy; and, finally, the position of the Russian borders, exposed to the unsettled steppe populations, which were partly addicted to robbery—all required the whole watchfulness of an army arranged with careful attention to strategical considerations. The fighting strength, although numerically inconsiderable, had to be distributed along the extended area of the entire country; this necessary subdivision of the forces could be met only by strategy, and by the establishment of a large number of firm points of support and forts. This was the origin of the many Turkestan fortresses, strongholds, and towns which form the garrisons of the Turkestan army, and which alone allowed the little force to fulfil its

arduous and dangerous duties with the most happy results. The origin of the first fortified *étappe* line on the Syr, the so-called Syr line, has been explained in the historical sketch. Its extension was a necessary consequence of the progress of the power of Russia in an easterly and a southerly direction. At the present time the Syr line stretches from the Sea of Aral to Khojend, comprising a continuous chain of fortified *étappes*, forts, or Asiatic towns strengthened by modern fortifications. The first points of support, as Fort Aralskoye, Fort Kassala (Fort No. 1), Fort Karmakchi (No. 2), Fort Perovsk (No. 3), Fort Julek (No. 4) have only recently been established, and form temporary fortifications of Vauban *tracés* and large and carefully constructed earthworks. In the further progress to the east, suitable and sufficient points of support were found in the larger cities, all of which were provided with Asiatic fortifications, with a double, often triple, rampart of earth, with trenches and a tolerably strong citadel. The Russians forebore, as earlier on the Lower Syr, from demolishing the captured forts of the enemy, and from giving them up to annihilation and to flames. On the contrary, they sought to spare, to improve, and to keep up the Asiatic fortresses they had gained, as far as they possibly could. The earth rampart, with the inner citadel of the towns, remained partly in its old form. The citadel was rebuilt according to the Russian plan, enlarged, and armed with modern cannon. Thus very soon the original Syr line, which at first had only consisted of Forts Nos. 1, 2, 3, and 4, was increased by the firm points of support of Turkestan (Azret), Chemkent, Tashkend, New-Chinaz, Khojend, and Uratiube. With this head line was afterwards connected, to the north, the Semirietchensk border line, which is represented by the firm points of Aulie-Ata (Tokmak), Fort Ak-Su (Kara-Kul on the Issik-Kul), Narynskoye, Vernoé, Ilezk, New-Kuldja, Kopal, Sergiopoli, and the strong position on the Musrat Pass;* and to the south, the Zerafshan line, formed through the points of Jizak, Samarkand, Pianjakent, Katta-Kurgan, Fort Kljut-

* To obtain a clear view, Petermann's splendid map of the central parts of the Tian-Shan ridge will do good service.

schewoje, Fort Kamennimosst, &c. In the small earthworks provisionally set up, at first containing only the most necessary dwellings for the officers, barracks for the men, and magazines for provisions, an active mode of life was soon developed. Artisans and tradespeople were attracted by the garrison and its requirements, wine and other shops, and, finally, spacious and convenient dwellings for officers and officials very soon sprung up, so that now very respectable communities surround the common earthworks. A similar transformation was displayed by the Asiatic towns, such as Tashkend, Samarkand, Chemkent, Turkestan, &c., as we have already observed at the beginning of the chapter. It may in general be said that the Turkestan troops, considering the difficult social conditions and the brief period of their sojourn in the land, have made themselves wonderfully at home in the foreign country. Although the Asiatic mode of life, to which he was totally unaccustomed, the hardships by which all Central Asian cities are characterised, heat and the terrible dust, numbers of noxious vermin, such as scorpions, *phalanges*, serpents, &c., may at first have been very difficult for the novice and the untrained soldier to put up with, the whole character of the troops in their outward life makes a very favourable, pleasing impression. There is a general prosperity, a certain joyous easiness of life, an interest in the abnormal, bustling, Oriental existence, which contrast so much with the uniformity of the great Russian home, that the foreign officer is most agreeably surprised thereby.

It might not be devoid of interest to form an idea how the Turkestan army already described is distributed in the above-mentioned points of support of the country, and this will give the reader a notion how the slight fighting strength is distributed along the great distances.

The quarters of the Russian troops in Turkestan have, however, meanwhile changed.

When we consider the immense disproportion of the troops to the population, we cannot but feel admiration for the pluck and skill of the Russian occupation.

Most of the Turkestan troops remain the whole year in the garrison, only marching out for a few weeks in the summer to the manœuvres. A very small part perform, with regular relief, service on the frontier, on the so-called line. All the forts are of recent date, and have been built by the Turkestan troops, being constructed, down to the tiniest dwellings, covered spaces, and magazines, by the soldiers themselves. One may form an idea from this of the colossal work which was to be done by the Turkestan troops, beyond their legitimate warfare, they having been obliged to build anew or alter all these fortresses and new settlements. There was not a brick (to quote from the description of Ivanow) which the soldiers had not, with the sweat of their brows, themselves formed and placed ; not a beam which they had not cut and reared ; not a paper window nor a door which they had not fixed in—only, when everything was settled and rendered habitable, to go away and have to begin the work again in another spot.

Now that everything is so comfortably finished, and the most pressing requirements satisfied, one often hears, in the small garrisons, complaints of the *ennui* of the uniform, changeless garrison life. The officers have, it is true, in winter very little service to perform, and the small clubs founded everywhere of late years, the diminutive dirty wine-shops, can only offer a very limited entertainment to those who are without occupation during the winter months. But in summer, the neighbouring steppe, and the reed-grown banks of the Syr-Darya, so rich in fowl, offer to the hunter and the sportsman an inexhaustible fund of amusement and diversion. Tiger-hunting is one of the principal passions of the Turkestan officers. The gloomy pictures which Ivanow paints of the spiritless monotony of the Turkestan garrisons appear, at any rate, to be portrayed in too strong colours ; at least the pictures of the local garrison life which have remained in my memory are all of a very cheerful, agreeable, and easy-going character.

The soldiers, as we have stated, have no lack of occupation. As we explained before, the soldier provides for all his wants himself, prepares his large articles of equipment alone, and has

to take part in everything that is being done in the fort or the garrison, as skilled artisans can only, with difficulty and at rare intervals, be induced to abandon their European home, in order to exchange for it an uncertain adventurous future in the far and infidel East. The summer months are filled up by exercises, target-shooting, and small field-service practice with field-cartridges. At the beginning of autumn, which almost invariably comes in in August, the larger manœuvres commence, and extend to the month of September and the beginning of October, months which, owing to the comparative moderation of their temperature, are well suited to these exercises. The climate at this season is, in general, in Turkestan, most favourable. The writer was astonished to find the people sleeping at night in the barracks with open doors and windows, in spite of the immediate proximity of the low river country. Winter, too, brings the men a variety of occupations. A large portion of the day is spent in hours of instruction in all the branches of military service, particularly in the handling of the modern arm, and in the examination of the complicated parts of the lock. The greatest part of the winter day is, however, devoted to learning to read, write, and cipher. A larger number of the troops also go out in detachments, under the direction of non-commissioned officers, into the broad steppe, to collect grass, shrubs, fodder for the camels, and fuel. The Cossacks drive their horses out into the meadows. Thus the whole day is often passed in the open air. The men breakfast away, and only return towards evening to the garrison barracks. The Russian soldier, especially the infantry one, is never embarrassed as to the disposal of his leisure time. The chase, fishing, card-playing, song and music, smoking, games and jests of every sort, in which the curious and, generally, good-tempered native population often play a very comical and droll part, make the careless and easy-going Russian soldier very quickly forget the isolated and shut-out position of his garrison home in the midst of the barren steppe.

Some of the Turkestan troops are, even in time of peace, constantly in a mobilised condition, and, equipped for active ser-

vice, perform duty on the frontier. In the most threatened and endangered border districts of the country are ranged the so-called outpost lines, supported by small field fortifications dotted here and there. To each of these small fortified positions a definite frontier *rayon* is apportioned, which is to be occupied by a species of constant outpost line. A detachment of about two battalions, one train of artillery, and a few *sotnias* of Cossacks, have to perform service in such a small border-fort. Then the detachment places pickets and double posts, consisting of Cossacks and infantry, in the most threatened points. On the Middle Syr, as between Chinaz and Jizak, where the river bank is principally exposed to the predatory attacks of the Turcomans from the Kizil-Kum desert, the pickets have definite, constant military posts, in which small earth huts are provided for the guards as a shelter against wind and weather. The fortified positions for the mass of the frontier *cordon* are of a very primitive character. As political and military circumstances changed so repeatedly of late years, the *rayons* of the outpost line were very often altered, so that the nature of these strong points of support could never be anything but a variable one, fulfilling alone all the conditions of the most pressing requirements. The whole fortification only consists, as a rule, of a cannon *emplacement*, which, erected on a commanding height in the steppe, forms the centre point of the small military colony. A few small, miserable earth huts, with flat roofs and paper windows, are scattered, desolate and melancholy, round the hill. They afford space, barely sufficient for the utmost want, for the officers' dwellings, for hospital and barracks. The officer lives here almost as miserably as the common soldier. The barracks for the troops are very bad. They are formed, for the most part, by long, narrow earth huts, which have only small holes, plastered over with paper, for windows, and, even during the day, are in a state of semi-obscurity. In the summer these covered places are endurable, but in the winter the soldiers suffer much from climate, cold, wet, and *ennui*, so that at this season the hospitals are usually crammed. The small, wretched earth huts, which serve as a dwelling to the

few officers, are for the most part the property of the temporary occupant. On a change of garrison the outgoer leaves to his successor his little villa for a very trifling cost, which scarcely exceeds 12 to 15 roubles. The men are pecuniarily well off. They receive double the pay of the troops in European Russia. The linesman receives per month 1 rouble 40 copecks as equipment money, and 1 rouble 77 copecks for pocket money ; but all his other requirements are free. Communication between the strong points of support already described and the larger forts in the rear is often a matter of excessive difficulty, particularly in the spring, when the steppe is drenched with heavy rains and full of mud ; it is kept up by the supply transports, which, usually escorted by half a company and a few Cossacks, bring at certain times provisions, pay, post, newspapers, and news to the isolated little garrison.

Service in the wet season is often very onerous here, and the state of the men's health is proportionately bad. This explains how it is that the statistics relative to the mortality in the Russian army give, for the troops of the Turkestan military circuit, any but favourable results. For the year 1873 the illness among the Turkestan troops amounted to 14·8 per cent., the deaths to 3·35 per cent. ; in other words, we have here the highest death-rate, the greatest mortality, in all the military circuits of Russia. The causes of this may be attributed, for the most part, to the lack of nourishment, as well as to the abnormal conditions of the climate, and partly also to the water. Great heat alternates in the day with keen, continuous night frosts. The water system of the Syr-Darya, with its extensive swamps and flooded lowlands, is the home of fever. But typhus and dysentery are especially to be found in the Syr-Darya district and the neighbouring steppe districts. From the weather table which the *Turkestan News* published for the year 1873, it will not be uninteresting to cull the following details, which can serve to explain those abnormal conditions.

The monthly temperature reached, according to Celsius, in—

For—		January.	July.	October.	December.	Medium year's tempera- ture.
		Degrees.	Degrees.	Degrees.	Degrees.	Degrees.
Kasalinak	..	−13·4	+24·7	+7·1	−10·4	+6·2
Kuldja	..	−9·8	+24·8	+9·0	−3·5	+9·2
Tashkend	..	+1·7	+25·8	+12·4	+3·5	+14·0
Khajend	..	+2·4	+28·8	..	+3·4	..

From this we may remark that in the months of May and June the day temperature in the sun, or the sand, measured a good $+40^{\circ}$ to $+45^{\circ}$ R. (*i.e.*, 124° to 130° according to Fahrenheit), whilst in winter, at the mouth of the Syr-Darya and in the desert of Kara-Kum, the temperature sinks to from -20° to -25° R.

THE PRODUCTIVENESS AND RESOURCES OF THE GOVERNMENT-GENERAL OF TURKESTAN WITH RESPECT TO ARMY AND WAR REQUIREMENTS.

The fertility of the different districts which are embraced in the administrative linking of the Russian Government-General of Turkestan show, particularly with respect to raw stuffs, natural productions, growth of plants, &c., the greatest extremes. We have seen, in the introductory chapters, how the barren character of the districts on the Lower Syr, and the want of the most indispensable articles for the sustenance of the troops, were the principal means of influencing the Russian administration to extend the sphere of its power further in a south-easterly direction up the Syr, to the fertile and watered river-lands of the tributaries which flow from the right into the Syr. There, on the Lower Syr, are broad barren steppes, which go right up to the river, broken by extensive swamps and sterile expanses of desert; here, in the environs of Tashkend, Khajend, Chemkent, is beautifully watered arable and garden land, which, as regards fertility, decidedly takes the first rank among all the

districts of the gigantic Russian Empire. When Russian dominion was still confined to the Lower Syr, the conditions of productiveness of the then "province" of Turkestan were considered eminently unfavourable, and all that was needed by the troops, down to the most trifling necessities, had to be imported, with unspeakable trouble and at great expense, from a distance along the earlier-described, inhospitable steppe road. Now that the troops have penetrated into the paradise-like Zerafshan and Ili valleys, matters have totally changed, to the advantage of the Russian occupation. At the present moment the produce of the province of Turkestan might in every respect cover the requirements of the troops in raw produce, as far as food is concerned, if one passes over some isolated, exceptional cases, caused by failures of crops and murrain, which often comes with great severity upon those regions.

If we ask where the causes of these abnormal extremes in the cultivation of the country are to be found, we shall, on a sufficient investigation of Turkestan affairs, soon perceive that they depend less upon the natural character, climate, &c., of the land than upon its historical, topographical, and hydrographic conditions. The whole cultivation of the Central Asian districts is based on irrigation, which is managed by artistic arrangements in the lands which are suited to this method. How far, in this respect, local circumstances and the character and changing of the river system on the one hand, and, on the other, the life of people and State, in the course of history influenced the degree of cultivation, may approximately be demonstrated, if we call to mind the circumstance mentioned above—that, after the establishment of ship traffic on the Syr-Darya, the Russian Government, with the idea of improving the navigation, filled up a row of canals, which branched off from the principal stream for the irrigation of the steppe districts, and by thus cutting off the water-supply, laid waste whole tracts of cultivated country. The cultivation of Central Asia depends entirely upon the rivers, and the canals in connection with them, and these latter, if they are to be of service, must be preserved in their normal condition by the hand of

man. Falls of dew are so rare in the whole of Central Asia, that they are not to be counted on in agriculture. Summers have occurred in those localities during which not a single drop of rain has ever fallen. The moisture necessary to the growth of plants must be artificially brought to field and garden. Where artificial labour is lacking, culture, fertility, and vegetation fade away; and those very districts which, only a few years ago, stood in fullest and most luxuriant bloom, often even now present, after a few weeks' interval, barren and desolate deserts of sand. Large districts in the valley of the Syr-Darya exhibit traces and ruins of earlier cultivation and of a former settlement, where steppes and expanses of wilderness now lie, which can often offer but scanty fodder to the easily satisfied herds of the nomads.

As regards their productive character, the Turkestan districts, as far as they belong to the plains of the Syr lowland and have to be considered here, possess three different regions of ground cultivation: real desert, steppe, and watered districts. The genuine desert districts are devoid of produce. The steppes serve as pasture-land for the nomad population, and afford, in the tough and gnarled *saksaul*, only the most indispensable amount of fuel for the steppe forts, the outpost lines, and traffic on the Lower Syr. The entire produce of the country, as regards agriculture, is exclusively confined to the comparatively small watered districts on the Middle Syr and Zerafshan and Ili. In these regions cultivation is at a very high standard. Agriculture, which in reality assumes rather the character of gardening, is extensive, and is well looked after and practised by the settled population, particularly by the diligent, hard-working Tadjiks and Sarts. The light and porous nature of the soil (which is especially adapted to irrigation), the high temperature and great power of the sun, combined with the extreme skilfulness of the people in matters of irrigation, render the results of farming in Central Asia in the highest degree favourable. In many years a double crop is obtained, and some vegetables—as, for example, the lucerne (called by the Russians *klever*)—are cut three or four times in the neighbour-

hood of Chinaz. Of grain, wheat and winter-barley are especially to be procured in Turkestan; then rice, maize, beans, peas, and different kinds of millet, amongst which we may particularly cite sorghum, which is called *dshugara*. Of fodder crops the most important is lucerne, which is almost exclusively used in summer by the Cossacks as horse fodder, and to a certain extent represents our clover. Oats are very little sown; the Russian horses are mostly fed with barley, and also with maize. Among the oil-crops we may especially mention hemp, poppy, linseed, safflower, sesame, and the heliotrope. The cultivation of cotton, tobacco, and madder is important for trade and the equipment and requirements of the troops. In the gardens and larger field-like plantations are grown in large quantities the musk melons and water melons so necessary in Central Asia, which are cultivated in excellent kinds and in great perfection, and, besides these, different sorts of gourds (the dry shell of the bottle or water gourd is used for vessels and water-pipes, called *caljan*), onions, carrots, red and other turnips, radishes, cucumbers, red pepper, &c. Four kinds of wheat are grown. Its yield is over thirty-fold, and its price lies between 25 and 60 copecks per pood in Turkestan. Important, before everything, to the population is the cultivation of the several kinds of millet, which often give crops of 400 to 500-fold, and, on account of their cheapness (20 to 30 copecks per pood in Turkestan, in Khiva only 10 copecks), are very much used. Amongst these the sorghum *vulgare et cernum* is especially to be included, which is called in the country *dshugara* or *dshuwari*, and in Khiva *dshury*; this about corresponds with the German moormillet, or the English guinea-corn. It is cultivated in large quantities, and forms the principal and local plant. The poorer inhabitants make a dish of it, which is called in Khiva, for example, *kusia*. Otherwise the *dshugara* is used as fodder for cattle, especially for horses, and is particularly rich in straw. Rice is a very important product. It is cultivated in the neighbourhood of Tashkend, Khojend, Vernoé, Jizak, Kurama, &c., and serves, as well with the Russians as the Asiatics, as an addition to the favourite meat dish (*pilau*). Rice

is of great value as a provision for desert expeditions. It is, of course, only grown where very plentiful irrigation is practicable, and attains on an average a thirty-fold yield, fetching from three-quarters to one rouble per pood. The European edible plants, such as potatoes, rye, and oats, are only exceptionally grown in gardens by a few Russians. I myself, during all my travels, have never set eyes upon a single potato; the Asiatics do not know this plant at all, any more than they do coffee.

Greater in extent and more important for the small daily wants of the soldier than articles of Turkestan agriculture is the produce of the garden, to which the Tadjik principally devotes himself, on account of the greater profit. Even gardening, however, can only be prosecuted, like agriculture, by means of an artificial and well-managed irrigation. To the arrangement and regulation of this irrigation the whole skill of the Turkestan gardener is devoted. But little is known of artificial means, and everything is left to the water introduced, and to the fertilising, scorching sun, which bring about the most happy results. The mulberry tree, in particular, is cultivated, being planted, for the enclosure of the garden-beds or even of the fields, generally in long rows, as is the case in Upper Italy. It is especially grown on account of the value of its leaves in the rearing of silkworms, and the fruit is there but little esteemed, although it is considered a great delicacy in Khiva. It is of a red, a black, or a white colour. Before the Russian conquest wine was only made to a small extent, as the Koran expressly forbids the consumption of that article. Thus the grape is only tasted by the Asiatics in a fresh or a dried state. The dried berries form a favourite sweetmeat of the Central Asiatics, as also of the Russian infantry soldiers. During a march in the broiling steppe the taste of the small berries is said to be most refreshing to the parched palate. But in spite of the stern interdiction of Mahomet, we found in Khiva some excellent wines, respecting the application of which the embarrassed, smiling proprietor and strict votary of the Koran could give us no information. In Khiva a fine vinegar is also extracted from the grape. In the hands of the Russians Turkestan wine-

making can still acquire considerable extension. The Turkestan wines reminded us of the wine produce of the Trans-Caucasian districts. In many parts of Turkestan the vine grows in great luxuriance, although the climate requires that it be covered during the winter. The yearly produce of the wine has amounted of late years, in the vicinity of Tashkend, Khojend, and Samarkand, to about 10,000 vedros.

Turkestan is very rich in fruit culture. Fruit is obtainable in such quantities that it scarcely fetches anything, and is dried for export. It serves especially in the preparation of the dishes of the country, and is cooked with mutton, rice, milk, &c. In the Turkestan artificial gardens are grown cherries, pears, apples, apricots, peaches, plums, pomegranates, figs, quinces, almonds, walnuts, &c. In the summer months, particularly in marches, expeditions, and campaigns, the Russian soldier consumes immense quantities. Cossack and infantry soldiers vie with each other in devouring fruit. A peculiarity of the soldier, and especially of the Russian soldier, is to consume the fruit in an unripe state, an imprudence which gives rise to a multiplicity of diarrhetic complaints. We may add that the strong inclination for fruit is, in the absence of fresh vegetables, often of great advantage to the troops from a sanitary point of view, when they march for whole months through barren steppes, and taste nothing but salted mutton and salt, bitter, steppe water.

The cultivation of cotton, the most extensive growth in the southern, warmer districts of Turan, is of great importance to the trade and the industry of Turkestan. This plant has a peculiar value for the troops, as the stuffs made therefrom (not to speak of the larger quantities, which are exported into the interior of Russia), in consequence of a particular regulation of the Turkestan military administration, are exclusively used by the troops, instead of linen fabrics, for march and summer equipments (smock-frocks). The amount of raw cotton exported into European Russia is at present tolerably considerable, although the cotton cultivation, remaining as it does still principally in the hands of the Tadjiks, whose method of growth and manufacture is of a very primitive character, yet remains at a

comparatively low ebb. If, however, matters were only to be set by Europeans upon a more regular and rational footing, it might, in connection with the neighbouring Khanates of Khokand and Bokhara, acquire, in time, a very high position with regard to the commerce and industry of European Russia. Cotton is specially cultivated in the circles of Samarkand, Khojend, Jizak, Tashkend, Chemkent, Kurama, Kopal, and Tokmak. The Aryss is given as the most northerly limit of the cotton zone in the Syr-Darya district. In the neighbourhood of Tashkend American cotton is already being planted. Turkestan cotton stands far behind that of Bokhara and Khokand, both of which Khanates yearly yield large quantities. The quality of the American cotton has not, however, so far, been able to reach that of the Turanian, a fact which is to be attributed principally to unskilful management, and to incompleteness of work and cleansing on the part of the Tadjik. Notwithstanding the difficult and troublesome produce of cotton, Wenjukow calculates an annual clear profit of 90 roubles for a dessiatine of cotton land. The price of a pood of raw cotton is estimated at three to seven roubles for Tashkend, while in Bokhara, Khokand, and Khiva it is considerably less. Almost more important than the cultivation of cotton in the Russian province of Turkestan is its extensive importation from the adjoining Khanates. According to Matthai,* the whole of Central Asia is capable of producing more than three million poods, or 120 millien pounds, of cotton:—

						Poods.
Bokhara	..	..	..	..	..	2,000,000
Khiva	..	..	..	..	..	500,000
Khokand	..	..	..	..	..	300,000
District on Amu	..	..	..	..	..	500,000

and besides this, about 160,000 poods in the valley of the Zerafshan. The greatest cotton-crops fall to the Khanate of Khiva; the smallest to the northerly districts of the province of Turkestan.

The cultivation of tobacco was, before the Russian era, at a

* *Russian Review*, i, 4th volume, 1872.

very low ebb, as the Asiatics smoke in their hookahs only very poor and common kinds, and use as snuff even poorer qualities, though in every respect they prefer tobacco to opium. Since the Russians have been in the country, it has, however, made such progress that, in the vicinity of Tashkend, American (Maryland) and Turkish sorts (called there *djubeck*) are already cultivated. Tobacco is especially grown at Samarkand, as well as in the circles of Vernoé, Khojend, and Tashkend. The "Samarkand tobacco" has, under this title, acquired great celebrity with the population. More accurate information is wanting with respect to the Turkestan tobacco cultivation, which, nevertheless, gains year by year in importance, and is of great value to the province in consequence of the immense demand for it, both among Russian officers and men. The sale of cigarettes in Turkestan is very considerable.

A great difficulty in the way of the development of Turkestan lies in the scarcity of wood for building. Real forests are completely lacking to the Turkestan district. The growth of trees would appear to have reached a far higher standard at an earlier period; ancient, enormous elm trees (called in Khiva *kara-agatsch*), which are still to be found at intervals in the environs of Tashkend and Khojend, testify to a period when the culture of trees would seem, probably in consequence of a more complete water system and of a moister atmosphere, to have flourished to a marvellous extent. The building wood produced in the country has proved utterly insufficient, even for the trifling requirements of the small artillery arsenals and workshops. In order to remedy this grievous want, extensive wood-plantations are being laid out a few versts from Tashkend. In the watered districts, in the fields and gardens, grow the elm, the plantain, the ash, the alder, and the lotus tree, the wild oleaster, and several kinds of poplars and willows. In the mountain chain further to the east grows the pine, and on the western slopes of the Turkestan mountains, even to a considerable height, we find fruit trees, nuts, almonds, &c. Further to the east, near the sources of the Naryn, the growth of trees, as well as that of every species of vegetation, declines very

much. In those regions which are not artificially watered and cultivated, as on the banks of rivers and brooks, scarcely anything grows but the poplar, the willow, and the tamarisk, as well as a great number of thorny shrubs—in the steppes, only the already often mentioned *saksaul*. While thus in Turkestan woods are entirely lacking, the culture of the natural meadows is, on the other hand, particularly prosperous. The pasturages in the steppe are, during certain months, on a par with the most blooming and luxuriant meadows of Eastern Russia. Cattle are therefore extensively bred by the populations wandering in the Turkestan Government. The cattle in Russian Turkestan, exclusive of the Zerafshan district, are thus estimated :—*

			Horned.		Sheep and Goats.	
			1872.	1874.	1872.	1874.
Syr-Darya district	..	..	387,920	163,000	5,493,086	2,375,600
Semirietchensk district	..	..	62,444	..	3,384,940	..
Total	..	..	450,364	..	8,878,026	..

			Pigs.		Horses.		Camels.	
			1872.	1874.	1872.	1874.	1872.	1874.
Syr-Darya district	..	..	..	210	423,414	301,540	219,500	158,000
Semirietchensk district	..	..	2,741	..	415,672	..	82,809	..
Total	..	..	2,741	..	839,086	..	302,309	..

Besides the produce of these domestic animals, which are chiefly to be reckoned in the districts of the nomads, the rearing of silkworms, which is widely practised by the Tadjiks, deserves mention ; this, thanks to the excellent cultivation of the mulberry tree, being immensely extended throughout Turkestan, although the quality of the silk is not very first-rate, and is inferior to that grown in Bokhara and Khokand.

* Terentieff further mentions the breeding of 20,500 donkeys.

If we throw a retrospective glance upon the productiveness of the Turkestan military district, characterised in the foregoing description, we may well be astonished on noticing how trifling it is in proportion to the area of the province, which comprises more than 16,000 German square miles (see page 257). But we should not forget, at the same time, that the greater part of that area is filled up with deserts, steppes, and mountains, and that really irrigated and cultivated districts are almost the exception, forming, as they do, oases in the midst of the surrounding desolation. From the circumstance that everywhere in the country are to be found traces and remains of an earlier settlement and irrigation, where now all is steppe and desert, optimists in Russia think they may infer that good management of the land would, without any difficulty, succeed, in a tolerably short period, in calling again into life that old, long-forgotten cultivation, and in thus doubling and even trebling the productiveness of Turkestan. That steps have already been taken to put this idea into effect is shown by the water-works in the Hungry Steppe of which mention has already been made, and which, when completed, will, according to Sobelow, insure as a natural consequence the cultivation of an area of 176,000 dessiatines, an area which is more extensive than the entire Zerafshan district. Whether the calculation of Sobelow is practically correct, will be shown by the future and by the result of the works in the Hungry Steppe. In any case, however, the canalisation and irrigation of the desert districts on the left bank of the Syr-Darya, particularly at its lower course, have their defined limits, which are much contracted by reason of expenses, want of manual labour, and, above all, by the quantity of water, which is now already scarcely sufficient for river traffic. A doubling, indeed a trebling, of the productiveness of the Turkestan military district might still therefore lie in the far-distant future. Wenjukow calculates, according to the position now presented, for the whole area of the Government-General, for the river districts of the Chu, Aryss, Chirchik, Augiran, and Zerafshan, only 223 German square miles—that is, about 1·4 per cent.—as suitable for settlements; and Sobelow estimates,

for the same area, only 143 German square miles, or about 0·9 per cent., of cultivated land, while he includes the remainder under the heading of steppes, sand deserts, sand-hills, and mountains. Moreover, if we consider the not unfrequent failures of crops, which are caused by drought, by inundations, and vermin (particularly mice and swarms of locusts), and which often attain large dimensions, and, on the other hand, cattle plagues, which are sometimes very virulent—in the year 1870 there died of the plague, according to Terentieff, in one circle alone, 254,583 head of cattle—we shall understand that, notwithstanding the relative productiveness of separate districts, the want of natural supplies for the troops in many circles can be so sorely felt that grain, flour, and cattle have to be imported from Russia and Siberia. This is especially the case in the circles of Kasalinsk and Perovsk, whither, moreover, every year, grain in large quantities is imported from the Khanate of Khiva, and particularly from the Chimbai district in the Amu delta. A similar want occurs in the eastern mountain districts of the Turkestan highland, where agriculture is very poor, and where the most essential green fodder for horses and domestic animals cannot often be procured. Only the furthest mountains of the Tian-Shan, to the east of Tashkend, form a partial exception to this state of things, as on their western slopes rich and good pastures are to be found, grain even flourishes without irrigation, while in the regions situated lower down, fruit trees, such as apricots, apples, walnuts, cherries, and mulberries, are to be met with in great profusion.

Turkestan affords prolific ground to the sportsman and the fisherman. The larger animals, which can be hunted with comparative ease, are the *argali*, the mountain-sheep, the antelope, and the wild boar. Among feathered game, the pheasant and several sorts of wild ducks and geese may be named, which haunt in flocks the reedy banks of the Syr-Darya. The Syr-Darya teems with fish, prominent among which are several species of such size that, it is reported among the people, there are some which could drag a man under water—a belief which has also been disseminated in Khiva, where I

really saw fish more than 15 feet in length. After the Syr-Darya, the Chirchik is, above all other rivers, uncommonly rich in fish, of which the scar, the perch, and the bleak are the best flavoured and most numerous. Full as are the plains of Turkestan of appetising game, both flesh and fowl, they are also prolific in beasts of prey, which take up their abode in their midst. We meet the tiger, the leopard, the panther, and hyena, wolves, foxes, jackals, badgers, wild cats, martins; fish-otters; the most various kinds of serpents swarm here; but they all offer costly material in fur and skin, quite independently of the pleasures of the chase which they are in a position to offer, to a large extent, to the officers and soldiers of the small, isolated, and monotonous garrisons, who are not quite spoiled by change and amusement. Even birds of prey are largely represented by different species of falcons, eagles, condors, pelicans, flamingos, spoonbills, herons, &c. Lizards and turtles are quite as common throughout Turkestan as in the Orenburg and, in particular, in the Central Asian steppes. The immense abundance of noxious scorpions, *phalanges*, tarantulas, &c., the bite of which is most dreaded, and is even said in many districts to be fatal, has already been mentioned. Feared more than all is the guinea-worm or maw-worm (*Filaria medinensis*), called in Russian *rischta*, the germ of which is said to be found in drinking water, coming only to development within the human frame. This, fine as a thread, often measures several feet, penetrates the fibres of the muscles, and attains complete development, often at the end of several months appearing, with its head, in some part of the skin. If the worm, with great care and skill, has been removed, and the physician has succeeded in working it thoroughly out of the flesh, the sick man escapes with comparatively slight suffering, and a certain amount of apprehension; but if only a small portion of the creature remains behind, very dreadful ulcers ensue, which give rise to the most grievous illness. According to a statement made by the doctors of the Turkestan garrisons who took part in the Khivan campaign, this illness is said to have appeared, not unfrequently, among the troops in the neighbourhood of Jizak, but especially in the

Zerafshan district (Bokhara). The *rischta* is even to be met with in the water of the Khivan country. For months, long indeed after I had returned to my native civilised Europe, did the idea pursue me that I had inside me such a germ, a notion which tormented me anew with every itching of my skin.

As regards the productiveness of the Turkestan Government-General in metals and minerals, it is but very small in comparison with that of the vegetable and animal world in this district. These materials are, it is true, to be found in the mountains; but mineral and geological knowledge is very limited, and means, as regards capital and labour to work them to the surface, are particularly lacking. In general, however, Turkestan would seem to be far less rich in the precious metals than the remaining provinces of Russia, as, for example, Siberia and Caucasia. Gold is, however, to be met with in the bed of the Upper Syr and its tributaries. Silver, lead, copper, and iron are found in most of the mountain chains of the Turkestan highland; and there is no want of brimstone, saltpetre, and salt. Coal, peat, and petroleum appear in different regions, and the ruby, the jasper, turquoise, and lapis lazuli are found in considerable quantities. But in spite of all this they are, in Turkestan, still very far from a regular *exploitation* of metals, and from a consistent mining and smelting system. Most important of all for the country is the discovery of coal, the existence of which affords a guarantee that commerce, industry, and general intercourse must one day prosper in the Russian province which is being formed almost in the heart of Asia, and which has hitherto been so far removed from the traffic centres of Russia and Europe. How nearly such a period of development may be at hand is shown by the project of a Central Asian railway, to connect the Volga directly with the Orenburg Government-General, a project which has attracted much attention in Russia. Independently of the high value which the Turkestan coal may exercise in the future for the development of commerce, it is even now an expensive product as a fuel, which commodity is so scarce in Turkestan that dried cow and camel dung is used for burning in the country, and in the towns the wood of the fruit

trees. Respecting the appearance of coal, Romanowski gives some interesting information in *L'Invalide Russe* (12, 1875). The Turkestan coal belongs to the Jura formation, and is principally to be found between Chemkent and Aulie-Ata, in the neighbourhood of Khodshakend, at Tashkend, and Khojend. The places in which the coal has hitherto been discovered lie very high, and, according to Romanowski, even up to 1,500 metres above the level of the sea; they form strata in no way connected, but, to a certain extent, small separate layers, the greatest breadth of which scarcely attains a *sajen*. Between Tashkend and Turkestan stretch a large number of such layers of coal, to the extent of more than 200 versts. At Khojend, in the valley of Chokine-Sai, 200,000 poods or 8,000,000 pounds of coal have already been extracted. Romanowski calculates that 19,000,000 poods or 760,000,000 pounds are still to be produced here. The principal speculator in this line in the Tashkend circle is a certain Tatarinow. In his mines, up to the present date, 300,000 poods or 12,000,000 pounds—that is, about 70,000 poods per annum—have been extracted. This has been chiefly devoted to the heating of the Syr steamers, and has, with this object, been transported from the mountains to the mouth of the Aryss. With expenses of transport, the price of this coal was, on arrival at the mouth of the Aryss, about 80 copecks per cwt. According to Wenjukow, the coal of Tatarinow gives 62 per cent. of coke, 32 per cent. of gaseous substances, and contains 3 per cent. of brimstone. The most unfavourable results of coal-mining are to be met with in the Kara-Tau, for here the layers seem to be very inconsiderable, and, moreover, very hard to obtain. Iron ore, with up to 60 per cent. of iron, has often been found in the mountains of Turkestan. The lead mines of the Kara-Mosar chain yield large quantities of lead ore, which is rich in silver. The mineral procured in this chain gives a yield of about 60 per cent. of pure lead. From a pood of metal as much as 1·5 *solotnik* of pure silver is taken. On the road to Khojend, in the vicinity of the village of Sangar, even rock-salt is found, which is said to be like the salt obtained at Welitschka, near Cracow.

In spite of the existence of raw materials essential to great industry, this, and the little business on the part of the Europeans, is scarcely prosecuted at all. In fact, it is left exclusively in the hands of the native population, particularly of the Tadjiks, whose results in this respect, obtained by skill and diligence, appear all the more praiseworthy, as they still use the primitive instruments with which they have been for centuries acquainted, and have scarcely a presentiment of the progress of European work. Thus it happens, too, that the articles of Tadjik manufacture are almost exclusively appropriated by the native population, while the troops, with the exception of the stuffs necessary for summer equipment, such as cotton textures and leather fabrics for smock-frocks and summer trousers, make very little use of them. The needs of the soldiers, as indeed of all Europeans, have to be supplied from European Russia by means of the difficult post or caravan road by Orenburg through the Kirghiz Steppe. An exception to this is only offered by the Semirietchensk district. According to the *isvestija* of the Imperial Geographical Society at Petersburg, in 1873 there were in that district three distilleries, one brewery, seven tanneries, and one candle factory, giving a total of thirteen factories. As regards the manufactures of the Tadjiks to which we have alluded, they are chiefly concentrated in and around Tashkend. There were, according to Terentieff, in the Turkestan capital, in the year 1874:—

			Number.	Work-people.	Worth of Produce.
				No.	Roubles.
Weaving-mills	..	..	775	1,500	232,500
Tanneries	..	..	86	890	133,500
Dyeing factories	..	..	95	..	9,000
Rice-mills (water)	..	..	174	348	26,000

The remaining branches of industry are of smaller importance, although, at the St. Petersburg Manufacture Exhibition in 1870, 23 classes of Turkestan industry were represented. Hempen and flaxen textures are manufactured, but not to any

great extent; on the other hand, cotton, woollen, and silk fabrics are produced in such quantities that there is even a considerable export of these articles into European Russia. The small industry extends to all departments of trade, but in every respect it produces fabrics of a very primitive character, which, from year to year, are more and more thrown into the shade by goods imported particularly from Moscow. The Turkestan soldier finds in the bazaars of the larger towns all the small articles of the European markets just as well as in his home, but at much higher prices.* The trade of Turkestan is therefore very active, and gains in extension every year. Notwithstanding the great interest which commerce claims in Central Asia, it would take us too far, and answer too little the character of our observations, if we went into too elaborate details thereon. Only a few figures, which are especially interesting for the military situation, and which are extracted from the *Russian Review* for 1874, may give the reader a means of judging of the Tashkend commerce:—

FOR TASHKEND.

In the second half-year of 1873.

	Value of Import in Roubles.	Value of Export in Roubles.
Grain	38,002	70,897
Raw cotton	67,608	105,012
Spun cotton.. .. .	170,097	87,603
Tea	170,195	44,575
Sugar	185,497	68,737
Fruits and colonial goods	199,943	91,422
Metals	152,457	69,282
Cloths	61,821	29,198
Wool goods of European fabric	40,221	20,528
Cotton ditto	3,360,493	1,456,782
Articles of clothing	72,046	161,363
Fancy goods	136,171	8,512
Drinks	190,298	74,445
Cattle (1869, 72,055 sheep alone from Semirietchensk)	657,166	..
Tobacco	51,064	4,353
Wood	43,152	..

* Whereas, in many a year the prices for inland food are astonishingly cheap.

On the whole, for the half-year, the total value of the imports is 7,275,310 roubles, and of the exports 3,356,007 roubles, so that the value of the whole exchange might be computed at 10,641,317 roubles. What extension trade in Turkestan has of late years attained may be seen from the figures which Terentieff gives for the fair of April, 1871, in Tashkend. The imports reached a value of 703,676 roubles; the exports, of 1,050,334 roubles. The caravan trade of the Semirietchensk district gave, according to our author, for the year 1869 alone, an exchange of 1,582,757 roubles. The caravan trade of the Syr-Darya district with Russia on the one hand, and with the Central Asian Khanates of Khokand and Bokhara on the other, has greatly increased of late years, particularly after the last successes of the Russians, which led to favourable commercial relations with the Khanates, and gained proper treatment for merchants and Russian caravans, and protection and rights in the sovereign States. Trade stipulations have been concluded with Bokhara, Khokand, Kashgar, and Khiva; but, as the Schuyler notices announce, the administration is said to be so careless about keeping these up with energy and authority, that the merchants, oppressed and defenceless, are exposed to all manner of tricks, neglect, and particularly to the payment of unfair duties in the Uzbek Khanates. In any case the situation, which is not yet matured, will every year improve, and the more so as the Russian merchant world has of late years bestowed great attention on the particulars of Turkestan commerce. A "Company for the Encouragement of Trade and Industry," which is especially observant of the cotton cultivation of Turkestan, has recently been formed in Tashkend; and at the end of 1874, a plan was even adopted in St. Petersburg for the establishment of a branch of the Imperial State Bank in Tashkend, a project which was to be put into execution in the course of the year 1875.

If we collect the details of our observations on the productiveness from a military point of view, we shall perceive that the requirements of the Turkestan army are in no single respect wholly and completely supplied by the country itself. Even food and clothing must, to a considerable extent, be made up by

caravan traffic from European Russia. All the large and small articles of equipment—summer equipment partially excepted—the total amount of war and army material, down to powder and lead, and every weapon, must be procured from Europe. Under these circumstances, one may understand how, according to Wenjukow, a single cannon-shot, fired in Tashkend, costs the Russian Crown more than 12 roubles. What immense expenses must then be incurred by the administration from the transport of arms, cannon, equipment, and ammunition? For the reception of the war material imported from Europe, partly in reserve, are the head artillery depôts in Tashkend, Samarkand, Chinaz, Khojend, Turkestan, Uratiube, Katta-Kurgan, Aulie-Ata, Klutschewoje, and Kamennimosst, a head intendant depôt in Tashkend.

In order to give the reader an idea of the immense expenses of the Turkestan military administration, expenses which are chiefly brought about by the costly transport, we may, in conclusion, cite a few figures, which characterise the budget of the local administration for the last years:—

BUDGET OF THE TURKESTAN ADMINISTRATION.*

For—				Receipts.	Expenditure.	Deficit.
				Roubles.	Roubles.	Roubles.
1868..	..	..	..	665,922	4,522,429	3,856,507
1869..	..	..	..	2,356,241	4,223,482	1,867,241
1870..	..	..	..	2,957,229	5,966,321	3,009,092
1871..	..	..	..	2,113,750	6,726,441	4,612,691
1872..	..	..	..	2,022,286†	7,528,627	5,506,341
In five years thus				10,115,428	28,967,300	18,851,872

We learn from this table that in the five years between 1868 and 1872 the expenses of the administration approximately trebled the revenue, and that the deficit for this interval reached nearly 19 millions. In this calculation, however, the 400,000

* The figures are taken from Schuyler, but do not agree with those of the *Suvorin Almanac*.

† According to the *Suvorin Almanac*.

roubles of war contribution from Bokhara for 1871, and about 2·5 millions of roubles, the revenue of the Zerafshan circle for the period in question, are not included. According to the *Suvorin Calendar*, the revenue for 1873 reached 3,321,888 roubles—a sum which, with the expenses incurred in the same year, including the money spent on the equipment of the Jizak and Kasalinsk columns for the Khivan campaign, would show a far more considerable deficit for the year 1873 than that of any year of the above-mentioned period.
