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C. 2.
S. A.

NO. 108

ROUTES

FROM

RUSSIAN TERRITORY IN CENTRAL ASIA

TOWARDS

AFGHANISTAN AND INDIA.

SECTION I.—THE PAMIR LINE OF ADVANCE.

PART I.

SHORT MILITARY REPORT ON THE FERGHANA PROVINCE, KASHGAR, THE
PAMIRS, AND UPPER OXUS AFGHAN PROVINCES, BEING THE COUNTRY
TRAVERSED BY THE ROUTES IN PART II.

PART II.

INCLUDES ALL ROUTES LEADING FROM THE CHIMKEND-KULDJA POSTAL
ROAD TO THE HINDŪ KUSH BETWEEN THE DORAH AND THE
KARAKORUM PASSES.

COMPILED

IN THE

INTELLIGENCE BRANCH OF THE QUARTER MASTER GENERAL'S DEPARTMENT
IN INDIA.

BY

LIEUTENANT W. R. ROBERTSON,
STAFF LIEUTENANT, INTELLIGENCE BRANCH.



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1893.

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NOTE.

THE want of complete route books leading from the Russian possessions in Asia towards Afghanistan and India being a good deal felt by those who have to deal with what is known as the Central Asian Question, I have considered it desirable to prepare the routes in three sections corresponding with the different strategical lines of advance on Afghanistan and India. The contents are thus :—

SECTION I.—The Pamir line of advance :

Part I.—Contains a short military report on the Ferghana Province, Kashgar, the Pamirs, and Upper Oxus Afghan Provinces, being the country traversed by the routes in Part II.

Part II.—The Pamir line of advance, which includes all routes leading from the Chimkend-Kuldja postal road to the Hindu Kush between the Dorah and the Karakorum passes.

SECTION II.—The Kabul line of advance will include all routes from the line Kazalinsk-Chimkend on to the Oxus from Charjui to Kala-i-Khumb, with a description of the country.

SECTION III.—The Herat line of advance will include all routes from the Caspian and Khiva on to the Afghan frontier from Zulfikar to Bosaga, with a description of the Trans-Caspian Province.

Owing to the increasing interest centering on the Pamir region, it has not been considered desirable to delay the issue of Section I until Sections II and III are ready.

The whole of the routes run from the Russian bases towards Afghanistan and India.

SIMLA ; } E. R. ELLES, *Colonel,*
The 20th February 1893. } *Assistant Quarter Master General,*
Intelligence Branch.

Intelligence Branch Diary No. 41 of 1892—“ Russia in Asia ”
Afghanistan .

PREFACE.

IN compiling the routes given in Part II, the Chimkend-Kuldja postal road has been taken for the base. From this base Routes Nos. 1 to 17 lead to the Khojend-Marghilan-Osh-Kashgar-Aksu line. From the latter line—the most important one—Routes Nos. 18 to 40 lead over the Hindu Kush and Mustagh mountains to Chitral, Gilgit, Hunza, and Northern Kashmir.

The routes are numbered in succession, beginning with the most easterly.

A cross-index is given at the beginning of Part II, and an index map will be found in the pocket. Notes to the principal routes are marked on the index map as note to such a number; and the note will be found at the end of the stage on which the branch road quits the main route. The index map affords the quickest means of finding any particular route.

The following reports, &c., have been consulted in the compilation of this work:—

Gazetteer of the Upper Oxus Provinces, 1888.

Gazetteer of the Eastern Hindu Kush, 1888.

Report of a Mission to the Northern Frontier of Kashmir.—*Captain Younghusband, 1889.*

Various Reports by *Captain Younghusband, 1891.*

Report of a Journey in Chinese Turkistan.—*Lieutenant Bower, 1889-90.*

The Regions of the Upper Oxus by Robert Michell.—*Proceedings of the Royal Geographical Society, 1884.*

The Russian Pamir Expedition of 1883.—*Proceedings of the Royal Geographical Society, 1884.*

The Yarkand Mission, 1873-74.

High Tartary, Yarkand, and Kashgar.—*Shaw.*

Routes in Asia, Section III.

The Russian Expedition to the Alai and Pamir, 1876.

Description of the Hill Route from Kashgar to Russian Turkistan, 1877.

The Turkistan Region by *Colonel Kostenko, 1880.*

Road Notes of a Journey through Karatigin and Darwaz.—*Kosyakoff*, 1882.

Through the Heart of Asia.—*Bonvalot*, 1889.

Route from Ighiz Yar to Bar Panjah.—*Ney Elias*, 1885.

Diary of a Journey in Central Asia to Kashmir.—*Dauvergne*, 1889.

Notes of a Journey from Osh to Chitral.—*Littledale*, 1891.

Travels in Hindu Kush and Pamirs.—*Dauvergne*, 1891.

Journey across the Pamir from north to south.—*Littledale*, 1891.

Osh to Chitral *viá* the Pamirs.—*Beley*.

Gilgit to Tashkurghan.—*Lieutenant Stewart*, 1891.

Pamirs to Marghilan.—*Lieutenant Davison*, 1891.

Gilgit to Ak Tash *viá* the Khora Bohrt Pass.—*Raja Khushwakht Khan*, 1890.

Captain Kuropatkin's Itineraries of Routes in Kashgaria, 1876.

Report on Road from Kuldja to Hunza *viá* the Mintaka Pass.—*Captain Pemberton*, 1892.

Reconnaissance Journey through the Central and Western Provinces of China.—*Colonel Bell*, *V.C.*

The article on "Ferghana" has been written by Lieutenant Peach, I. B., and that on the "Russian claim to the Pamirs" has been taken from a note written by Captain Mason, Deputy Assistant Quarter Master General of the Intelligence Branch.

SIMLA,

24th November 1892.

}

W. R. R.

SECTION I.—THE PAMIR LINE OF ADVANCE.

PART I.

**SHORT MILITARY REPORT ON THE FERGHANA PROVINCE, KASHGAR, THE
PAMIRS, AND UPPER OXUS AFGHAN PROVINCES.**

PART II.

**ROUTES LEADING FROM THE CHIMKEND-KULDJA POSTAL ROAD TO
THE HINDU KUSH BETWEEN THE DORAH AND
KARAKORUM PASSES.**

MAPS (IN POCKET).

- 1. Index Map of Routes.**
- 2. Map of Pamirs: 1 inch = 16 miles.**

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MAIN LINES OF ADVANCE.

FROM OSH TO HUNZA AND LEH *via* KASHGAR.

This route was followed by the mission under Kuropatkin in 1876. The strength of the party was 64 persons and 104 saddle and pack horses. The mission left Osh on the 20th October, and, proceeding by easy marches *via* the Terek Dawan pass, arrived at Kashgar on the 6th November. It is the caravan road from Ferghana to Kashgar, and in May of this year the Russians were reported to be improving the road from Narin to Osh; and the telegraph line, which at that time went only as far as Osh, was to be extended to Sufi Kurghan, and Mr. Macartney added that the Russian consul at Kashgar thought it was possible that before long it might be extended to Kashgar. Later on Mr. Macartney heard that several hundreds of men were employed in the repair of the road south of Osh, and that a telegraph was being laid down from Osh to the Great Kara Kul and Irkeshtam.

From Kashgar the Tagdumbash Pamir may be reached in ten marches by the somewhat difficult route of the *Gaz* defile; it is generally practicable for ponies, but in the summer months is liable to floods from the rain and melting snow. But the best road to the head of the Tagdumbash Pamir is by Chahil Gumbaz (Route No. 35).

From the Tagdumbash Hunza may be invaded by either the Kilik (see stage 23, Route No. 25), the Mintaka (Route No. 35), or Khunjerab passes (Route No. 37), or a force might march from the Tagdumbash by the valley of Yarkand river (Routes Nos. 38, 40, and 33) to the Karakorum pass by a route practicable throughout for ponies and camels.

Four routes practicable for ponies lead from Yarkand, *viz.*:—

No. 32 by the Sanju pass.—A difficult one, but in common use.

No. 33 by the Kilian pass and Shahidulla, the route now in use by traders.—The pass is very difficult and steep, and 17,800 feet high, but laden ponies can cross it.

No. 34 by the Kugiar and the Yangi Dawan.—This is the best route in the winter, but between April and September is impassable on account of the increased depth of the rivers.

No. 34, Note A., by the Kilik pass.—Not now in use, but can be made practicable for ponies.

From the Tagdumbash Pamir no supplies on the route to Ladak are at present obtainable until after the Karakorum and Saser passes have been crossed and the Nubra valley reached; but in future years the valley of the Yarkand river may again become populated and cultivated, and supplies may therefore be forthcoming. At present a force operating by this line would have to obtain its supplies from Yarkand and Kugiar, and it is probable that this line would be adopted in the case of its being desirable to avoid passing through the garrisoned parts of Chinese Turkistan.

FROM OSH TO CHITRAL, GILGIT, AND HUNZA *via* THE PAMIRS.

Two thousand five hundred men, with 6 guns, set out from Osh for the From Osh to the Alai Pamirs by this route in 1878. According to Kostenko, valley, Route No. 29. it is suitable for wheels as far as the Alai. It is the highway of the Pamirs, and has often been traversed by travellers.

The general remarks regarding all the roads across the Alai range is that they are difficult, since they lie through confined gorges, where the track now goes over a cornice which overhangs a precipice, now over steep declivities (called by the Kirghiz *kiga*), now amidst heaps of stones that cut the horses' feet, now over so-called *balconies*. These balconies consist of cross-beams thrown from one cornice to another. Over these are laid brushwood and earth. They then form a hanging bridge of from $2\frac{1}{2}$ to $3\frac{1}{2}$ feet wide, the ends of which are resting on the rock.

Sometimes the rivers have to be forded; but this operation, in consequence of the low temperature of the water and the velocity of the current, especially if the bed of the river happens to be stony, presents difficulties of no little importance.

The Alai valley has a steppe character. Throughout it is covered with grasses that form a very abundant and nutritive food for the cattle of the nomads.

Cultivated patches are only met with at Daraut Kurghan at an altitude of 8,000 feet. Here are sown in the smallest quantities wheat, barley, and lucerne grass (*jenushka*). The greater portion of these fields are irrigated. Barley yields six-fold; wheat from four to five. Lucerne grass crops are collected twice a year, whilst in the Ferghana valley there are five cuttings.

The Kizil Su, which rises in and flows through the Alai valley, is thus described:—

“Its bed is about 1 mile wide, strewn over with stones, and divided into numerous channels, which shift from year to year. In the upper part the banks are steep, but not high, and consequently present no difficulties in the way of progress.

“The current of the Kizil Su is swift, but easy, because of the even and gradual fall of the valley. The waters of this river do not whirl or foam, as do those of many of the mountain rivers of Central Asia. Its bottom is firm and strewn with pebbles. The water of the Kizil Su is in the highest degree muddy and red, hence its name; but if it is allowed sufficient time to settle in a vessel, it becomes clean and clear. The admixture of red earth has no sort of influence on health. The Russian troops used to drink this water without even giving it time to settle.

“In case of a military movement across the Pamir from Osh, a store depôt in the Alai valley would be absolutely indispensable to enable troops to fill up supplies and forage for their passage along the next section of the route. The Alai valley seems suitable for such a depôt, especially as carts can be used for transport of supplies to it.”

The second section of the route has been traversed in different parts by From the Alai valley to the Ak Baital-Murghabi junction. Severtsoff, Kostenko, Ney Elias, Grombcheffshy, Yonoff, and others. The result of their discoveries is as follows:—

“ The lofty basin of the Alai is covered with excellent grass and well watered. From the entrance to the Kizil Art defile good forage ceases. The road becomes stony, especially before the pass of the same name, where the path runs amongst masses of sharp stones thrown down in disorder. Grass throughout the whole route from Kizil Art to the Tuyuk pass is only met with in places, sometimes more than 10 *versts* apart. Moreover, these spots are not large, so that moving with horses here it is absolutely necessary to carry barley. The Kizil Art pass (14,000 feet) is suitable for passage. Beyond the pass the road offers no obstacles, except the want of forage and fuel (dung).

“ The defile of the Little Chon Su is broad, *and the road might easily be made for wheels*. At the junction of the Chon Su and the Uzbek Su grazing ground is found. From here the whole valley of the Upper Chon Su is seen as plainly as the palm of one's hand.

“ From the sources of the Chon Su (Suok-Chabir) the road rises to the Tuyuk pass. The ascent is for 8 *versts* (5 miles 2½ furlongs), but only the first ½ *verst* (¼ mile) is steep.

“ The soil of the ascent is, however, soft, and it would be easy to make a road with gentle zigzags ; beyond, up to the summit of the pass, the ascent is extremely gentle. The descent to the Ak Baital is steeper, but very short. The efflorescent nature of the soil makes it suitable for working a road in. The commencement of the ascent to the Tuyuk pass is at a height of about 14,000 feet, the summit of the ascent being about 14,400 feet. The summit of the pass before the descent is little under 15,000 feet. The foot of the pass in the Ak Baital valley is about 14,600 feet. One may presume that the pass is open for about half the year, from June to December. On descending from the pass, the road runs along the river as far as the river Ak Su (Murghabi).

“ It is almost completely even, only at first for 20 *versts* (13 miles 2 furlongs) stony, passing over fine pebbles. Then for another 25 *versts* (16 miles 4½ furlongs) small, gentle, and soft hillocks follow, with cobble stones scattered over them ; beyond, as far as the Ak Su, the road is quite even, and only in places covered with fine pebbles ; it is gravelly for the greater part, and resembles a natural *chaussee* running through a broad valley. The passage of the Murghabi is by a ford. The current of the river is not particularly swift. The river runs in pools separated by shallow rapids. At the space below the mouth of the Ak Baital at 15 *versts* (9 miles 7½ furlongs) M. Severtsoff found out three fords, over two of which he passed. In the beginning of August these fords are only suitable in the early morning, as water comes down by midday ; the depth then reaches 2½ feet. In the end of the month, at all hours of the day and night, it is not more than 1½ feet deep. In the intervals between the fords the depth reaches 7 feet. The height of the Murghabi at the passage is about 12,000 feet.

“ This being at a convenient distance—about 9 marches—from the Alai depôt, it would be necessary to make a store depôt here also.”

From the data shown above regarding this second section of the route—its want of supplies, forage, fuel, and two high passes to cross—its difficulties appear to be considerable.

In the vicinity of Bulun Kul would be the third supply depôt.

Severtsoff's description of part of this section is as follows :—

“ The road, which had a south-east direction throughout along the Ak Baital, changes to south-west along the Ak Su up to the pass* forming the watershed between two sources, *viz.*, (1) of the Amu; (2) of the Ak Su and Alichur.

“ Only in the first 12 *versts* (7 miles $5\frac{3}{4}$ furlongs) at the Yaman Tal stream are there perceptible, but not particularly difficult, ascents and descents. The very summit of the pass is a completely even, open space, on which four valleys from the surrounding mountains meet, *i.e.*, two run down on to it opposite each other without roads, and two run out from it on opposite sides of the pass to Kara Su and Alichur in a line north-east and south-west. An even and good road with an imperceptible descent runs over the Alichur Pamir along the river of the same name.”

Beyond Bulun Kul the road enters a mountainous valley, but nevertheless, judging from reports, it is suitable for traffic. Ivanoff in his report says :—

“ From the Alichur the expedition at its full complement again went to the Great Pamir by the most interesting and practicable Khargosh pass, and on the second day descended to Yolmazar.”

Besides the above there is a route (No. 26) leading to Sarhad by the Bashgumbaz pass. It appears to present difficulties which prevent the possibility of its use.

A practicable route (No. 25) for animals leads up the Ak Su valley to Ak Tash; thence to Sarhad-i-Wakhan by the Little Pamir; and to the Tagdumbash Pamir and Hunza by the Baiyik or Kukturruk passes, or by the Khora Bohrt pass and Karambar valley to Gilgit.

From the Ak Baital-Murghabi junction towards Hunza and Gilgit *via* Ak Tash.

There are also routes (No. 26) by the Year Meuse, Kizil Robot, Urta Bel, and Benderski passes leading from the Great to the Little Pamir.

Although the above description shows this route to be somewhat difficult, yet it must be remembered that—

- (1) the Russian soldier is accustomed to severe cold :
- (2) the position of Chitral and Gilgit on our flank invites attack in spite of all difficulties :
- (3) the difficulty only commences from the Alai valley, 109½ miles from Osh, the cart road to the former entirely simplifying the first portion, and enabling the troops to go forward thence fresh and well-stocked with supplies :
- (4) the Russians themselves attach great importance to the Osh-Alai-Alichur route for future use.

With regard to supplies on the Pamirs, although no crops are grown in these elevated regions and supplies of grain are unprocureable, yet large flocks of sheep, goats, and *yaks* are kept by the Kirghiz, and for a short time, at any rate, or with perhaps a limited supply of flour brought down from Yarkand or Kashgar, a force of 2,000 to 3,000 men might support itself in a march across the Pamirs. Fuel is somewhat scarce, but sufficient quantities of scrub and dried dung for cooking

* Alichur-Neza Tash.

purposes could always be obtained. But few complaints have been made by even Russian exploring parties of any lack of grass at their encamping grounds, though they have almost invariably travelled in considerable numbers. Thus Yonoff in 1892 had two *sotnias* of Cossacks under him. Ivanoff and Benderski in 1884 had a large retinue. Even Grombcheffsky lost only one horse. All these and other parties have scoured every nook and corner of the Pamirs, crossing nearly every pass. They have naturally taken barley for their cattle and food for themselves they have brought from Ferghana. Ivanoff, in describing his journey across the Bash Gumbaz, says : —

“On descending from the rocky upper portion of this defile, we find ourselves at once in better circumstances : here is fodder and brushwood for fuel. * * * I have no occasion to describe this (Alichur) valley, because it has been explored and depicted before by M. Severtsoff. I will only say in a couple of words that the advantages of this valley consist mainly in its extensive irrigation, and consequently in its rich pasturage.”

FROM MARGHILAN TO THE ALICHUR PAMIR *viâ* DARAUT KURGHAN.

This route was taken by the detachment of infantry which escorted Lieutenant Davison from the Pamirs to Marghilan in 1891, and also by Yonoff in 1892. About one march from Soma Tash the Khargosh pass road is struck. The road between Alai and Soma Tash is described by Lieutenant Davison as “something fearful.” The country seems quite uninhabited even by Kirghiz nomads. It is said there are no supplies, the Russians having been very “hard up” for food owing to the loss of many supply ponies. However, Yonoff with his force of 700* men and 2 guns in 1892 accomplished the distance from Soma Tash to Marghilan in three weeks, and the fact of his taking the route a second time proves it to be not very “fearful.”

FROM KHOJEND TO FAIZABAD AND CHITRAL *viâ* KARATIGIN.

This is the main road connecting the Zarafshan with Karatigin. It leads from Ura Tapa to the Zarafshan village of Pakshif ; thence by the easy Pakshif pass to Gharm. Kostenko says : “This pass is considered the best from the valley of the Zarafshan to the valley of the Surkhab.”

From Gharm a practicable road for animals goes *viâ* Kila Khum to Bar Panjah. Muhammad Shah states that since Darwaz has become a dependency of Bokhara, the roads have been much improved. The high road between Saghir Dasht and Kila Khum has been made passable for laden beasts of burden, and the roads, which are carried along the face of the cliffs above the banks of the Panjah, have been put into repair.

Trotter in his Gazetteer says :—“The road on the left bank of the river (Panjah) is in very good order for pack animals.” This route can be followed to Zebak, $84\frac{1}{4}$ miles ; thence to Chitral by the Dorah pass is $8\frac{1}{2}$ miles ; or a route (No. 30) can be taken to Faizabad, $83\frac{3}{4}$ miles, and from thence the Dorah pass can be reached by either the Jirm-Munjan pass route or the ordinary trade route (No. 31) to Zebak. All these roads are in frequent use.

* Captain Picot, I.S.C., was informed by M. Petrovski that this force numbered 1,500 men.

DESCRIPTION OF THE COUNTRIES THROUGH WHICH THE ROUTES PASS.

THE FERGHANA PROVINCE

The country included in the Ferghana province as now constituted represented formerly the territory of the Khanate of Khokand, and came into the possession of the Russians with the taking of the city of the Khokand in March 1876. The province is now one of three into which the Turkistan military district is divided, and is under a military governor, whose residence is at Marghilan, the head-quarters and chief town of the province.

From their junction with the Kurama, the Chatkal mountains form the north-western boundary of the Ferghana province as far as the Alexandrofsk mountains, which then bound it on the north as far as their highest point opposite to Pishpek. From here the boundary turns south along the hills on the right bank of the Jungal river to the Urum-beli pass, and thence by the Ferghana mountains to the Suck pass. From this point it follows the frontier with China down to the Uzbek pass.

From the junction of the Kurama and Chatkal mountains the boundary runs south, crossing the Syr Daria river about 22 miles east of Khojend, and from the Zarafshan glacier follows the boundary of Bokhara (Karategin and Darwaz) to the Takhta Kuram pass. The frontier between the Takhta Kuram and Uzbek passes is not now defined by the Russians, though it is sometimes spoken of vaguely as *crossing the Pamir plateau*, as, for instance, by M. Ostroumoff in his "Geography of the Turkestan Country," which is apparently the official geography now used in all the Government schools in Turkestan.

Note.—In the Russian Staff map of 1877 this boundary was distinctly laid down as passing west to the Tuyuk pass, and following the mountains Mustagh on the south of lake Karakul to the Takhta Kuram pass, and it is only since the recent explorations of the Russians on the Pamirs that they have come to the conclusion that the boundary in this direction is undefined.

This portion of the boundary being thus left undefined leaves the way open to Russia to advance on to the Pamirs, and consequently she now appears likely to put in a claim to an extent of country in this direction which may only be terminated by the Hindu Kush mountains, and direct continuity of her boundaries with the frontiers of our own northern protectorates of Chitral and Hunza.

The importance of the consideration of the Ferghana province, therefore, in the light of a possible base of operations for a force acting in this direction is obvious.

For administrative purposes the Ferghana province is sub-divided into five districts, each under a *nachalnik* or superintendent of the district, and are named after the principal towns in them as follows: *Osh, Marghilan, Andijan, Khokand, and Namangan.*

The total extent of the province is about 36,014 square miles.

The greater part of the Ferghana province is taken up by the fertile and populous valley of the Syr Daria, the "Ferghana" valley, in which most of the towns, kishlaks, and inhabited points are situated. There is also the

Alai valley, the valley of the Kizil Su, called lower down in its course the Surkh-ab or Waksh river. The remainder of the province is occupied by mountain ranges uninhabited, except during certain months of the year by nomad Kirghiz.

The Ferghana valley is shut in on the north, south, and east by almost impassable mountain country, and it is only on the west that a narrow strip of land, about six or seven miles in width, unites it with the Khojend valley and general steppes of the Samarkand and Syr Daria provinces.

It is amygdaloid in form, about 166 miles in length and 66 in breadth.

All the life and wealth of the province is concentrated on the southern bank of the Syr Daria; the country on the north, being more of a "steppe" character, attracts the nomads more than the settled population, as the former find good pasture lands for their flocks and herds.

The soil is in parts stony, partly salt beds and sandy wastes (as the sandy steppe between Khokand and Marghilan), and the rest fertile "loam" or clay soil. The Ferghana valley, like nearly all the surface of Central Asia, is really a desert, and it is only by artificial irrigation that it has been converted into a fruitful country. For this reason the general impression conveyed is that of an endless sea of gardens intersected by numerous canals.

The chief occupation of the settled inhabitants is agriculture and horticulture (see Resources), and the trade arising from these industries. There is also known to be much mineral wealth in the mountains, but it is as yet but little worked or explored; the inhabited points are scattered along the southern shore of the Syr Daria, but not generally on the river bank itself, but on the large aqueducts leading from the mountains, the water of which is all expended in irrigation.

In this way are situated the towns of Khokand, Marghilan, Andijan, and others.

There are about one million inhabitants in the Ferghana valley, or about 28 to the square mile according to M. Ostroumoff (in his "Geography of the Turkestan Country"); but Captain Younghusband in his memorandum on the financial position of the Russians in Central Asia, written from Kashgar in February 1891, gives the population of the whole province as only 690,000.

The Alai valley or plateau is about 93 miles in length by 7 to 10 in width, and is watered by the river Kizil Su. In summer the whole length is covered with luxuriant grass, and consequently almost the whole nomad population of the southern portion of the Ferghana province and Khojend district concentrate here with their sheep and cattle. But it is only for three or four months; in winter communication with the valley is cut off, as the passes are covered with snow; with the first fall the nomads hasten away, and the valley is deserted save for a few Kara Kirghiz in and about Daraut Kurghan in the west of the valley.

The chief ranges in the province are the *Chatkal* or *Chatkal Ala-tagh*, parts of the *Alexandrofsk* and *Susamir*, the *Ferghana*, the *Alai*, and *Trans-Alai*, and part of the *Hissar* mountains.

The Chatkai mountains form the northern boundary of the Ferghana valley, and are not very high, though separate peaks rise to 17,000 feet. They give rise to a large number of small streams watering the northern part of the Namangan district. There are timber trees on the southern slopes which are rafted down the Syr to Khojend and Kazalinsk. In the valleys and ravines is good pasture, and also wild fruit trees.

The chief passes are *Chanash*, *Afiatun*, and *Chupchama*, through which in summer a brisk stream of commerce passes from Siberia *via* Aulia-ata. They are also important as the avenues by which the Kirghiz from the steppes in the north and north-west drive their flocks into the Ferghana valley.

The average height of the Alexandrofsk mountains is 10,000 feet; opposite to Pishpek, 15,000. The northern slopes are covered with pine forests; southern slopes generally bare; but in the valleys and passes of both sides grow the birch, willow, poplar, juniper, and mountain-ash. There is also good pasture for the Kirghiz flocks.

The chief are the *Ut-mek* leading into the Ferghana valley, and *Karakul* leading from Pishpek.

The Ferghana or Uch-Sait mountains protect the Ferghana valley on the north-east and separate the province from that of Semirechia. There are forests and coal in the outlying branches. These mountains give rise to numbers of small rivers flowing into the Kara Daria and Narin.

The Alai form the water parting of the Syr and Amu Daria basins. They are a continuation of the Great Thian Shan, and stretch all along the south of the Ferghana valley up to the Zarafshan glacier, where they reach their greatest elevation; their average height is 12,000 feet.

On the northern slopes grow the juniper, and higher, the pine, birch, mountain-ash, and mountain-poplar.

The passes fit for caravans are the *Taldik*, 11,000 feet, leading into the Alai valley, and *Terek Dawan*, 12,000 feet, leading to Kashgar. (Route No. 21).

For a detailed description of the Alai mountains and passes through them, see Kostenko, page 102.

On the far side of the Alai valley are the Trans-Alai mountains. These are still higher than the Alai, and in the eastern portion of their length are practically impassable; about the centre they are 18,000 to 19,000 feet, but towards the west there are many defiles and passes. The vegetation is the same as that of the Alai. There are some very high peaks, *e.g.*, *Kaufman*, *Gurundi*, and *Kizil Agi*, all about 23,000 feet high.

Tagh-murun leading to Kashgar (Route No. 21), *Ters-Agar* leading to Karatigin, and the Takhta Kuram pass and *Kizil Art* through which Route No. 29 by the Great Kara Kul and Uzbek or Tuyuk passes leads to the Pamirs.

The Hissar mountains are a further continuation of the Tian-Shan beyond the Alai. Height 16,000 to 18,000 feet. This range forms the water-parting between the Zarafshan and Kizil Su rivers, and separates the Bokharan Khanate from the Russian dominions. The northern slopes are easy and covered with vegetation, the southern being precipitous and bare. In the valleys are the usual juniper and a few other trees.

The passes in the part of the Hissar mountains in the Ferghana province are very important, as by them lie the main roads leading towards the Hindu Kush from Ura Tapa. The best is the *Pakshif*, through which the main road leads to Gharm (the capital of Karatigin), Kila Khum, and Faizabad. The *Yarkhich* and *Terek* passes are both very difficult, the latter especially so.

For further description of these passes, see Routes Nos. 19 and 20.

The Ferghana province is watered by the sources of two great rivers of Central Asia, the Syr and Kizil Su, a tributary of the Amu-Daria. The Syr Daria, thus named after the junction of the Narin and Kara-Daria near the town of Namangan, flows through the Ferghana valley. The Kizil Su does not join the Amu-Daria at all in the province. All the other rivers and streams in Ferghana are tributaries and feeders of these two.

The length of the Syr in the Ferghana province is about 200 miles; it is very swift and not navigable (owing to the rapids near Khodjend) except for rafts and boats. There are numerous ferries over it (the Russian Government keeps up no less than fifteen of these, at a yearly cost of 7,000 roubles, in the Ferghana province alone), but it is not fordable except in the autumn, when fords are made at Ak-Jar, Tapa-Kurghan, and other places. For places of ferries and boats, see Routes.

The Kizil Su is fordable almost anywhere in its course in the Ferghana province. It is from 40 to 70 yards wide, and the current is swift.

The only lake of any size in the province is the *Great Kara Kul* to the south of the Trans-Alai mountains in the Khargosh Pamir, situated at a height of over 12,000 feet above sea level. The water is salt and bitter. In the Namangan district is a very deep fresh-water lake called *Sarichilek*, and two salt lakes called *Ak-siken* and *Balikchi*.

In comparison to its size, the Ferghana province contains more ground under cultivation than any other part of Russian Turkistan. Kostenko gives the number of acres as about 1,700,000. This fertility is, however, entirely due to artificial irrigation.

The chief cereals grown are *wheat, rye, oats, barley, millet, buckwheat, maize, rice, and jugara*.

Large quantities of *lucerne* are also grown, this grass giving 4 or 5 yields a year; as fodder, it is best for animals when dried to form hay. Most ordinary vegetables flourish, but potatoes are not grown. Vines and fruit of most European kinds grow in abundance.

No grain being exported from Ferghana, it would appear that, notwithstanding its boasted fertility, very little is grown in excess of local requirements.

The trees have been already noticed in the description of the mountains of the province. There is very little building timber generally in Turkistan, but most of what there is comes from Ferghana. Attention is now being paid by the Russians to tree-growing, and large nurseries are being planted.

Coal and *petroleum* are being largely found in the Ferghana province, but they can hardly be said to be profitably worked yet.

Horned cattle are not very largely bred, and are of inferior quality. *Sheep raising*, on the contrary, forms the chief occupation of all the nomads, which is to say nearly half the total population. They are the fat-tailed species as a rule. *Goats* are also much bred.

Silk and cotton. The chief industries are silk and cotton in which there is a large export trade.

Gold is found in the upper courses of some of the mountain streams, and there is also said to be *lead*, *copper*, and in some parts *iron* in the mountains.

Minerals.

The Russians have now 47 colonies scattered along the Syr Daria, and there is not apparently room for any more immigration at present.

Except on the main roads in the Ferghana valley from Khojend to Gulcha, communications in the province are carried on mostly by roads only fit for pack animals; and all roads are difficult in winter. The chief animals used for transport are horses and ponies (of which great numbers are bred by the Kirghiz), mules, donkeys, and in the Alai and Trans-Alai *yaks*. Camels and bullocks are very little used in Ferghana.

Communications.

Telegraphs.

Marghilan is in telegraphic communication with Tashkend *via* Khokand and Khojend, and directly with Osh.*

The climate of Ferghana is more temperate than the rest of Russian Turkistan, and but little snow falls in winter. In summer it is very hot in the valleys. The town of Osh enjoys peculiar advantages as to situation and climate.

Climate.

The total population is divided pretty evenly between those leading a sedentary and those leading a nomadic existence. To the former belong (1) the *Uzbeks*; (2) the *Tajiks* (of Iranian extraction, the original inhabitants of the country); and (3) the *Sarts*, which name is simply given to the dwellers in the towns. The nomad population is composed of (1) *Kirghiz* and (2) *Kipchaks*. The Kirghiz are nomad Uzbeks, and the Kipchaks are a mixed race, apparently of Turkish origin, though they greatly resemble the Mongols in appearance.† Though greatly inferior in numbers, they are braver and more warlike than the other races of the country. They are found chiefly in the east and north-east of the province, and are partly nomad and partly sedentary. In the Gulcha district are also Dunganis and Taranchis of Chinese extraction.

Ethnography.

* See also page 1.

† But see article on "Kirghiz," page 37.

The fort and town are on the Gulcha river, and the situation commands the road up the valley, and also the Chichborchik gorge. Gulcha. The *raison d'être* of the fort is primarily the control of the neighbouring Kirghiz. It is described by Kuropatkin as a redoubt with round bastions suitable for a garrison of about 2 companies of infantry, 100 Cossacks, and 4 guns.

In the neighbourhood vegetation and grain are raised without artificial irrigation.

In writing the above article the following works have been consulted:

Bibliography. "The Turkestan Region," Kostenko; "Western Turkestan," Trotter; "Turkestan," Schuyler; "Statistics and Geography of Turkestan," Clarke; "Memorandum on the Financial position of the Russians in Central Asia," Younghusband; "Description of a Journey to Trans-Caspia and Turkestan," Eliot; and the "Geography of the Turkestan Country," Ostroumoff.

KASHGAR.

The country now most commonly called Kashgar or Kashgaria has at different periods of its history been known under different names. At the time of the Arab conquest it was generally spoken of either simply as Turkistan or, to distinguish it from the Turkistan proper, as Bilad-us-Shirk, or the "Eastern cities." The Moghol invasion, without entirely displacing these names, gave it the name of Mogholistan, and it was generally known by this name during the period of the rule of the Chaghtai Khans. In the time of the later princes of that dynasty, however, the name of Kashgar, their capital, came into use to designate the plain country south of the Ala Tagh in contradistinction to Mogholistan proper. And this name of Kashgar has ever since been the one most commonly used to represent the great basin of the Tarim river, though other names have been applied to it in whole or in part by foreigners. Thus by the Chinese conquerors it is now called the New Dominion, and by modern European authors Chinese, or Eastern, Turkistan.

The northern boundary runs obliquely between 39° and 43° north latitude from the Terek Dawan in 73° to Pichan in 92° east longitude, and is formed by the southern watershed of the Ala Tagh mountains. The southern boundary has never been delimited. The eastern boundary cuts the parallels of 92° and 85° of east longitude from Pichan in north to Chachan on the south between parallels 43° and 36° north latitude, and presents an undefined border formed by the shifting sand of the Gobi desert. The western boundary runs from the Terek Dawan to the Uzbek pass. Beyond this point it has never been defined.

Kashgar may be said to have an approximate area of 243,750 square miles. But it must be borne in mind that by very much the greatest part of it is an uninhabited waste. To give a full description of this extensive area does not come within the scope of the present work, and only so much of it will be dwelt upon as comes within the sphere of a Russian advance across the Hindu Kush and Mustagh mountains between the Dorah and Karakorum passes.

The prevailing character of the Kashgar region is a vast plain surface extending east and west, which may be conveniently described under the natural divisions of highland, lowland, desert, swamp, and lake.

Geographical description.

The highland portion is constituted by the elevated plateaux and deep valleys of the lofty mountain barriers which form three sides of its area, and is characterized as much by the rigour of its climate as by the nakedness of its hills. Glaciers are found on its more elevated ranges, and there is everywhere an absence of forest trees. Nevertheless, its glens and hollows are the home of numerous nomad tribes during the winter, whilst in summer flocks and herds are fed on the rich pastures that sprout as soon as the snow melts off the steppes which buttress the main range.

The lowland division comprises the belt of hill skirt at the base of the bounding ranges. It is the most populous part, and is the only portion which is permanently settled and cultivated. The soil is characterized by its aridity and barrenness. It is more or less highly charged with salines, which in many places retain sufficient moisture to form mud bogs and marshes, on which grow coarse reeds and dwarf tamarisks. The peculiar features of this tract are the numerous rivers which traverse it to their junction with the Tarim river, which is the great drainage channel for the whole country. They are the Khotan, Yarkand, Kashgar, and Ak Su rivers. These streams mostly flow in wide channels. Their volume varies according to season; thus in winter even the largest of them is fordable, whilst the smaller ones are generally frozen over. In summer they are so swollen by the melting snows that they fill the whole of their wide channels, and form in some cases a stream nearly a mile broad. None of them are navigable. They all contain fish, and in the case of the larger streams they are a source of food to the inhabitants.

The desert division occupies the whole of the Kashgar basin beyond the lowland belt. In general aspect it presents a vast undulating plain of sand which slopes away to the eastward. Its elevation is estimated to vary from 2,500 feet at Lob Nor to 4,000 feet on the Yarkand border. It is traversed by the four rivers which go to form the Tarim, and by that stream itself. On the banks of these rivers grow narrow belts of poplar, willow, tamarisk, and tall reeds. The greatest portion of this division is an unmitigated waste; horses cannot traverse it owing to their sinking knee-deep in the soft soil; whilst to man the dust proves suffocating, and the glare from the snow white salts is blinding.

The swamp division is principally concentrated on the course of the Tarim river in the eastern part of its course. The lakes also are in the eastern half of the valley, and, like the swamps, lie outside the area necessary to be described here.

The inhabitants consist of a mixture of tribes or races which belong to one or other of those two great Central Asian families—
 Inhabitants. namely, the Turk and the Tartar. For the sake of description, they may be classed under the heads of urban and rural. The urban population of the western cities is a confused mixture of Turk and Tartar, or Moghol and Tajik, and the offspring of their several alliances one with the other. In the rural districts the population consists of two distinct classes, the settled and the nomad. The first named is everywhere of Turk descent, and represents the ancient Uighur, the Hun of Attila's invading armies. The Turkis live comfortably as a rule, being well clothed and fed; they are great meat-eaters, all the towns being crowded with butchers' shops, in which beef and mutton are displayed. Horse flesh is also eaten. They do not eat the *chuppatti*, but make leavened rolls of fine white flour.

They are excellent agriculturists of a timid and vacillating nature, and were they otherwise than the quietest and most submissive people in the world, the Chinese would be incapable of keeping order in the country, while in any case they are quite unable to resist an invasion.

For description of the nomad population, *see* article on Kirghiz, page 37. The Yarkand Mission Report, 1874-75, gives the population of the Kashgar state as 1,015,000 souls, but Colonel Bell thinks 2,000,000 to be nearer. The bulk of the population profess the Muhammadan religion.

The principal crops are Indian-corn, barley, wheat, rice, and lucerne grass; the latter crop on good ground yields five cuttings a year. The Turks own a large number of horses, small sturdy animals, well able to do long journeys. They are well fed on dry lucerne grass—a most nourishing food,—maize, and chopped straw. Some few riding ponies are clothed at night, but the ordinary ponies, such as those used in the country carts (arabas), never have anything on even in the coldest nights, when the thermometer is several degrees below zero. The Chinese own the best horses however, their cavalry being mounted on most serviceable animals; a little small and slow compared with our ideas of troopers, and more the style of the Cossacks' horses, but they are well able to perform long journeys. The average height is 13-14 hands, and price Rs. 60 to Rs. 70. The Chinese also own many excellent mules which are raised in the east about Turfan and in that neighbourhood; they sell for much higher prices than the horses, and some are of a class well suited for mountain batteries. Good serviceable donkeys are numerous, and are much used for light caravan work, &c. The cattle are of poor quality, no care being taken of them. On the northern slopes of the Himalayas, to the west of the Pamirs, in the southern slopes of the Thian Shan, and in the jungles from Maralbashi to Lobnor immense herds of sheep are raised. Wool is exported in large quantities, and coal is found about Ak Su. There are but very few camels in the country. The Hakim of the Kashgar circle sent in to Yakub Beg's treasury, 1876, from the town of Kashgar, and from the villages of the same circle, a heradj tax of 900,000 chariks (about 250,000 maunds) of different grains, chiefly maize and wheat.

The climate is remarkable for the extreme dryness of its atmosphere at all times, the trifling amount of its rainfall, and the dense haze which nearly always obscures the air; the periodical winds which sweep the surface, the intensity of the sun's rays, and the very great range of temperature between summer and winter. The spring and autumn months are those in which regular winds do most prevail. The seasons in the plain country are distinguishable into four of equal duration, but in the mountain regions there are only two seasons, summer and winter.

The language is the Uighur dialect of Turki. It is spoken with greater or less difference of idiom and patois in the several divisions of the country, and that of Ak Su is said to be the purest.

The chief towns in the western division are Khotan, Yarkand, Yangi Hisar, Kashgar, Ushurfan, Maralbashi, and Ak Su. Each is fortified, but in a very primitive manner. For description of these towns, *see* Routes.

The history of Kashgaria from the 15th to the 18th century affords an unbroken record of civil war between two religious parties—of a struggle of which now the Chinese and now the neighbouring nomads took advantage to seize the country for themselves. Several times the Kashgarians, supported by Mussalman adventurers, got the upper hand, but each time again the Chinese with unchanging patience got the best of it. Eventually, after a very bloody war, the sovereignty of the Chinese was established in 1757. Nevertheless, the Chinese authorities by not maintaining a proper army in the country held very insecure tenure for a considerable time.

In 1856, in Yunnan, the south-west province of China, there broke out the most formidable of all the Mussalman revolts. This rapidly spread to all the remaining provinces of Western China. This revolt, known by the name of Dungan, produced terrible desolation in Zungaria, in the province of Ili, and in Chinese Turkistan. The Dungans were soon joined by their co-religionists—the Sarts—who are called in the Ili province by the name of Taranchis.

The Khan of Khokand, wishing to take advantage of the disorder in Eastern Turkistan, sent to Kashgar a certain Buzurg, one of the descendants of the Khojas, who ruled at one time in the country (*i.e.*, prior to 1757). With the aid of the Khokand troops, led by the brave Yakub Beg, Buzurg Khoja gained possession of Kashgar in the year 1865. But in consequence of his incapacity the interloper soon lost all influence, and this passed entirely into the hands of the resolute Yakub Beg. Having sent Buzurg out of Kashgar (in 1867) on the plea of performing a pilgrimage to Mecca, Yakub Beg remained the sole and absolute ruler of Kashgar, and, through his own energy and spirit of adventure, in a short time brought under his sway all the towns of Chinese Turkistan.

Yakub Beg at first called himself ruler of Alti-Shahr (the six cities); he then styled himself sovereign of Jiti-Shahr (the seven cities). At first, too, he bore the title of Atalik Ghazi (or the Father-Conqueror). Subsequently he assumed the designation of Badaulat (the Fortunate or the Powerful). Through this title he increased his own importance in his diplomatic relations with both the Russians and the English. Finally, he adopted the title of Amir. To letters addressed to him by the Russian Governor-General of Turkistan suggesting free trade within Kashgarian limits, Yakub Beg generally replied that his country was poor and had nothing wherewith to carry on a trade; but should the Russians come to Kashgar for purposes of conquest, he would place all in the hands of God, by whose will it would be decided whether Russia should conquer Kashgar, or, on the contrary, Kashgar should conquer Russia. Protected as he was by the difficult Thian Shan mountains, he had some reason for counting upon the impunity of his actions. Moreover, in order to strengthen himself, he entered into relations with us. In 1870 he sent his nephew to the Viceroy of India to negotiate for an alliance and with a request for the supply of arms. Mr. Forsyth, the return envoy, arrived at Yarkand at a time when Yakub Beg had entered upon a war with the Dungans. The envoy was not therefore received at Kashgar; indeed, it was only after his second visit to Yakub Beg's territory in the year following that a polite reception was extended to the agent of the Government. Subsequently, in 1874, a great embassy, also under Mr. Forsyth, was sent

to Yakub Beg. This, however, led to no positive results. Russian relations with the then ruler of Kashgar were of a different type, for whilst carrying on negotiations with Yakub Beg relative to the free movements of Russian merchants within the limits of Kashgaria, the Governor-General of Turkistan engaged his attention with the repair and reconstruction of the roads leading into Yakub Beg's country, so that, in the event of a refusal on his part to sign a treaty, Russian troops might be marched into Kashgaria and a treaty exacted by force.

Thus intimidated, Yakub Beg in May 1872 affixed his signature to a treaty, and bound himself to open to Russian merchants free passage throughout his dominions, and to take from them only such dues as corresponded with those levied on Kashgarian merchants trading in Russian territory, that is to say, $2\frac{1}{2}$ per cent. *ad valorem*. For some time afterwards he wavered between an English and a Russian alliance, but ultimately submitted himself to Russian influence.

On the 29th May 1877 Yakub Beg died, and at once the monarchy, which he had skilfully welded together with fire and sword, fell into its component parts, which were all at variance each with the other. Disorder and mutual animosity once more set in. The Chinese then took advantage of the anarchy which prevailed to again take possession of the country. But there appears to have been little real fighting. As the Chinese advanced, the Andijanians retired into their own country again, while the Turks went on ploughing their fields, troubling themselves very little as to who should rule them for the future.

In 1879 Mr. Ney Elias, Officiating British Joint Commissioner at Ladak, received an unlooked-for invitation from the Governor of Kashgar to meet him at Yarkand, and immediately set off in the hope of obtaining some information regarding the then state of affairs in Eastern Turkistan, especially as affecting the trade *via* Ladak, which at that time was much interfered with by the Chinese; but before he had proceeded half way he heard that the Governor had left Yarkand for Kashgar. Some time after Mr. Elias had arrived at Yarkand he received a verbal message from the Governor at Kashgar to the effect that he could go on to Kashgar and pay his visit there "if he liked." From this change of tone in the Governor's manner it appeared unlikely that any good would accrue from the visit; consequently Mr. Elias returned to Ladak. In 1880 Mr. Elias was sent by the Government of India for the purpose of enquiring into the effects on Indian trade exercised by the Russo-Chinese treaty of Livadia of 1879; but the treaty never having been ratified, and its provisions consequently never having come fully into force, he had no opportunity of ascertaining its influence on the trade of the country, but he found the same grumbling as in the previous year regarding the uncertainty of duties, delay in procuring passports, and the prohibition placed on the importation of Indian tea and opium. In 1883 the full effects of the Russo-Chinese treaty of 1881 began to be felt. This treaty provided for the complete freedom of commerce between the two territories. From 1883 forward Russian caravans poured such large quantities of goods into the province that Indian exports could not compete with them, and the consequence was a falling off in Indian trade.

In 1885 Mr. Ney Elias was again sent on a mission to Kashgar with a view to improve our political relations with the Chinese Provincial Government

in Turkistan, and to remove, as far as possible, the restrictions then placed upon Indian trade in that country. With regard to the first of these objects, the chief aim of the Government was to establish a permanent political agency in Chinese Turkistan. The second object was to be effected by concluding with the Chinese authorities of Turkistan an agreement embodying certain provisions for placing the trade with India on a recognized basis. As neither of these two objects could be accomplished without the consent of the Chinese Government, a letter was sent to the Chargé d'Affaires at Peking requesting his assistance in obtaining the necessary co-operation of the Chinese. It was shown that Indian trade was unrecognized, and that British subjects had no authorised rights in the New Dominion, while Russian trade and Russian subjects were, on the contrary, provided for by full treaty rights. It was shown also that the trade interests of India and China were identical, and an assurance was given that Indian trade should not be pressed to an extent which might embarrass the Chinese authorities. It is unnecessary here to follow the correspondence which ensued with the Peking Legation. The Chargé d'Affaires apparently only brought before the Chinese Government a part of the proposed measures, the establishment of an agency was not even mentioned by him, and the reply he elicited from the Tsungli Yamen regarding the trade was a curt refusal to take the proposals of the Government of India into consideration.

The province of the New Dominion forms a separate local Government Administration. under a Futai, who resides at Urumtsi, and whose rank may be best represented by that of Lieutenant-Governor in India. At Kashgar there is a Taotai or Commissioner, who is also superintendent of trade, &c., and has under his jurisdiction the four districts of Kashgar, Yangi Hisar, Yarkand, and Khotan. These are usually administered by a Che-li-chon or Deputy Commissioner, commonly called Amban, and form the western division of the New Dominion. The district officials and magistrates are entirely Chinese, the Hakim Begs having been abolished in 1883.

Captain Younghusband says:—"The administration is fairly popular with the natives: they have been accustomed to the Chinese for centuries, and have a very high opinion of their strength. The people are not over-taxed, and as a rule they are not worried. If they leave the Chinese alone, the Chinese leave them alone, and this seems to suit their national character. On the other hand, the Russians have a reputation for taxing heavily, and they do not seem to command the same respect as the Chinese. The Russians are feared, and their power is certainly respected; but this so far from making them popular seems to have an opposite effect, and their advent would certainly not be welcomed. As regards the feeling towards ourselves, I am convinced that it is distinctly favourable. The Chinese officials, too, are favourably disposed to us, though, when Russian and English interests clash, to prevent annoyance from the Russians, who have a consul at Kashgar, while we are unrepresented,* they are inclined to side with the Russians rather than with us; and, though they look upon both ourselves and the Russians as barbarians, I think they look upon us as the less barbaric of the two, and respect us as the conquerors of India."

* The appointment of a British consul at Kashgar is now under consideration. At present Mr. G. Macartney is stationed there on special duty, but has no official status.

The following estimate of the number of Chinese troops in Kashgaria was furnished by Mr. Macartney in August 1891 :—

Army.

Place.					Cavalry.	Infantry.
Khotan	...	...	...	...	150	400
Yarkand	...	...	...	...	200	800
Yangi Hisar	...	...	...	...	220	400
Maralbashi	...	...	...	...	...	400
Kashgar	...	...	...	...	200	400
Yangi Shahr	...	...	...	...	300	2,500
Ushturfan	...	...	...	...	200	400
Ak Su	...	...	...	...	400	2,500
TOTAL				...	1,670	8,100

The men are of bad physique and morale, discipline is lax, and the equipment is bad. This force in its existing state of disorganisation could never be expected to offer effectual resistance to the Russians, even though its present numbers were trebled.

However, it is improbable that China could in any circumstances place a larger force in the New Dominion than 50,000 men.

The most striking trait in the character of the Chinese soldiery is cowardice. Their tactics consist in *frightening* the enemy; never in *hazarding an attack*. The order of battle is a semicircle threatening the front and the flanks; simultaneously the troops open fire at a distance much further than the range of their guns, utter hideous cries after every round, and altogether behave in a childish way, which would, of course, produce no effect on superior troops. The officers lack every quality which goes to make up a leader of men.

On the Pamirs a karawal merely means the head-quarters of a Beg. Captain Younghusband visited several of these posts in 1890, and in no case did he find a fort or soldiers. No Chinese officials permanently reside at any of the outer frontier posts, all of which along the Afghan side are under a native official. The nearest official of Chinese nationality is not to be found further west than the foot of the mountains overhanging the Kashgar plain, along which are stationed a series of inner karawals.

THE NORTHERN FRONTIER OF KASHMIR.

The north of Kashmir is bounded by a stupendous mass of mountains known in different parts as the Hindu Kush, the Musnagh, and the Karakorum mountains. The eastern portion, the Mustagh mountains, will now be dealt with. This may be said to extend from the Kilik pass to the Karakorum pass. The highest point of this range is reached in the vicinity of the Mustagh pass, where one peak (K-2) rises to the height of 28,278 feet. Four other peaks are over 26,000 feet, and it may probably be said that hardly a peak on the main axis of the range is under 20,000 feet. There is naturally a vast extent of glaciers, and these are found in greatest extent between the head-waters of the Oprang river and the vicinity of the Shimshal pass. Perhaps the largest glacier on the northern side is that

running down in an easterly direction near Suget Jangal. This is some 24 miles long and about 2 miles broad, but it is surpassed by the Baltoro glacier on the southern side of the Mustagh pass, which is 38 miles long and from 4 to 5 miles broad. These glaciers extend down on the northern side to a height of 20,000 feet to 13,000 feet above sea level, but on the southern side reach considerably lower. Thirty or forty years ago men used frequently to cross the Mustagh and Saltoro passes, whereas now such a thing is never heard of.

Across this range there are the following passes :—

- (1) *Kara korum* (18,550').—Easy and practicable all the year round for ponies and camels (Route No. 33).
- (2) *Saltoro*.—Now disused and quite impracticable (Route No. 40, *Note C*).
- (3) *Mustagh* (about 19,000').—Now disused and quite impracticable (Route No. 40-A).
- (4) *Shimshal* (14,700').—Easy and practicable for ponies (Route No. 40).
- (5) *Khunjerab* (14,300').—Easy and practicable for ponies (Route No. 37).
- (6) *Mintaka* (14,400').—Practicable for ponies (Route No. 35).

Between the Karakorum and the Shimshal there is an immense region of glaciers, which makes the country quite impracticable for the passage of even a small force, and there is no way by which an army could penetrate into Baltistan across the main range, except by one of the following passes, *viz.*, Karakorum, Shimshal, Khunjerab, and Mintaka. But the value of the various routes leading towards Kashmir must be tested, not by the practicability of the actual crossings of the Mustagh mountains, but by the character of the country on the southern side, so that, although the Mustagh mountains may be crossed comparatively easy, an invading army would find it well nigh impossible to force its way through the Hunza gorges, or the deep valleys leading into Ladak, if resolutely opposed by even a few troops.

To the north of the Mustagh mountains is the Kuenlun range. It is characterised by the bold and rugged appearance of the peaks. The mountain-sides are perfectly bare, but along the bed of the streams in the northern side good stretches of jungle are often met with. The principal passes across this range are the Sanju (16,650'), the Killian (17,800'), the Kilik* (17,000'), the Yangi (16,000'), the Chiraghsaldi (16,000' ?), Tashkurghau, Isak, and the Kukliang. The first three of these are all steep and difficult passes. The Yangi and Chiraghsaldi are fairly easy. Grombcheffsky crossed the Kukliang in November 1889, and says it "is smooth, sloping, and not difficult, although it must be over 16,000 feet;" and of the other two named nothing is known except that it is said that ponies may be taken across them. The southern declivities of this range are broken up into short transverse valleys, and on the northern side it throws out a series of long spurs running out towards Killian and Yarkand.

This range runs in a general north-west direction between the Mustagh and Kuenlun ranges. It is about 120 miles in length, and its peaks rise to a height of 23,000 feet. It is utterly devoid of vegetation, and only the scantiest description of scrub is met with in the valley-bottoms. The only known pass across this range is the Aghil pass (15,300'), a remarkably easy one, being a Pamir-like depression between lofty rocky mountains. Grombcheffsky crossed it on 31st October 1889, and found it "smooth, grassy, and easy."

* Not to be confounded with the Kilik on the Tagdumbash Pamir.

This range runs out from the Mustagh mountains in a northerly direction from a point near the Khunjerab pass. The highest peaks do not rise above a height of probably about 20,000 feet. No trees are seen on the slopes, but grass is plentiful on the lower portions on the western side, and in the shallow valleys which run down towards the Tagdumbash Pamir.

The largest branch of this river has its rise near the Karakorum pass, and from that it flows to Kirghiz Jangal, when it sweeps round almost at right angles in a westerly direction to near Chong Jangal, where it receives the Oprang river. From Chong Jangal it turns north-west to the Ilisu junction, and then it passes through a number of impassable gorges towards the Turkistan plain, and is eventually buried in the sands of the Gobi desert. The depth and volume of this river vary very considerably according to the season of the year. In the summer months, even in its upper course, it is quite unfordable, but by the middle of September it can be forded as low down as Chong Jangal, and by the middle of October as far as the Ilisu.

The climate is one of great severity. At the western end of Raskam, at a height of 9,000 feet above sea-level, the thermometer, even in the middle of October, falls to 4° Fahrenheit. Captain Bower crossed the Killian pass *en route* from Leh in August, and writes:—"Here (half way up the pass) we had our first taste of cold. Although the thermometer only went down to 23°, there was a biting wind, and I have often felt the cold less trying when the thermometer was below zero." However, in summer the valley of the Yarkand river is certainly warm enough to allow cultivation, and fruit trees are met with at the western end of Raskam. The vegetable productions of any useful description are almost *nil*, a small amount of timber being the only thing obtainable, besides jungle, scrub, and coarse grass. The Kirghiz keep large flocks of sheep and goats, and also a fair number of camels, *yaks*, and ponies. In the neighbourhood of Shahidulla there may be between 30 to 40 camels and 50 to 60 ponies, and perhaps the same number of *yaks*. The inhabitants round about the sources of the Tiznaf in Pakhpu have nothing in common with the Kirghiz. They are a distinct population. They rear large flocks of sheep, but keep few horses, *yaks*, camels, or mules. The grain produced is insufficient for their requirements.

THE PAMIRS.

The derivation and meaning of the word "Pamir" has never been satisfactorily explained. Perhaps the least fantastic solution is *pá-i-mir*, or foot of Mir, the great legendary holy mountain of the early Hindus, the abode of the gods, and the traditional cradle of the Aryan race. It must not be supposed that the Pamir region is a plateau in the ordinary acceptation of the term. It is rather a lofty upland, nowhere less than 12,000 feet above the sea, whose general elevation may be taken at 13,500 feet, intersected in every direction by ranges of bare rocky snow-clad mountains rising from 15,000 feet to 20,000 feet, and separated from each other by valleys of varying width. These valleys in places open out, forming flat or gently shelving troughs from one to several miles in width, covered generally with low wormwood scrub, but here and there with the richest grasses. Such flat open valleys are known as Pamirs, while deep, narrow ravines are never so described. It is therefore

quite inaccurate to speak of the whole region as Pamir, though that term is a convenient expression for describing the wild uninhabited tract between Eastern Turkistan and the Upper Oxus Provinces.

Ivanoff defines the Pamir as the district between Alai on the north, Kashgharia on the east, Wakhan on the south, and Shignan on the west. This definition, though a broad one, is fairly accurate. He derives the name from "the Pamir river," but this is unquestionably an error. Doubtless the Ak Su is known in places as the Ab-i-Pamir, but that is simply the oriental custom of naming a river locally according to the place it runs through or by, and that the river is named after the region and not the region after the river is the most probable. The general description of the Pamir given by Ivanoff is:—"A country where spacious level valleys are formed between low mountains, and where nothing grows but grass, whose only denizens are Kirghiz nomads, yaks, *ovis polii*, and bears, and which is traversed by routes in every direction."

It is, however, scarcely correct to say the Pamir is traversed by roads in every direction. The mountains are quite impracticable, except at certain well defined points; and, as a matter of fact, there are only a few routes which are ever used. The mountains in the western portion of the Pamir region, on the Afghan frontier, are lofty and rugged, rising well above the snow line. But further eastward they are of much less height, and the ridges, which divide the Alichur and the eastern portions of the Great and Little Pamirs, are easy of access and passable without difficulty.

One very characteristic feature of the Pamirs is the number of lakes both fresh and salt which dot the region. We may particularly notice the Great and Little Kara Kul and Rang Kul in the north. The numerous lakes of the Alichur—Yeshil Kul, Tuz Kul, Sasik Kul, &c.; the Kul-i-Kalan, or Victoria lake of the Great Pamir, and Gaz Kul in the Little Pamir.

The climate of the Pamir is very severe in winter. This lasts from October till May, and during these months the deep snow and biting winds render travelling on the Pamir very trying to any but the hardy Kirghiz. During the summer the dry keen air of the Pamir is very invigorating to those in lusty condition, but the great elevation is prejudicial to violent exercise, and is very trying to people with weak lungs. The sun in summer, owing to the rarity of the atmosphere, is very hot, but the nights always cold. Captain Younghusband says:—"I have seen the thermometer at zero (Fahrenheit) at the end of September, and 18° below at the end of October. The snow on the valley bottoms does not clear away before May is well advanced." However, Wood in 1837, and others subsequently, have recorded more fair weather than foul on the Pamirs, and as a traversable region the cold is no impediment to any moving body. There appears to be a leeward side to most valleys, where no snow lies, and where passage is nearly always practicable. Also it may be noted that there are in many directions positions which afford very tenable and excellent sites for posts and other establishments.

In summer *yaks* are driven up to graze by the Kirghiz, Wakhis, and Shignis. The Kirghiz, however, are the only people who can be said to inhabit the Pamir, and even they only during the summer. Formerly the Kirghiz used to frequent the Great and Little Pamirs, but nowadays they are chiefly to be found on the Alichur and Rang Kul, in the Kudara valley, and the basin of the Great Kara Kul or the so-called Khargoshi-Pamir. In the winter

they generally migrate to Kashgaria, to the upper part of the Shakh-dara in Shignan, and to Alai.

The name is applied to one of the northern Pamirs lying south of the Alai valley, with which it is connected by the Kizil Khargoshi Pamir. Art pass leading across the Trans-Alai range.

This Pamir may be said to extend from the Tokhterek pass to the Ak Baital river. It is described by Severtsoff as a wide, Rang Kul Pamir. level, and dry valley, and the lake as consisting of three basins and an extensive marsh joined by narrow straits, the whole about 20 miles long and from $1\frac{1}{4}$ to $3\frac{1}{4}$ miles broad. Ney Elias gives the following description:—

“Here the valleys are wide and open, and the hills that bound them usually low and easy. There is grass in abundance, as the large flocks of the Kirghiz and numbers of *ovis polii* testify. In summer also there must be abundance of water, but by October many of the streams have run dry, and it is not always easy to make marches so as to reach a camping ground with water. Rang Kul—or lake of all colours, as the name is interpreted to mean, there being no special colour either in the water or the surrounding hills to distinguish it—is a fresh-water lake. Though Rang Kul is undoubtedly within Chinese limits, the Kirghiz there consider themselves as Afghan subjects, though at the same time they pay tribute to Kashgar.”

Most maps, especially Russian ones, show such a Pamir, but apparently the valley of the Ak Su in the vicinity of Sarez has Sarez Pamir. none of the characteristics of a Pamir, and therefore it is an error to speak of the valley as such.

A Pamir running approximately east and west between the Neza Tash pass and lake Yeshil Kul. It is drained by a river Alichur Pamir. of the same name. From the pass as far as Burzilla the Pamir averages about 5 miles in width. The range bounding this Pamir on the north is free of snow in summer, but that separating it from the Great Pamir is of considerable height, the summits always covered with snow, and the passes across it difficult. From Burzilla the valley begins to close in, and the road increases in difficulty as the Yeshil Kul is approached. In consequence travellers to Shignan generally leave the Alichur valley at Burzilla and travel to Sardim *viâ* the Koh-i-Tezek. The Alichur is bounded on the north by the watershed of the Murghabi, which consists of a mass of snowy mountains crossed by only one or two difficult footpaths. There is a pass called the Buztari leading from the eastern end of the Pamir to the Ak Su just below the junction of the Kara Su, and there is a route leading from Bugrumal to Sarez. On the south it is separated from the Great Pamir by high and rocky mountains, the peaks of which attain an altitude of 18,000 feet, and among which on the Alichur side many glaciers are found. This watershed is crossed by the Bash Gumbaz and the Khargosh passes. Both these passes are described in Routes Nos. 26 and 29.

The peculiarity of the Alichur Pamir is the number of small lakes and swamps, some fresh, some stagnant and salt. Fish and waterfowl abound. There is little good grass to be found, and saxaul offers the only firewood. Severtsoff noticed extensive deposits of peat near the Yeshil Kul, and also mentions a grove of willows in the same neighbourhood in the glen formed by a tributary of the Alichur river at an elevation of 12,700 feet.

This pamir is bounded on the north by the watershed separating it from the Little Pamir; on the south by the Hindu Kush; on the west by the watershed connecting the first two. It drains eastward to Sarikul, and has an average breadth of 3 to 4 miles, its bounding mountain ranges rising to 2,000 feet or 3,000 feet above it. It may be said to commence, one branch at the Khunjerab pass and another at the Wakhujrui pass, and to extend down to Tashkhurgan, where the district of Sarikul begins. It is inhabited chiefly by Kirghiz, but there are also a few Sarikulis. All of these keep large flocks and horses, but the only attempt at anything like cultivation consists of a few scattered patches about Dubda and Khusghum. The Pamir itself rises very greatly on both sides to the mountain ranges by which it is enclosed. It gives one the impression of formerly having been a deep valley between two mountain ranges, which has now been filled up by the débris brought down by former glaciers. On account of the insufficient rainfall this valley has not been washed out and cleared of the débris, and consequently is now a plain at a high elevation. The Pamir rises from 10,000 feet at Tashkurgan to 14,300 at the Khunjerab pass. It is mostly covered with coarse scrub and gravel, but there are also some fine stretches of good grass. Fuel is very scarce, and the inhabitants generally use dung for their fires. The Kirghiz who frequent the head-waters of the Pamir pay a small tribute to Hunza. *Ovis polii* abound. On this pamir there are probably about 20 camels, 30 to 40 *yaks*, and 60 ponies.

The Great Pamir is a grassy valley, about 90 miles in length. It is said to begin at Boharak, 2 miles beyond the junction of the Great Pamir. Ab-i-Matz with the Pamir river, and is there only a mile broad, but gradually widens to about 6 miles in the first 20 miles of the road towards lake Victoria, 12 miles beyond the eastern end of which is the watershed between the Pamir river and Ak Su or Murghabi branch of the Oxus. The valley gradually narrows again from this point eastward to its end near Dahan-i-Isligh. This valley is generally bounded by low spurs from ranges that rise about 5,000 feet above the plain on the south and 2,500 feet on the north side, giving absolute heights of 18,000 feet and 15,500 feet respectively, the Pamir itself being from 12,000 feet to 14,000 feet above the sea. The summer route from Wakhan to Yarkand lies through the Pamir, as also a route to Shignan by the Joshangaz pass. Roads lead to the Little Pamir over the Year Meuse, Kizil Robot, Urta Bel, Benderski, and Waeram passes.

The Little Pamir resembles in all respects the other Pamirs, except that the mountains forming its northern and southern boundaries rise more directly from the plain than those of the Great Pamir. Its lake, however, which is in the eastern part of the valley, does not drain towards the Panjah branch of the Upper Oxus, but is the source of one of the affluents of the Ak Su or Murghabi branch. The western portion of the Little Pamir forms the valley of one of the two heads of the Panjah branch. The length of this Pamir is about 68 miles, and its average width from 2 to 4 miles. The name is also given in some maps to the Shewa Pamir. The elevation of the Little Pamir is about 13,000 feet. The grazing in summer is excellent. The winter route from Wakhan to Yarkand lies through the Little Pamir. It is generally spoken of as extending from Bozai Gumbaz to Ak Tash, though why, it is hard to say, for the Ak Su valley continues wide and open as before, right down to, and for a few miles below, the junction of the Ak Baital river.

The bit of pamir along the branch of the Wakhan river, which rises near the Wakhujrui as far as the junction of the Little Pamir stream at Bozai Gumbaz, is known as the Pamir-i-Wakhan. During the winter it is frequented by Wakhis on account of its right bank facing south, and consequently receiving the largest amount of sunshine.

THE AFGHAN PROVINCES.

A province of Afghanistan which is immediately under the governorship of Badakhshan. Abdul Rahim says:—

“From ancient times the *Mir* of Wakhan used to send to whoever was the ruler of Yarkand, on behalf of China, the following presents: two greyhounds, two skins of *siahposh* (foxes?), and two skins of *sulisu* (?). If the Amban was satisfied, he presented two pieces of silk, two pieces *khampu* (?), 24 bricks of tea, 10 China cups, gold embroidered cloth (amount not known), one pair of shoes, 40 cotton pieces from Khotan, four pieces of linen, four pieces of chintz, and two ponies.” But all such tribute has for a long time past fallen into abeyance, and China certainly does not now put forward any pretence to suzerainty. The dues paid to Badakhshan according to the same authority were two slave girls, eight horses, two oxen, and 12 horse-shoes.

In 1837-38 Wakhan is said to have been virtually independent, although the *Mir* occasionally sent some inconsiderable tribute to Murad Beg, a chief of the Kataghan Uzbaks, who had asserted his power over Badakhshan and the neighbouring territory. This tribute was, however, paid irregularly, and Mir Muhammad Rahim Khan was inveigled to Kunduz and brutally murdered. Muhammad Rahim Khan was succeeded by a cousin, who only ruled one year, when Fateh Ali Shah seized the Mirship, which he held for 36 years until his death in 1875. He is said to have won the attachment and respect of his people. Fateh Ali Shah was a younger brother of Muhammad Rahim Khan, and on the occasion of Colonel Gordon's visit to Wakhan in 1874, he asserted that the ruling families of Chitral and Shignan had sprung from his own. When Hafizulla Khan in July 1873 assumed the governorship of Badakhshan, Fateh Ali Shah proceeded to Faizabad, the capital of that Khanate, to give in his allegiance to the Amir of Kabul. The tribute consisted of 2 camels, 12 horses, 12 cows, and 12 blankets, which had been fixed as the yearly due from Wakhan, the *Mir* remarking to Colonel Gordon—“No money is asked, for the country has none.” Fateh Ali Shah spoke bitterly of the cruel exactions which had been made from him by the rulers of Badakhshan, and stated that he greatly preferred the Afghans as masters. Fateh Ali Shah was succeeded in 1875 by his son, Ali Mardan Shah. He was very obliging to Colonel Gordon's party, and for this service a *khilat* was sent him by the Viceroy of India direct, which gave offence to the Amir of Kabul.

In 1883, on the advent of Abdul Rahman's troops in Badakhshan, Ali Mardan Shah fled into Yasin, taking with him a large following. Since then the province has been ruled by an Afghan *hakim*, who is under the orders of the governor of Badakhshan. Wakhan is divided into four “*sads*,” each under an *aksakal*, namely—(1) Sad-i-Sarhad; (2) Sad-i-Sipanj; (3) Sad-i-Khandut; and (4) Sad-Ishtagh.

The last named was once an independent principality. Its *Aksakal* is the hereditary Naib of Wakhan.

The population before Ali Mardan fled was about 6,000—*i.e.*, 300 houses. A house in Wakhan means a family hamlet, and may consist of from 12 to 50 people; but 20 may be taken as a fair average. The population now is probably about 4,500.

Abdul Rahim gives the following estimates :—

Sad-i-Sarhad ...	122 houses.	|	Sad-i-Panja, or Sipanj ...	65 houses.
Sad-i-Khandut ...	87 houses.	|	Sad-Istragh ...	60 houses.

The inhabitants of Wakhan are of medium height and have a distinct Tajik type of face, and, generally speaking, are very handsome.

They wear *chapkans* or *chogas* of wool, with *postins* of untanned sheepskins. Those who can afford it have turbans, but the greater number are content with caps fitting close to the head. The flocks of the Wakhi constitute his riches, or rather enable him to endure the ills to which his bleak, high-lying valley exposes him. The skin and fleece of the sheep supply him with every article of dress, in preparing which both women and men find their winter's employment. The women clean and spin the wool, while the men weave it into cloth. The valuable wool of Thibet, from which the costly shawls of Kashmir are fabricated, or at least a wool that has all its good qualities, is yielded by the goat of Wakhan.

They are all Shiah, and follow the religion of Imam Jafir Sadik. They profess belief in the transmigration of souls, and deny a heavenly existence, and say that when the soul leaves the body, it enters another body according to good or evil deeds done in this life.

They looked upon the late Mir Aga Khan* of Bombay as their spiritual leader, and always put aside one-tenth of their goods and their alms for him, and they called these goods their lord's property—*mal-i-sarkar*. They entrusted it to his representative, whom in this country they called the *pir*. The abode of Aga Khan, *i.e.*, Bombay, they looked on as their Mecca. The people are generally classed as Galchas, and their dialect, which, like that of the other hill Tajik states, is of the Iranian family, is known as Wakhi; but Persian is also generally spoken. The climate is no doubt very severe. Snow lies for half the year, and the fierce wind known as the *bad-i-wakhan* is excessively bitter.

Afghan rule is not popular in Wakhan, and the people long for the return of Ali Mardan Shah, failing which *Russian rule would be welcome*. The Wakhis, however, are not an important factor in the Central Asian question. They have no warlike instincts, are not in the least fanatical, and rarely carry arms. The secluded situation of their country and its unattractive character have saved it from being often subjected to invasion, and this immunity has rendered this hardy race gentle and peaceful in character. The people are very hospitable, and decidedly lovable. They have little enterprise, and seldom travel much.

The principle crops are peas, beans, millet, and barley. Wheat is likewise grown, but only to a very limited extent, and that only below Kala Panjah. In April the seed is put into the ground, and in July the harvest is reaped. The land requires to be irrigated, and, to yield even a moderate crop, must be richly manured. The strong wind that blows with little intermission throughout

* Died November 1892.

the winter and spring down the valley of the Oxus is unfavourable to vegetation. Fruit-trees do not grow, except at Ishtragh. Above Kala Panjah the only trees are willow and birch, while above Sarhad juniper is the most common tree. From Khandut downwards thick groves of poplars are common in the villages.

Yaks, cattle, ponies, goats, and sheep are largely reared; in fact, thanks to the excellent pastures of Wakhan, the chief wealth of the people lies in their flocks and herds. A considerable amount of wool is exported. Traders from Yarkand bring cotton and silk, and take back ponies, sheep, and warm *chogas*. Rice, salt, and cotton cloth are imported from Badakhshan.

Shignan. Formerly an independent Tajik state, now an Afghan province.

The frontier of Shignan with reference to Roshan is at the *darband* on the Panjah about 5 miles above the mouth of the Murghabi, and from the *darband* eastwards it is the watershed between the Ghund and Bartang valleys; but this boundary after all is only now a district one, and has no further interest. The international boundary between the Afghan and Bokharan dominions is the important one, and in considering this we must include Roshan. The boundary between Roshan and Darwaz on the Oxus is on the left bank the Tangshab *nala* and on the right bank the Shipid *rafak*, while from the Oxus inland towards the north-east the boundary is formed by the watershed between the Bartang and Yaz Ghulam valleys. For further details concerning this boundary, *vide* article Roshan, page 32.

To the west the boundary of Shignan may be taken as the range of mountains dividing Shiva from the valley of the Oxus, while on the south, at between 4 and 5 miles above the Darmarakht stream, the boundary line of Gharan is reached at a spur, or point of rocks, called "Sang-i-Surakh." There is no pillar or boundary mark of any kind on either side of the river, and on the right bank there is not even a point of rocks to indicate it. On that side the line is considered to cut the hills *opposite* the Sang-i-Surakh.

Eastward of the valley of the Oxus the southern boundary of Shignan may be taken as the watershed dividing the Shakh Dara from Wakhan, and afterwards the Alichur from the Great Pamir. Captain Younghusband visited the Pamirs in 1890, and reported: "I have made careful enquiries in the matter, and I am unable to see that the Afghans have any justifiable claim over the Alichur Pamir. It is true the Kirghiz of that district may in times past have paid tribute to Shignan, but that fact is of little importance; and, on the other hand, I find that the Chinese have occupied the country in former times, and have now again established their authority over it."

As regards the north-eastern boundaries of the Afghan dominions in the Pamirs, we have very complete information from the reports of Mr. Ney Elias. With reference to the Russo-Afghan boundary, he says:—

"At Rang Kul I ascertained that the Great Kara Kul and Kizil Jik regions are not recognized as lying within Russian territory, though they are marked within the green line on our maps.* All the Kirghiz assert positively that their people in the Kizil Jik valley are Chinese subjects, and are under a Beg who carries tribute to Kashgar. They had never heard of those regions being claimed by Russia till I mentioned it. Round the Kul itself there appear to be no resident Kirghiz, and those of the Alai are

* And on the Russian Staff map of 1877.—*W. R. R.*

said never to visit Kara Kul or Kizil Jik for pasture, &c. All my informants agreed that the Kizil Art pass over the range running east and west between the Kul (lake) and the Alai Pamir is the Russian boundary, and that a Russian pillar has been built on the top of the pass to mark the frontier between Russian and Chinese territory in this direction, while no pillar or mark of any kind exist on the south of the range. I was also informed that the Russians had never levied any taxes south of the Kizil Art, though they take taxes regularly from the Kirghiz of the Alai on the northern side. The Beg of Rang Kul and his people were very accurate in most of the information they gave me, and I should have been inclined to trust them on this point without confirmation; but, while travelling afterwards up the Murghabi from Kila Wamar, I met at Basit a party of Kirghiz from the Kakui Bel feeder of the Kudara, who had come down to buy grain in the Roshan villages. These people confirmed what the Rang Kul Kirghiz had told me, and, as their home is just within the green line in question, they probably have some knowledge of the subject. They had no idea of Great Kara Kul and Kizil Jik being Russian territory, and said that the Russians had never claimed jurisdiction over those parts, nor had they ever levied taxes from the inhabitants as they do from the Kirghiz beyond the Kizil Art pass. As for themselves, they considered that they were subjects of the rulers of Shignan for the time being, whoever these might be, and their country a portion of the Roshan provinces. In this they are borne out by all the Shignis and Roshanis who have any knowledge of the subject, and I think it may safely be assumed that all the Kudara sources, as marked in our latest maps from Russian surveys, are according to ancient usage within Shignan territory, and perhaps also the western shores of Great Kara Kul. The Russian flag was, I believe, "planted" on the Kara Kul-Rang Kul water-parting about nine or ten years ago by Prince Wittgenstein's expedition, and it is just possible that the Russian Government may have recognized the acquisition by marking it on their maps, but may never have assumed jurisdiction over it. Thus the Kirghiz inhabitants may still consider themselves with good reason to be subject to the rulers of Shignan or Kashgar. With the Kakui Bel party was a man from Rang Kul—undoubted Chinese territory—on a mission to the Hakim of Shignan with *nazar* or tribute! It appears that *nazar* is sent every year by the Rang Kul Kirghiz to the Shignan authorities, but the matter is kept secret from the Chinese; and though the Afghans are well aware that the same people also carry tribute to Kashgar, yet, strangely enough, they make no objection to being the inheritors of a divided allegiance. For people like the Kirghiz to pay tribute to two or more States which they fear is nothing new in Central Asia, and is often only a way of propitiating possible enemies; but the circumstance shows how difficult it is to prove the ownership of these border lands, how dangerously ill-defined the frontiers must be where such things occur, and how easily advantage could be taken by Russia of this." But, whatever Russia may claim, this much is certain, that the natural and locally recognized boundary is the great watershed between the basins of the Alai and the Murghabi.

With reference to the Afghan-Chinese boundary, Elias says:—

"I had heard reports of the Kirghiz of the Alichur and other trans-Murghabi valleys having been summoned by order of the Chinese to within

the right bank of the Murghabi, and on arriving at that river I found that these reports were perfectly correct. In the time of the Shignan Mirs, the Kirghiz, who lived beyond the left bank of the Murghabi, paid tribute to Shignan; when the Afghans took the country from Yusuf Ali in 1883, they sent out and demanded the customary tribute, which was paid as usual. But at this time the Chinese, fearing a general Afghan advance, and believing the Kirghiz would be used against them, despatched a Beg from Kashghar with instructions to collect all the Kirghiz within the line of the Murghabi, implying in this way that the Murghabi formed the Chinese frontier. I have since ascertained that the Murghabi from Ak Tash downwards is considered by all the people in this region, including the Afghans, to be the frontier between Chinese territory and the provinces of Shignan and Wakhan. The act of the Chinese in thus practically pointing out what they hold to be their frontier must be considered an important one in a region where all frontiers are so loosely defined as on the Pamirs. It is, moreover, an undisputed frontier from the present, for the Afghans recognize it, and, as far as one can judge from their actions, seem willing to accept it as the line which ancient usage has laid down as the limit of their Tajik provinces. Still they have never taken formal possession of any point on the left bank of the Murghabi, nor performed any act that can be held to show that they do more than tacitly accept it as their frontier. Indeed, no Afghan official, as far as I am aware, has ever shown himself above the settled villages of Koshan, Ghund, Shakh Dara, or Wakhan during the two years that these provinces have been in the Amir's possession. The Murghabi line makes a good frontier, or, at all events, I can see nothing in it to object to; nor do I know of any line in the neighbourhood that might be considered a better one. It would probably never be attacked, and in time of peace would not withdraw from the Amir's army more than half a dozen sepoy for the purpose of guarding it. In settled countries rivers that are easily crossed form bad boundaries, but in nomadic countries one line is nearly as good as another; and, in the absence of an inaccessible range of hills, even a small stream like the Upper Murghabi would serve as an indication as well anything else either natural or artificial. About eight or nine years ago a Russian officer, who knew these parts (Colonel Kostenko), wrote: "The extent of country between the most southern portion of the province of Ferghana and the pass mentioned above (the Baroghil) lies in the Pamirs, and belongs to no one. . . . This belt of no-man's land must probably, sooner or later, be included in Russian dominions, which will then be in immediate contact with the range forming the water-parting from the Indus." It is precisely this fulfilment of a Russian desire that I believe can be frustrated by closing up Afghan and Chinese territory to a common frontier line across the belt in question, and leaving to Russia only the possibility of violating it by an open act of aggression or war."

The main geographical features of Shignan are:—(1) the Oxus river with its great tributaries on the right bank of the Murghabi or Ak Su and the combined stream of the Ghund and Shakh Dara; (2) the Pamirs to the east, with the great mountain ranges with spring from them. In fact the whole country is a mass of stupendous mountains seamed by deep valleys. The only inhabited tracts are the valley of the Oxus, that of the Murghabi, and those of the Shakh Dara and Ghund. The northern portion of Shignan is

better known as Roshan, and is described under that head. Shignan proper is merely the valley of the Oxus between Gharan and Roshan, *i.e.*, from Kuguz Parin to the *Darband* and the basins of the Shakh Dara and Ghund.

Shignan is said to be richer than Wakhan. Villages and cultivation abound on both banks of the Oxus, especially near Bar Panjah.

The best accounts we have of the country are those of Mr. Elias and Muhammad Shah. The former gives the following description of it:—

“ We crossed the Panjah a few miles below the fort, and camped the first evening at Sacharv on the right bank. Down to this point the Panjah valley is wide and comparatively populous. The villages in their orchards stand usually on the open spurs of the hills, at some height above the river, and in summer would no doubt look green and fertile enough. Though the fields are somewhat cramped, the fruit is abundant, and at certain times of the year the inhabitants live on it to the exclusion of almost every other kind of food in the same way as in some parts of Kashmir and Baltistan. Mulberries form a regular food-crop. In addition to these, apples, pears, apricots, and walnuts are the most common fruits, and there are also grapes and melons of different kinds, and some sorts of plums. Immediately below Sacharv the river valley narrows, and only admits of a village every here and there. About 2 miles before reaching the mouth of the Bartang valley it attains what is perhaps the narrowest point at a spot where a spur or point of rocks juts out from the right bank and forms a cliff overlooking the river. This spot is called the ‘Darband.’

“ The question of population in an Asiatic state is always an unsatisfactory one to deal with, and the figures given can generally be regarded as only rough estimates. Shignan proper (without Roshan) is to some extent an exception to this general rule, for Gulzar Khan was good enough to place at my disposal the figures he had obtained for revenue purposes. These are given, as is usual in the east, with “houses” for the unit instead of individuals; and it may be generally assumed that a house is taken to mean a family of which the members are settled at certain spot. But there is always a small floating population—usually single man connected, for instance, with the government, the troops, &c.—whose numbers are not included in an estimate by the house.* In some countries (as Kashmir, for example) such

* These are—	Houses.
Darmarokh ...	32
Wir, or Viar ...	60
Shakh Dara ...	80
Ghund and Suchan ...	100
Deh Panjah ...	250
ashniv ...	100
Deh Panjah ...	80
Khof and Baju ...	60
	762

people amount to a large proportion, but in Shignan they must be few, and I have added only 2 per cent. to account for them. For each house or family I believe five persons in a Mussalman country may fairly be taken as an average. Thus Gulzar Khan’s computation shows 762 ‘houses’ for the eight districts into which he divides Shignan, and these would give a total population of 3,810 persons, or, with 2 per cent. added for the floating portion, about 3,900 in round numbers. In addition to these, there would be some 800 or 900 Afghan troops, followers, &c.”

Muhammad Shah’s totals considerably exceed the above; and, though there is no doubt that they are excessive, they are given them for what they are worth. They probably give a fairly correct idea of the proportionate population of different districts.

Shighnan.	Villages.	Houses.	Population.
Waznud to Pas Baju	32	1,230	6,150
Khof	5	106	530
Baju	3	60	300
Parshineo (up to Baju) ...	18	412	2,060
Warshineo (Shadud to Washarwa) ...	30	540	2,700
Washarwa, Ghar Zabin, and Viar or Vir ...	28	419	2,095
Darmarokh, Avaring Samagh	15	260	1,300
Total ...	131	3,027	15,135
Bartang	14	300	1,500
Ghund	35	400	2,000
Suchan	26	300	1,500
Shakh Dara	28	450	2,250
Total ...	103	1,450	7,250
GRAND TOTAL ...	234	4,477	22,385

There are no towns in Shighnan, but Bar Panjah has an approach to a *bazar*, and it and Wamar are places of comparative importance. The climate varies greatly with altitude. While in Pasar it is extremely rigorous, in the Roshan part of the Oxus valley it is comparatively mild, the altitude there being only a little above 6,000 feet.

The whole of the inhabitants of Shighnan, Roshan, and Gharan are Shigni-speaking* Tajiks, and mostly understand Persian. The whole of the inhabitants of these provinces, as well as a large proportion of the Darwazis, may be reckoned as Shiachs of the Ismaili sect, or followers of the late Agha Khan of Bombay.

The Kirghiz of Pasar and the Pamirs of course speak their own tongue.

The history of Shighnan is an important subject, as it bears most intimately on the political position of the country. It is therefore somewhat unfortunate that no really reliable records are available.

Mr. Ney Elias says: "The family of the Shigni Mirs trace their origin to a certain Shah-i-Khamosh, a Darwesh and Saiad of Bokhara, who appears to have first converted the people to Sunni Muhammadanism in his capacity of *Pir*, and then to have become *Mir* over them. Long afterwards the people become Shiachs, though the family of the *Mirs* remained Sunnis till the last. When Shah-i-Khamosh lived I have not been able to ascertain, and there are no written histories in the country. Probably it was about the same time as the conversion of the Badakhshis, or early in the 7th century. This, at all events, is what the Khan Mullan of Badakhshan thinks probable.† The *Pir's* shrine exists to the present day in a vil'age close to the Bar Panjah fort, but it contains, I believe, no record from which a date can be ascertained. The earliest *Mir* of whom the people of the present day seem to have any distinct knowledge was one Shah Mir, whose death is estimated to have taken place about 120 years ago. He was the father of Shah Wanji (the latter was so called because his mother was a native of Wanj in Darwaz), and the only date I have been able to find occurs during the latter's reign.

* Called Khugni in their own language.

† At the village of Suchan, in the Ghund valley, is the ruin of a fort attributed to a *kafir* or pre-Musulman king of Shighnan, but no inscription or mark is to be found in or near it. Another and similar ruin exists in Wakhan, and is referred by tradition to the same ruler.

On one of the stone inscriptions at the *bazar* it is recorded that Shah Wanji built the canal mentioned above in the year of the Hijra 1201, or 1786, but it is not known how many years he lived after that date. Shah Wanji is credited with being the founder of the slave-trade, the first Mir of Shignan who sold his subjects into foreign countries; and his three lineal descendants have shown themselves to be worthy successors by keeping up the practice for nearly a hundred years. His character, as far as one can glean it, seems to have been that of a typical Central Asian khan, who by means of personal energy and some warlike instincts* succeeds in making a mark in the obscure and barbarous little world that knows him."

"At the date of Captain Wood's travels, Shignan and Roshan, which then, as now, was a dependency of the former, were in some measure subject to Murad Beg, the Mir of Kunduz, the Shah of Shignan paying tribute to that ruler to the extent of 15 slaves every year, and receiving from him the corresponding value in presents."

"After Murad Beg's death, Muhammad Khan, who ruled the country when Pandit Manphul visited Bokhara, paid tribute to Badakhshan, *the ruler of which is the recognized suzerain of Shignan*. As far as the history of the state is known, it has always been the leading power among the small principalities on the Upper Oxus, and there is reason to believe that Wakhan, Darwaz, and others were at one time among its tributaries. It also appears to have been with great difficulty reduced to a state of dependency by Kunduz, and is said to have been subsequently at open war with Badakhshan in 1871."

Russia is said by Venyukoff to have had no dealings with Shignan or Darwaz; * * * But writing in 1877, he says "that the fact of the Kara Kirghiz of the Pamir having recently declared themselves subjects of Russia will bring them into contact with Shignan."

According to Elias, the successor of Shah Wanji was his son Kuliad Khan, of whom nothing remarkable is reported. His grandson, who followed Kuliad, was called Abdur Rahim. This personage is remembered for having defended his country successfully against the Darwazis who invaded Roshan about 1858 or 1859. Abdur Rahim had married one of his sons (named Shah Mir) to the daughter of Ismail, Mir of Darwaz, who considered that his son-in-law should have brought with him the province of Roshan. Abdur Rahim, however, declined to part with Roshan, met the invasion of the Darwazis which followed at Shids near the frontier, and defeated them. This was the last war with Darwaz. A few years after this event Abdur Rahim died, and was succeeded by his son Yusuf Ali, who ruled the country till 1883, when he was carried a prisoner to Kabul by the present Amir.

There seems little doubt that for very many years Shignan, like Wakhan, has been tributary to the *de facto* rulers of Badakhshan, and that though the Shignan rulers may also have paid tribute to both China and Bokhara, *yet the ruler of Badakhshan has for centuries been the real suzerain of the country*. In 1859 the Mir of Badakhshan acknowledged the supremacy of Dost Muhammad, and from that date therefore Shignan came within the orbit of Afghan domination, while with the forcible seizure of the country in 1883 the last shred of independence came to an end. Shignan, and with

* Shah Wanji is said to have invaded Badakhshan at one time, but was not able to hold it.

it Roshan, is now just as much an Afghan district as Khost or Kunar, while any attempt by Russia to seize it under the pretence of supporting some mythical claims of Bokhara would be a flagrant violation of Afghan rights.

Shignan is now administered by an Afghan *hakim* who has his headquarters at Bar Panjah. The Shignis have a fairly good reputation as fighting men, and at all events have always beaten the Darwazis. Lead, iron, and the elements of gunpowder are found in the country. The manners and customs of the people are similar to those of the Wakhis and Badakhshis. There is no fanaticism, and none of the lawlessness one might expect in a region so far removed from civilization. Nowhere in Asia will one find a more peaceable, harmless, and lovable race than these Tajiks of the Upper Oxus.

Gharan. A district on the upper Oxus or Panjah extending for some 24 miles along both banks of the river between Shignan and Ishkashim.

The Ishkashim boundary is thus described by Mr. Elias :—

“ About 2½ miles above the village of Andaj, and nearly opposite to Kazi Deh (which is in Gharan), the road passes over another rocky spur which marks the boundary of Ishkashim on the left of the river. This point is called “Abrang-i-Safed,” and there is no artificial mark to indicate the boundary : the line is taken to cross the river to a point opposite, but there is nothing on the right bank to indicate its whereabouts. It would be at a spot rather under a mile above the mouth of the Kazi Deh ravine.”

The Shignan boundary is described under Shignan, page 25.

Trotter in his Gazetteer gives the following account of Gharan :—

“ This district, known also as Kucha-i-Gharan, has at all times been famous throughout the east for its ruby and lapis lazuli mines, and has always been subject to Badakhshan. In addition to rubies, the small state of Gharan produces a certain amount of gold which is washed for in the sand of a large stream of warm water, known as the Garm Chashma, which joins the Panjah below Shaikh Beg. The people employed in this work are Badakhshis, and farm the washings from the ruler of Badakhshan for Rs. 200 per annum. Gold is found in many of the tributaries of the Oxus, but its discovery in Gharan is said to be of recent date. The only other village in Gharan mentioned by Abdul Subhan is called Gharan-bala, and is situated 4 miles up a small stream that joins the Panjah on the left bank at Shaikh Beg.

Gharan, like all the other Upper Oxus provinces, is under the Governor of Badakhshan, but its direct administration is entrusted to a *najib*, who has also charge of Ishkashim and Zebak. No troops are now maintained in the district, and, according to Elias, not more than 200 people now live in it. The road (Route No. 28) down the left bank of the river is in very good order for pack animals.

A district of Shignan comprising the valley of the Ghund river. It may be said to end at Sardim, the highest village in the valley. The following is Mr. Ney Elias' description of the valley :—

“ At Chahrsim, Sardim, Joshangaz, &c., little else than barley can be cultivated ; but as one advances towards the Panjah valley, all kinds of grain, except rice, are met with, and nearly all the fruits of temperate climates in Europe. The people also below Deh Basta (known as Ghund *par excellence*)

are not only better off as to clothing and houses, but look less cowed and miserable, the reason being not, as one naturally supposes at first sight, that they inhabit a more genial district, but that the Lower Ghund valley was never one of the favourite slave-farms of the Mirs. The Upper Ghund, the Khof villages near the Darband, and the three or four lower villages of the Bartang valley in Roshan were, for some reason which I have never heard explained, the chief sources from which the later Mirs, at all events, derived their supply of slaves for the foreign markets; and in these parts the people bear the brand that might be expected. There is no populous village, however, in the whole Ghund valley, and none of the side *nalas* are inhabited."

The total length of the valley may be estimated at about 60 miles. As regards population, Muhammad Shah states that it contains with Suchan 60 villages or 700 houses with 3,500 inhabitants; but Mr. Elias, the only explorer who has ever traversed the whole valley, prefers the figures given him by Gulzar Khan, the *hakim* of Shignan, and gives 100 houses as the total for the valley, which would only give a population of about 500; but if we take "houses" in the Wakhi sense (*vide* page 24), the population may be estimated at 2,000.

Formerly the Ghund valley was independent, and was only conquered by Shah Abdul Rabim, the father of Yusaf Ali Shah.

The Russian Pamir expedition of 1883 has been credited with having explored the Ghund valley, but it never got below Sardim. The villages in the Ghund valley are:—

Sardim.	|	Shetam.
Chahrsim.	|	Deh Basta.
Wir.	|	Revak.
Suchan.		

Roshan was classed by Wood as a separate principality, but even at the date of his visit to Wakhan it paid a joint tribute with Shignan to Murad Beg of Kunduz, who frequently invaded, but never succeeded in actually conquering its warlike population, and it is now part of the dominions of the Amir of Afghanistan, and is included in the province of Shignan. Roshan may be said to consist of three districts—(1) Roshan proper, which is the main valley between Shignan and Darwaz; (2) Bartang, the valley of the Murghabi from its mouth up to Rah Sharo; (3) Pasar, which includes the Murghabi valley above Bartang as well as the Kudara valley

The boundary between Shignan and Roshan on the Panjah is the Darband just below Khorf; elsewhere it is the watershed between the Murghabi and Ghund Dara. As regards the boundary between Roshan and Darwaz, which is the really important point, Mr. Elias makes the following remarks:—

"On the 15th of November I found myself again at Wamar, and the next day continued my journey towards Waznaud, which I had always been informed was the frontier of Roshan in this direction, and it was not until I arrived at the village of Waznaud that I ascertained the actual frontier on the right bank to be some 8 miles further on below the village of Rakhav. The Tangshab (sometimes called Gulsar), which descends from the ridge, dividing Shiva from the Oxus valley, and debouches just below Waznaud, but on the opposite (left) bank of the river, forms the boundary

on the left bank. Below this, for about 8 miles, the river itself forms the boundary line until a *rafak* called Shipid is reached on the right bank. This *rafak* is the recognized boundary point on the right of the river, and the line then extends along the main ridge dividing the Yaz Ghulam valley from the Bartang. The last village of Roshan on the left bank is Chasnad, and the Tangshab *nala* is considered the limit of the district of that village; in the same way, the Shipid *rafak* is considered the limit of the district of Waznaud, and hence forms the boundary point on the right bank. Rakharv, a small *kishlak* of about six houses, is within the village district of Waznaud, and is distant from that place about 6 miles along the river, or rather less over the spurs. The Shipid *rafak* may be reckoned at about 2 miles from Rakharv. On neither side is there anything to mark the boundary, nor is there any *karawal* or frontier guard of any kind either at the boundary points or at Chasnad or Waznaud. The line, as I have described it, is held to be the frontier by acknowledged custom, and this is considered sufficient even by the Afghans, who, it appears, have accepted all the frontiers of these provinces as they found them. The Shipid *rafak* is reckoned at about 8 or 9 miles above the mouth of the Yaz Ghulam stream, but the fort of Yaz Ghulam is said to be half a day's journey back from the Oxus up the stream. Below Waznaud, along the right bank of the Oxus, there is only a foot-path; the bridle-path crosses to the left bank at Waznaud, but is said to become very difficult below the Tangshab *nala*. Personally I saw nothing below the Tangshab *nala*. After frequent enquiries I had understood that the frontier line crossed the river just below Waznaud.

"It has been said, I believe, in certain quarters that Bokhara has a claim to the allegiance of Roshan. On this point I made particular enquiries wherever I met anyone who had a knowledge of such matters, but I could find no trace of Roshan ever having been subject to Bokhara or to Darwaz. Neither had anybody, of whom I enquired on this subject, ever heard that Bokhara had put forward claims to Roshan. Gulzar Khan, however, informed me that when he took Shah Yusuf Ali prisoner, he found among his papers documents to show that Yusuf Ali had been constantly in the habit of declaring himself a dependent (*tabeah*) of neighbouring rulers. Besides, the Amir of Afghanistan, the Amir of Bokhara, the Khan of Khokand, the Badaulat of Kashgar, and others had all in their turn received letters from the Shigni Mir assuring them of his dependence. My impression is that none of these letters were meant to have any more than a mere complimentary significance, or at most to be expressions of good-will or flattery of the extravagant kind that such people often use. He could not have offered subjection to *all* of them, though he might have paid tribute to all, as is frequently the custom with petty Asiatic rulers who wish to propitiate neighbours more powerful than themselves. As the Afghans were the only people he feared, it is scarcely likely that he would have willingly renounced his independence, except to the one power who could defend him from their aggression, *viz.*, Russia; yet it does not appear that he ever offered allegiance to the Russians, though he might have been on the point of doing so (as the Afghans allege) when the Amir seized him.

"The Oxus valley from Wamar down to Wama, though only some 8 or 10 miles, is no doubt the most favoured portion of the province of Shignan. The river valley is wide, the slopes between the river and the hills on the right bank are easy and open to the sun, and leave larger culturable spaces than in any other part of the province; the climate also is warm, for

the elevation is but little over 6,000 feet. In consequence the villages are larger here than elsewhere; and though bad government has checked their prosperity, still they are fairly populous, and in summer would, no doubt, appear fertile and productive enough. During my visit the continual sleet and rain prevented them from appearing to advantage. On the whole, they have much the appearance of Kashmir villages, and most of the same products as in Kashmir, except rice, are found there. The *chinar* tree is also found from Wamar downwards."

The domestic animals of Roshan are horned cattle, sheep, and the Kirghiz (Bactrian) camel.

Ney Elias says:—

* Roughly thus—					
4	villages with 30	houses each	...	120	"In Roshan no revenue has yet been levied, and there is as yet no census of the 'houses.' I saw nearly every village in Roshan, however, and have been able with the assistance of the naib and others to form a rough estimate, which results in a total population of 3,000."*
6	" "	25	" "	150	
9	" "	20	" "	180	
13	" "	10 or 15	" "	150	
		Houses	...	600	
				5	
		Persons	...	3,000	

If this is exclusive of Bartang and Pasar, the total population may be taken at 5,000. The people resemble in every respect their neighbours the Shignis.

DARWAZ.

Darwaz became a province of Bokhara in 1877. Previous to this date it was more or less independent. The last Mir of Darwaz was one Muhammad Suraj, who in 1877 (it is said) was called upon to carry his tribute personally to the Amir of Bokhara. On arrival he was seized and imprisoned on a charge of meditated treason, and a *hakim* was appointed to administer Darwaz. The seat of government is at Wanj.

It is not very clear what area may be included in Darwaz, but, roughly speaking, it extends along both banks of the Oxus, from the Roshan boundary to Khuldask on the left bank of the river. The boundary on the Roshan side is described on page 32. Darwaz also includes the district of Wakhia. In fact, it comprises about 100 miles of the Oxus valley and the valley of the Wakhia river. Colonel Tanner gives the following account of it, which he gathered from Muhammad Shah:—

"The geography of Darwaz is little known to us, and owing to the suspicious watchfulness of the Bokharian officials, by whom it is administered, is likely to remain so for many years to come. The 'Havildar' explored a part of it some years ago, and Muhammad Shah has since added something to our scanty stock of knowledge of this land-locked region of defiles and narrow valleys. He continued the explorations of the Oxus from the point where the havildar relinquished his survey, through the districts of Nasai and Khof to Zaghhar, on the right bank of the river, where a road strikes off over the Walwalak range to the Dara-i-Imam. Between the mouth of Dara-i-Imam and Zaghhar the valley is said to be so exceedingly rough and narrow that the accounts Muhammad Shah heard of the dangers of the road caused him to give up all idea of traversing it. The highly disturbed state of the country also added to the natural obstacles, and increased the difficulties of his operations. Between these two places the pathway is said to run along the face of the cliff, in many places hundreds of feet above the rough waters of

the Oxus, and it requires a practised mountaineer to effect the journey in safety. Since Darwaz has become a dependency of Bokhara, the roads and communications have been much improved. The high road between Saghir Dasht and Kila Khum has been made passable for laden beasts of burden, and the *avarings* or roads, which are carried along the faces of the cliffs above the banks of the Panjah, have been put into repair."

Though Darwaz is the poorest of all the Oxus states, yet several accounts agree in stating that the people, both upper and lower classes, are more civilized than their neighbours in Roshan and Kolab. The culturable area is small, and therefore the inhabitants obtain their food-stuffs from Kolab, the granary of the Upper Oxus. There are no other places besides Kila Khum of importance, except perhaps the forts of Khof and Khwahan. Compared with Roshan, the culturable portion of the country is very populous, and every available square yard of ground is terraced. Weaving and spinning is carried on to a great extent, and the productions of the looms are bartered in Kolab for food-grain. The people of Darwaz are nearly all Sunnis and talk the Persian language. On the verge of the country towards Darwaz, in the Wanj-Ab valley, there are some 20 villages of Shiaks.*

This authority gives the population as 43,500 souls; but this a gross exaggeration, for Mr. Ney Elias made enquiries on this subject, and he says:—

"For Darwaz I was only able to obtain an estimate for that section which lies on the left bank of the Oxus. It appears that there are about 24 villages on that side, and though mostly exceedingly cramped for space—so rugged is the country—yet they are more populous than a similar number of villages in Roshan would be. The climate is warm on account of the lower altitude and sheltered position of the *nalas*, and therefore the villages are said to be productive and populous. On the whole the population of these 24 villages may, perhaps, be assumed at about 2,500 or 3,000."

Muhammad Shah describes the main valley as very narrow, the mountains on either side sometimes approaching the very banks of the Panjah. Owing to the narrowness of the valley and the stony nature of the ground, very little corn is raised by the inhabitants. The supply is chiefly obtained from Dara Imam and Kolab, and grass and fuel are got from the interior of the mountains. Mulberry-trees are very numerous throughout the valley; the fruit is dried and ground into flour, of which the people make a kind of gruel.

THE MURGHABI OR AK SU.

An affluent of the Oxus,† which from its length and name may almost be considered the main river. Its volume, however, is not equal to that of the Panjah. It is certainly the most important river in the Pamirs, which it may be said to divide into two halves, the northern and eastern half coming under Russian or Chinese influence; the southern and western half under Afghan domination.

The Ak Su rises in the Gaz Kul or lake of the Little Pamir within a mile or two of the watershed which separates it from one of the sources of the Panjah. It first flows north-east for 30 or 40 miles; then, making a sharp bend to the north, it flows through the Ak Tash valley for about 60 miles. The valley is here an open grassy pamir from 2 to 4 miles wide; the river shallow and sluggish. The only tributary of any importance in this portion of its course is the Isligh or Istigh. Below the Kara Su junction the Murghabi valley continues open and well grassed for some 2 or 3 miles; then

* These Shiaks talk Persian, and are not followers of Agha Khan.

† Oxus being probably the same as Ak Su.

the hills close in, and the gorge becomes narrow and rugged and quite impracticable for baggage animals. The Ak Su near the Kara Su confluence is quite an insignificant stream, at all events in the autumn—some 20 yards broad and barely knee-deep, even where it flows in a single channel—though in summer it would, of course, swell to many times its autumn volume. After leaving the Pamir and entering the inhabited limits of Shignan, the river takes its Persian designation of Murghabi. From Sonab downwards the river is locally known as the Bartang, from the district of Roshan, through which it flows. The river is here a very rapid and dangerous one, and quite unnavigable. Owing to the political complexion given to the Upper Oxus by the Anglo-Russian agreement of 1873, it is an important question whether the Murghabi or the Panjah should be considered the main river. The Munshi who crossed the Murghabi about 200 paces above its junction with the Panjah was of opinion that the former was the bigger stream. The river-bed was about $1\frac{1}{2}$ miles wide, and at least a mile of this was covered with water, which was running in three channels, and was barely fordable by horses. This appears to have been in winter, as the Panjah is described as being remarkably clear, though the Murghabi was coming down red and muddy. In summer floods it is said to extend across the whole width of the valley not less than 5 miles. But Mr. Ney Elias is not of the same opinion. He says:—

“The two chief points to be investigated about the Bartang or lower Murghabi valley were (1) whether its stream might prove to be of greater volume than the Panjah, and therefore the main Oxus (as reported, I believe, by one of the native explorers); and (2)* how far certain passes leading over from the Darwaz valley of Yaz Ghulam might be considered practicable roads into Roshan. From the inspections of the confluence which I was able to make on the upward and the return journeys, from careful enquiries made from the people of Wamar regarding the fluctuations of the two rivers during the course of the year, and from estimates made by fording both (on horse-back) at short distances above the confluence, I was able to satisfy myself that the Panjah is a very much more voluminous stream than the Murghabi. The general estimate that I arrived at was that at this the season of lowest water the Murghabi has somewhat less than half the volume of the Panjah. The chief glacier feeders of the former (the Kashala Yakh) are much nearer to the confluence than those of the Panjah are to the same point. It is also a more confined stream than the Panjah, and has a steeper bed—a greater fall per mile—from the glacier feeders downwards. The two former circumstances cause a greater range in volume between summer, when the glaciers are melting, and winter, when they are frozen, so much so that in summer the volume of the Murghabi is probably almost equal to that of the Panjah at the same point for a short time during July and August, but after that it decreases rapidly to the winter level, which is (as above remarked) less than half that of the Panjah. In the meantime the Panjah neither rises nor falls to the same extent, and this in itself in a mountainous country is a characteristic of a main stream as opposed to a tributary.† If the native explorer, who first put forth the theory that the Murghabi was the main stream, happened to have seen the junction in July or August, his mistake may be partly accounted for.”

* Description of these passes will be found on page 47, Part II.

† Of the three elements—breadth, depth, and velocity—the *first* is greater in the Murghabi in summer and in the Panjah in winter; the *second* is always greater on the Panjah; and the *third* is always greater on the Murghabi.

Muhammad Shah, who was here in September, says that at 300 paces above the junction the channel was 2,100 paces wide, in parts shallow, at others deep, with a strong rapid current, requiring the assistance of a raft or camel to cross.

THE PANJAH.

The name given to the Wakhan branch of the Oxus from its source in the Great Pamir, as far at least as the Samti ferry in Kolab, and according to some authorities to the place where it leaves the hills above Kilif. From about Khuldask, down to Khawaja Salar, this river forms as far as we know the frontier between Afghan and Bokharan territory; but from Khuldask up to Yaz Ghulam, a strip of country shown as about 13 miles wide by Regel on the left bank of the river belongs to Darwaz.

Three or four miles above Kala Panjah it is joined by its left branch, the Ab-i-Wakhan. From this point to Urgand the valley is fairly open, being seldom less than a mile in width; but at Urgand the hills close in and form a defile. Five miles below Urgand the river is spanned by a rickety *kadal* bridge. At Warg there is another defile, and here the river commences to take its great northerly bend. From Ishkashim downwards the valley is a mile or two wide. On its right bank it receives one large stream, the Suchan Dara, which itself is formed by the combined waters of the Ghund and Shakh Dara. The valley of the Panjah at the point of junction opens out to a width of about 4 miles, and is well cultivated. Just below Kila Wamar the river is joined by the Murghabi (Bartang). The whole subject is more fully treated under the heading "Oxus" in the Gazetteer of the Upper Oxus provinces.

THE KIRGHIZ.

The people who call themselves Kirghiz are known to the Chinese and Kalmaks as the Buruts, to the Russians as Diko-Kamenny, and to most Asiatic nations as Kara-Kirghiz.

According to their own genealogies, they consist primarily of the Turk tribe "Kirghiz," who have since been joined by two other branches of the race, *viz.* :—

I.—Some of the Kipehaks, Naimans, and Kitais.

II.—The Chiliks, who claim to have a common ancestor in a son of Kirghiz Beg; but this is not admitted to be authentic.

Their language is the Uigar dialect of Turkish, nearly resembling that spoken in Kashgar. It contains very few Persian or Arabic words, but consists chiefly of primitive Turkish with a considerable number of Mongol words. They call themselves simple "Kirghiz," and have a tradition that they came originally from the Adjan mountains, or from a country to the westward inhabited by Turks. There are many contradictory theories as to their origin. According to the Chinese writers above alluded to, and to Abul Ghazi, as interpreted by Klaproth, they were settled before the time of Changhiz Khan in the country watered by the Yenisei, where accordingly the Russians found them at the time of their conquest of Siberia. During the whole of the 17th century they were alternately in a state of war with, or subject to, the Zungarians, Russians, or to Altyn Khan of the Mongols and his successors, who all found them formidable neighbours. At length towards the end of the 17th or beginning of the 18th century the Zungarians

compelled them to migrate into the mountainous districts between Andijan and Kashgar, where, by amalgamating with the aboriginal Kalmak population, their physiognomy has acquired, among some of their tribes at least, the decided Mongolian cast, which has led many ethnologists and others to consider them of Mongol extraction. They are divided into two great branches, the On (or right) and Sol (or left), who may be roughly described as the Kirghiz of the Tian-Shan and of the Alai and Pamir respectively.

Valikbanoff mentions the tribes of the Sol division in the Aulia-Ata country; but this does not agree with the evidence of subsequent writers, and it is probable that they are the Kirghiz of the Osh and Namangan districts who are said to migrate in summer to the Alai. Many of the Adugins and other tribes of the On branch also cultivate lands in the Ferghana valley, and feed their flocks in the hills south of Khokand and Osh. Most of the latter may be described as the "Alai Kirghiz," who are divided into the following tribes :—

The Mongush, comprising	1,225	tents.
„ Adugin	„ 3,145	„
„ Ichkili	„ 9,000	„

The latter tribe include, according to the writer of an account of the Alai expedition which appeared in the *Russische Revue* of 1876, the Taiti and Naiman, who are classed as separate tribes by Kostenko. All of these, according to the last-mentioned author, pass the winter in the valleys of the rivers flowing towards Ferghana, and trade only with that country; but, like much of the information collected by M. Kostenko, this is open to doubt, as we learn from other sources that many of the Alai Kirghiz trade rather with Karatigin than with Ferghana on account of the comparative easiness of the passes leading towards the former country, and pass their winter either in the upper valleys of that Begship or in Russian territory between Daraut Kurghan and the Karatigin frontier at Fort Karamukb. The Karatigin Kirghiz occupy the eastern part of that Begship, their summer quarters extending up to the border of the perpetual snow, and their winter quarters being found on the upper Kizil Su and in the valleys of most of its affluents. Oshanin divides them into the following tribes: the Kara-taiti, the Tupchak, and the Gidirsha, all of whom, like the tribes wintering in the mountain valleys of Ferghana, cultivate a large extent of land round their winter quarters. To the east of Karatigin we know little of the sub-divisions of the Kirghiz, as they appear to be generally classed by travellers as the Rang Kul, Great Pamir, or other Kirghiz, according to the localities in which they are found. Oshanin mentions the Sahib-Nazar tribe as camping near the Takhta Kuram pass and in the Paliz valley district, according to him, 67 miles from Altin-Mazar, across an entirely uninhabited country. These Sahib-Nazars he says, writing from the Alai in October 1879, have every reason to fear the approach of the Russians, as they are emigrants from the Alai, which they left in the time of Khudayar Khan, and have since their departure thence into Shignan territory devoted themselves to lifting the cattle of the Alai Kirghiz.

The political constitution of the Kirghiz is generally said to be essentially more democratic than that of the Kazzaks; but the race is capable of showing some powers of combination and of attachment to their chiefs when pressed by a foreign enemy. A certain Kirghiz lady, styled Mama-jan Dadkwah, is mentioned by Kostenko and other writers, who had

great influence, especially over the Adijin and Mongush tribes, before the annexation of the Khanate of Khokand by the Russians, and was treated with great respect by the native rulers of that state. We learn also that she was visited and entertained with some courtesy by General Skobelev on the occasion of his visit to the Alai in 1866. Her son Abdul Beg was a great leader of the anti-Russian party during the campaign which ended in the annexation of Ferghana and the Alai; and the opposition of the tribe was only brought to an end by his defeat in a considerable engagement in April of the same year, after which he is said to have gone to Afghanistan with a view to making a pilgrimage to Mecca. A few particulars which we learn from Oshanin's travels in Karatigin regarding their system of land tenure also throws some doubt upon the accuracy of this assertion regarding their politics, and seems to show that class distinctions are not altogether unknown among the tribe.

Their elders, called *manaps*, are said by Schuyler to have been, in the case of the Russian Kirghiz, men of aristocratic family, the remainder of the population being classed as *bakhara* or *kul*, the latter having the same signification as among the Turkomans; but it appears from the best Russian authorities that the families at least of these *manaps* had no aristocratic position. The *manap* himself had considerable influence, and this was enormously increased if he was also a *batyr* or noted military leader.

The Kirghiz are partially converted to Muhammadanism, but many traces of their old religion of Shamanism are still to be found among them, and strange rites are practised by their Shamans, dressed in caps and sleeves of swansdown for the propitiation of evil spirits. Fire worship is also regularly practised by them according to Bardasheff. Tatar *mullas* are now beginning to penetrate among the tribe, and many of them are said to send their children to the *mullas* established by the Russians among the Kazzaks with a view to their being educated. The race is altogether illiterate, the *biis* and *manaps* being as ignorant of letters as the common people. Like the Kazzaks, they delight in the recital of poetry, improvised or otherwise, and possess a great mass of traditions regarding real or imaginary heroes of the past, which form a compilation known as the *Manas*, with a continuation or supplement known as the *Samyatei*, the *Iliad* and *Odyssey* of the race.

They are, generally speaking, a poorer race than the Kazzaks, the only sections that possess large flock and herds being the Boghu and Sari-Bagush. They are supplied by Tartar and Russian merchants with cotton goods, metal wares, and leather of such inferior quality as to be hardly saleable elsewhere, but which they are unable to produce for themselves. The merchants take payment in sheep for their goods and make an enormous profit, the Kirghiz being simple and proverbially honest in such transactions, so much so that a trader can allow them to go off with goods, knowing that they will return to the same place the following year with their flocks and herds. Besides live-stock the merchants purchase from them fox and marten skins. To the Chinese also they sell the horns of the *bara singh*, for which, especially when in velvet, they receive high prices, as they are then esteemed as aphrodisiacs. All authorities give them an indifferent character as a surly, ill-mannered race, and the Chinese historians of the last century describe them as fierce, cruel, addicted to plunder, and braver than either the Kazzaks or Kalmaks, which is probably correct, though the

statement is said to be made to enhance the merit of their conquest by the Chinese Government. Most of them are nomads, but those who have taken to agriculture appear to prosecute it with considerable skill and success. The women, as among all the nomads, do most of the hard work, notwithstanding the curious fact abovementioned of a female chief in the Alai, besides making felt and a coarse yarn used for sacking; they have few slaves, and the system of the harem is unknown among them. They are said to be addicted to drunkenness whenever they have the opportunity, no shame or religious objection attaching to this vice. They are also unusually dirty in their persons and habits; they think it wrong to clean any vessel as likely to scare away abundance, and as a sign of mourning abstain from ablutions or change of raiment for a year. The Pamir Kirghiz roam about indefinitely, camping wherever the grass is best; but the most frequented part is the valley of the Ak Su, where there are about 80 tents, while on the Alichur Pamir and the valleys leading into it there are not more than 30 tents in all. They possess large flocks of sheep and herds of ponies, *yaks*, and goats.

The following is from Elias :—

“ The Kirghiz in the Kara Kul district, as is the case nearly all over the Pamirs, belong to no one tribe exclusively, but are composed of representatives of all the tribes that occur in these regions. The four chief divisions are the Naimau, the Tait, the Kara Tait, and the Kasik, and there are also many subdivisions. At Kara Kul, Kirghiz of all four main divisions are found living together promiscuously, and having in many cases intermarried.* The most numerous of the tribes is perhaps the Tait, which is said to number some 600 tents or families; but this is probably too high an estimate. The Naimans, though perhaps less numerous, claim to be of the best Kirghiz blood, or of the highest caste on account of their kinship with the Kipchaks, whom all Kirghiz seem to regard as a superior people to themselves. The common descent which the Naiman claim with the Kipchaks dates from many hundreds of years ago, when the home of their common ancestors was, as they believe, in the country between Bokhara and Samarkand. They seem to have no record or estimate of the time they have inhabited the Pamirs, yet it is curious to note the clear knowledge that the most squalid and ignorant among them have of their own descent and the pride with which they point out their respective pedigrees. Like all nomads that I have come in contact with, they are vain and fickle, and consider the chief aim in life to be able to live it through without work. They are humble enough to the commonest Yarkandi, Andijani, or Shigni, will do as he orders them, and accept from him any amount of abuse or ill-usage; but they would never consent to work for him for wages, or indeed to earn a livelihood in any way whatever, poor as they are in everything but the barest necessities of life. On the Eastern Pamirs they seem well content to be under Chinese rule, as they feel that this is little more than nominal, and that in fact they are left almost entirely to themselves. Under the rule of Yakub Beg a certain proportion had to serve in his army, and Russian rule is dreaded by them on account of the tax-gatherer. Farther west—at Rang Kul and onwards—I found a distinct leaning towards the Afghans.

* From the best estimates I have been able to procure I should say that the total Kirghiz population of all the hill and Pamir country south of the Russian frontier might perhaps be taken at about 1,200 tents or families, making a total population of about 5,000 or 6,000 persons. This estimate is, however, only a rough one.

“At Yemen Tal our Rang Kul guides joined us for the journey to Shignan, and brought with them a deputation of several Kirghiz from the Murghabi valley, who had formerly inhabited the Alichur, to ask me to intercede with the Chinese authorities on my return to Kashgar, and move them to withdraw the prohibition against the Kirghiz having communication with Shignan. It appeared that not only are the Kirghiz required to live within the line of the Murghabi, but they are also forbidden to have any communication with Afghan territory. The Chinese fear and jealousy of the Afghans is so great that they desire to keep even these miserable Kirghiz from falling under their influence and increasing their power.

“But to return to the Kirghiz deputation. From these people it became evident that their grievance was not so much the loss of the excellent pasture of the Alichur as the prohibition they were under against resorting to the Shignan villages for their requirements of grain, clothing, &c. This latter circumstance weighed heavily with them. It was a hardship, they considered, to have to resort to the plains of Kashgar for their supplies while the natural source lay close and convenient in Shignan.* The “bazar parting” (if one may use the term) on the Pamirs is very much that of the water parting, and might be placed between Little Kara Kul and Rang Kul on this line of road. Thus the people of Rang Kul, Ak Baital, Murghabi, &c., naturally resort for their supplies to Shignan, while those from Kara Kul, Karatash, Tagharma, &c., look to Kashgar. The former are on the western, or Shignan, bazar-shed, and feel the inconvenience of being obliged to draw their supplies from beyond the eastern shed. The Chinese policy of fear and suspicion, however, has begun to take effect in the way that might be anticipated: the Kirghiz are becoming alienated, and this summer sent a deputation to Abdulla Jan, Governor of Badakhshan, to ascertain how the Afghans would receive them if they abandoned their allegiance to the Chinese. The sardar assured them of a welcome in the Oxus provinces whenever they chose to settle there.

“Perhaps the most curious point about the relations of the Kirghiz to their neighbours is the anxiety of both the Chinese and Afghans to keep them as subjects. Were they a numerous, a warlike, or a wealthy people, this desire could be understood; the taxes taken from them might swell the revenues of the province, or their men might be counted on as a defence against an enemy. But they are a poor people and pay little or no revenue except where they cultivate the ground. Their numbers, too, are small, and it is estimated that only about one-tenth in four possess a matchlock (usually a heavy small-bore, rifled-barrel of Russian make, fitted to a rude, home-made stock). If this estimate be applied to the total population (5,000 to 6,000 in about 1,200 tents), it would give only about 300 firearms for the whole of the Pamirs. It is difficult to see how this western section of the Pamir Kirghiz can be considered either valuable allies or formidable enemies. Warlike qualities I believe nobody would attribute to them; on the contrary, they have been the victims of raids from Shignan for many generations past; and if they were ever possessed of any aggressive spirit, it must have been long ago crushed by the treatment they have received from more powerful neighbours. From time to time, as the demand in the slave market might require, the Shigni Mir would organize *chapons*, or forays, to the Alichur or the Rang

* As a matter of fact, as I afterwards saw for myself, they frequently obtain supplies from the Shignan villages, but it is done by stealth.

Kul Pamir, and carry off as many marketable head of Kirghiz as he could dispose of to advantage in the neighbouring countries. Even the villagers of the Ghund and Shakh Dara valleys of Shignan—themselves but slaves of their Mir—after harvesting their summer crops, were in the habit of making up raiding parties to the Pamir, where they plundered all the Kirghiz within their reach of sheep, ponies, woollen stuffs, and, in short, anything they could lay their hands on, except the people themselves. These were a “royal monopoly” in the Shignan state, and the Mir’s subjects did not dare to deal in them. The Kirghiz could seldom call themselves secure, except when the Mirs were engaged in war with some neighbouring state; and, perhaps, the darkest day for them was when the sister of the last Mir, Shah Yusuf Ali, was given in marriage (about 1870) to Yakub Beg of Kashgar. This alliance with the powerful khan gave additional strength and prestige to Shignan, and, besides, entailed frequent missions across the Pamirs to Kashgar, each of which took more or less the form of a raid on any Kirghiz that might be accessible *en route*.”

RUSSIAN CLAIM TO THE PAMIRS.

M. Levchine, who was a Russian Councillor of State, wrote in 1840 that the Kirghiz “inhabited the country between Andijan and Kashgar, or between the actual Khanate of Khokand and little Bokhara * * * It results from all that we have said above that the great horde no longer forms an entity: one part obeys China, a second the Khan of Khokand, and a third is regarded as independent.” Further on he writes:—“According to these principles, the submission of the Kirghiz to foreign sovereigns is born, changes, and ceases with the wants of the moment. In passing from the frontiers of Russia to those of China or Khiva, from a Russian subject the Kirghiz becomes a Chinese or Khivan subject, and at Tashkend or Khokand he gives himself out as a Tashkendian or Khokandian.” The above extracts prove (1) that in 1840 the Kara Kirghiz or Buruts were spread out between Andijan and Kashgar; (2) that portions of them used to pay tribute and acknowledge different masters; (3) that the nomad Kirghiz were only the subjects for the time being of the power within whose territories they located themselves.

Schuyler says, speaking of the Kara Kirghiz, that “at the end of the last century they were subject to the Chinese, who on several occasions gave them protection against the attacks of the petty Begs of the provinces of Tashkend and Khokand. Subsequently they came under the dominion of Khokand, but in the troubles at the death of Madali Khan in 1842 they made themselves practically independent.” Most of the Kirghiz belonging to the On division have for many years past been permanent residents in Russian territory, and form a large element in the population; but even of these we learn from Colonel Gordon, who accompanied the Yarkand mission in 1873-74, that a large body from the Narin valley crossed over the hills yearly with about 5,000 ponies for winter grazing, for which they paid tribute to Kashgar. At the time of the Yarkand mission the Ak Tash valley was occupied by Kirghiz from the Kizil Art, who were permanently settled there about the year 1867 under a chief named Abdul Rahman. This chief migrated with them from Khokand (now Russian Ferghana) territory. The Tagharma plateau, also belonging to Kashgar, was at the time occupied by a branch of the Alai Kirghiz. On the Great and Little Pamirs there were at the date of the explorations of the Yarkand expedition

no Kirghiz; those who had been in the habit of visiting these districts as summer pastures, and who were formerly *subjects of Wakhan*, having left it in consequence of the constant slave-making raids off the Wakhis, Kanjutis, and others, and had taken up new winter quarters in the Shakh Dara district of Shignan, whence they move with their flocks in summer to the Alichur plateau, also in Shignan territory. The tents of their old winter quarters at the western end of the Great Pamir were seen by Colonel Gordon. This officer also mentions the Kirghiz in the Tagdumbash Pamir and at other places in Kashgar. Gordon also mentions the promptness with which the Atalik Ghazi restrained and punished the Kirghiz of the Pamirs even as far north as the Kizil Art.

With regard to the ownership of the Pamirs at the time of the Yarkand mission, Colonel Gordon says:—"Wakhan, on the Pamir, owns the Western Tagdumbash from the watershed, the Little, Great, and Alichur Pamirs, and the Ak Tash valley to the west (left bank of the river as far as its junction with the Murghab). The Alichur belongs virtually to Wakhan, but it appears that the Kirghiz from Shignan are in the habit of occupying it at will without question. The Eastern Tagdumbash, the eastern end of the Ak Tash valley, and the Kizil Art plain up to the Alai belong to Kashgar." Sir Douglas Forsyth, in his confidential report on the Yarkand mission, says:—"The Kirghiz of the Kizil Art plain own an easy kind of allegiance, at one time to Khokand, and at another to Kashgar." Captain Biddulph, in his work called the Atalik Ghazi, says:—"The Kirghiz of the mountains pay tribute to Russia, China, or Khokand according to the pastures they occupy for the time being, and sometimes pay tribute to two powers at the same time." The state of affairs among the Kirghiz of the Pamir in 1885, when Mr. Ney Elias visited that region, is fully described under "Shignan," page 25. There appears *then* to have been no question of Russian pretensions to these regions. When Captain Younghusband visited the Tagdumbash Pamir in 1889, he found the Kirghiz living there still paying tribute to China. He says:—"The headman, Kuch Muhammad, has been placed here by the Chinese, and is supposed to be in charge of the frontier in this direction. He, however, is also in the pay of the Raja of Hunza, and seems to have a good deal more respect for him than for the Chinese." Since the visit of Mr. Elias to the Pamir regions the condition of affairs had gradually changed. The Chinese recovering from their dread of an Afghan advance which had been caused by the seizure of Shignan had withdrawn their demands on the Kirghiz to live within the line of the Murghabi; and when this region was visited by Captain Younghusband in 1890, he found that the Chinese had again asserted their authority over territory on the left bank of the Murghabi. In a letter dated the 14th August 1891, with reference to the claims of Khokand to the Pamirs, after stating that some of the Kirghiz of the Pamir formerly paid tribute to that Khanate, he says:—"It is equally certain that these same Kirghiz, and at the same time, have paid tribute to Shignan, and also acknowledged the supremacy of China. The account the Kirghiz themselves give me is that they have always considered themselves really to be the subjects of the Emperor of China, but that in old times the Chinese, except on urgent occasion—as when the Sakal Amban pursued the two Khojas to lake Yeshil Kul about a century and a half ago—seldom came up from the plains of Kashgharia into the mountains, and consequently when parties of raiders came from Khokand or Shignan, the Kirghiz paid tribute or blackmail, whichever one likes to call it, and the Chinese pretended to know nothing about it; just in the same way

in fact, as the inhabitants of Pakhpu, between Yarkand and Kanjut, pay blackmail to the latter country to the present day, while the Chinese suppose themselves to have no knowledge of such proceeding.

“These, as far as I can learn, are the sole grounds upon which Russian bases her claims to the Pamirs; and if such should be of any avail with so wilfully aggressive a power as Russia is, China would have little trouble in proving that she has infinitely stronger claims than Khokand to the Pamirs (and for the matter of that even to Shignan); that for centuries the Kirghiz have been tributary to her; that as evidenced by the inscription at Soma Tash, near lake Yeshil Kul (see below), she has conquered the country up to there in former times; and that of recent years she has shown her supremacy over the Pamirs by sending officials to collect taxes and arrange the head-quarters of the different frontier posts.

“All this the Chinese would have no difficulty in proving; they could show that the Pamirs belonged to China long before any inhabitants of them paid tribute to Khokand; during the time that these inhabitants paid tribute to Khokand; and again for years after the Russians had annexed Khokand. But the probability is that no amount of reasoning will get the Russians off the Pamirs; and, if that is to be effected at all, it will only be by strong pressure elsewhere.”

Captain Younghusband in his final report of his mission to Chinese Turkistan, dated 18th November 1891, says:—“I reached Yarkand at the end of August last year, and there met the Russian traveller Colonel Grombtchevsky, whom I had seen in the previous year on the borders of Hunza. As he had travelled round the Pamirs, I took an opportunity of enquiring from him to whom the Alichur Pamir belonged, and he informed me that the Kirghiz inhabitants considered themselves to be Chinese.”

From Yarkand Captain Younghusband proceeded to the Pamirs, visited Ak Tash on the Little Pamir, the eastern portion of the Great Pamir, and travelled down the Alichur Pamir to Soma Tash. The results of his enquiries on this spot were briefly as follows:—

“The extreme limits over which the Chinese were found to claim jurisdiction were on the Little and Great Pamirs up to the watersheds between the Panjah and Ak Su branches of the Oxus, and on the Alichur Pamir up to Soma Tash, at the eastern extremity of lake Yeshil Kul. He found the remains of a fort at Soma Tash and part of an old Chinese inscription apparently describing the events of 1759, and setting forth that a Chinese force had pursued their enemies up to the borders of Badakhsban. This inscription was reported to have been removed by Colonel Yonoff’s party in August 1891. In the direction of the Russian frontier he found that the inhabitants round Rang Kul considered themselves Chinese subjects, and that the frontier according to them lay along the watershed between the Rang Kul and Kara Kul lakes.”

Captain Younghusband, in conclusion, says that “whatever doubt may have existed as to how much of the Pamirs was Afghan and how much Chinese, none has existed as to whether they were Russian or not, and no European who has visited the Pamirs has ever spoken of them as Russian territory.”

It is noteworthy that in the “Map of Afghanistan Military District,” scale 40 *versts* = 1 inch, compiled by the Turkistan Topographical Military

Section in 1877, the southern Russian boundary is shown just to the south of the Great Kara Kul, as in Walker's Turkistan map; but in a map of the "Upper sources of the Oxus" compiled in the Military Topographical Section of the General Staff, 30 *versts* = 1 inch, in 1885, the boundary is broken off about the Kara Art pass* (due east of lake Kara Kul) and at the Muksu, and no southern boundary towards the Pamirs is shown. The direct evidence of the boundary shown on the map of 1877 after Khokand was absorbed into the Russian possessions is important, and its omission on the 1885 map is significant. The negative evidence of Von Kuhn† may also be mentioned. This writer gives the provinces of the Khanate of Khokand under Khudayar Khan, but does mention the Pamirs. He speaks of nomad Kirghiz who at one time wander into the Semiretech district and at another into Kashgar. In a more recently published historical work on the Khanate of Khokand called "A Short History of Khokand, 1886," the writer, M. W. Nolivkin, a Central Asian by extraction, does not mention the Pamirs.

Vambéry in a letter, dated 26th October 1882, to the *Times* draws particular attention to this fact to prove that the Pamirs until quite recently was a geographically undefined and unknown region, and he ridicules the idea that this region could ever have elicited such an amount of attention and importance among the inhabitants of Khokand as assumed by the Russian claim. He says that he himself was travelling with Khokandians for months, and never heard the name Pamir.

The Khokand envoy who visited India in 1854 gave the districts of Khokand, but made no mention of the Pamirs.‡

Everything goes to show that Khokand never had any real authority over country south of the Alai valley, and, as far as can be ascertained, no mention is made in any of the numerous authorities on the subject of any provinces or districts of Khokand south of the Alai range.

"There is no doubt," to quote Vambéry's letter to the *Times* again, "that certain portions of the Pamirs are frequented by Kirghiz coming from the Alai, *i.e.*, Russian subjects; but, on the other hand, it is patent that some of the Kirghiz subject to China likewise resort to the said high tableland, and the right or duty of the Russians to protect their subjects applies in the same degree also to China. Of course, at present, when the right of possession of the Pamirs is on the *tapis*, the Russians are inclined to claim authority over all Kara Kirghiz; but a few years ago this was not the case, for Russian authorities like Yagriashski,§ Radloff,§ and many others unreservedly mention Kirghiz as acknowledging allegiance to China."

The statement in the article headed "The actual position of affairs in the Pamirs," which appeared in the semi-official *Turkistan Gazette* of the 20th September, to the effect that "the possessions of the Khan of Khokand

* There are two passes of this name shown in Walker's map of Turkistan. It is the one marked 15,800 feet.—*E. R. E.*

† "The province of Ferghana" by A. Von Kuhn, 1876, page 23.

‡ Letter from the Chief Secretary to the Government of the Punjab, to the Secretary to the Government of India, Foreign Department, dated 18th October 1854.

§ Works not available, but our authorities are as good.—*E. R. E.*

altogether embraced all the Pamirs and parts of Kashgar" is therefore devoid of foundation.

In conclusion, it may be observed that the subject is one about which proof is difficult, and is chiefly of a negative character. Most important evidence, however, as to the state of affairs at the time of the annexation of Khokand is furnished by the reports of the Yarkand mission,* which took place shortly before the annexation of the Khanate. If the Pamirs were "uninterruptedly administered by special Khokandian officials," as stated by the *Turkestan Gazette*, the existence of such officials was not discovered by the party which traversed this region in 1873, and all the evidence went to prove that the Kirghiz of the Pamirs were at that time paying tribute to the rules of the tracts in which they wintered, and that only the northern sections which wintered in the Alai, Osh, &c., paid tribute to Khokand.

The direct evidence of the 1877 map of the Turkistan Military District is also very important as showing what the Russians shortly after the annexation of Khokand considered to be their frontier in the direction of the Pamirs.

Further direct evidence is afforded by a Russian official publication, the second edition of which was published last year. This work is called "A Geography of the Turkestan Country," compiled by N. V. Ostroumoff. The first edition was approved by the Educational Committee of the Ministry of Public Instruction for use in the Government Schools of Turkistan in September 1886; and the print of the second edition was sanctioned on the 31st July 1890, and the work was published at Samarkand in 1891. In this second edition (see page 1), in describing the boundaries of Turkistan it is stated: "The southern boundary, which is also the southern boundary of the Empire, separating the country from Bokhara, stretches from the Uzbek pass on the east over the Pamir plateau,† and, curving round the Fedchenko glacier,‡ cuts the Trans-Alai mountains, the Kizil Su river, and thence following the Alai and Hissar ranges takes a direction towards the mountain Aktagh. From here it continues in a north-western direction across the Kizil-Kum desert to the Oxus." And again in describing the divisions of the Turkistan province in detail under the heading Pamirs, it is stated:—"South of the Trans-Alai mountains lies the lofty plateau of the 'Pamir Khargosh,' or simply Pamir, with the lake of Kara Kul, the largest in the whole country after the Aral Sea. Its water is salt and bitter. The extent of the plateau is about 10,000 square *versts* (4,400 square miles) and the average height 13,000 feet, for which reason it is called by the natives the 'Roof of the world,' or 'Pamir.' On it are the frontiers of our Empire with China and Afghanistan."

According to this work therefore, and it must be remembered that it is an official publication, only the Khargoshi Pamir is included within the Russian boundary, the remainder of the Pamir region being under the jurisdiction of China and Afghanistan. This entirely agrees with the contention of the British Government.

* This, though evidence from the British side, is, I consider, most important, as the Russians had not then annexed Khokand.—*E. R. E.*

† Presumably the Khargoshi Pamir.

‡ This is west of lake Kara Kul.

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ANDIJAN ...	UZKEND	4	50 $\frac{1}{4}$	10	20
AULIA-ATA ...	KHOKAND ...	The Bish Tash Pass and Namangan.	20	301 $\frac{3}{4}$	12	21
AULIA-ATA ...	KHOKAND ...	The Kara Bura Pass and Namangan.	17	244 $\frac{1}{4}$	13	23
B.						
BAB PANJAH ...	THE GREAT KARA KUL.	The Murghabi ...	13	189	24	46
C.						
CHITRAL ...	FAIZABAD (BADAKHSHAN).	The Dorah and adjoining Passes and Zebak.	13	157	31	69
CHITRAL ...	MARGHILAN ...	The Dorah Pass, Zebak, Kila Khum, and the Kara Kizak Pass.	41	563 $\frac{3}{4}$	28	56
CHITRAL ...	OSH ...	The Baroghil Pass, Kala Panjah, and the Khargosh and Tuyuk Passes.	44	583 $\frac{3}{4}$	29	61
CHIMKEND ...	KHOKAND ...	The Postal Road <i>viâ</i> Tashkend and Khojend.	20	253 $\frac{3}{4}$	17	26
CHIMKEND ...	KULDJA ...	The Postal Road ...	50	762	1	1

INDEX—*contd.*

From	To	Via	Stages.	Miles.	Number of Route.	Page.
CHUST ...	KHOJEND ...	Pungan ...	8	106½	15	24
F.						
FAIZABAD (BA- DAKHSRAN).	CHITRAL ...	Zebak and the Dorah and adjoining Passes.	13	157	31	69
FAIZABAD ...	KASHGAR ...	The Alichur Valley, Rang Kul, and the Little Kara Kul.	30	501½	30	66
G.						
GHARM ...	KHOJEND ...	The Pakshif and adjoining Passes and Ura Tapa.	15	211	20	29
CHAEM ...	KHOKAND ...	The Tarak Pass ...	8	?	19	28
GILGIT ...	MARGHILAN ...	Yasin, the Baroghil Pass, Soma Tash, and Daraut Kurghan.	40		27	53
GILGIT ...	OSH ...	The Khora Bohrt Pass, the Little Pamir, and Ak Tash.	33	502	25	48
H.						
HUNZA ...	KASHGAR ...	The Mintaka Pass and the Tagdumbash Pamir.	24	304	35	78
HUNZA ...	SHAHIDULLA...	The Shimshal Pass ...	19	?	40	89
HUNZA ...	TASHKURGHAN	The Shimshal and Kurbu Passes.	16	?	38	84
HUNZA ...	YARKAND ...	The Khunjerab Pass and Tashkurghan.	23	?	37	83
K.						
KALA PANJAH	TASHKURGHAN	The Victoria Lake and Ak Tash.	12	194½	36	82
KARA KUL (THE GREAT).	BAE PANJAH...	The Murghabi ...	13	189	24	46
KARAKOL ...	ANDJAN ...	The Bars-kaun defile and Narin.	20	378	9	16
KARAKOL (ISSYK KUL).	VEBNI ...	The Santish Pass and Chilik	12	209½	4	6
KASHGAR ...	AK SU ...	The Belowti Pass ...	15	296½	22	42

INDEX—contd.

From	To	Via	Stages.	Miles.	Number of Route.	Page.
KASHGAR	FAIZABAD	The Little Kara Kul, Rang Kul, and the Alichur Valley.	30	501 $\frac{1}{4}$	30	66
KASHGAR	HUNZA	The Tagdumbash Pamir and the Mintaka Pass.	24	304	35	78
KASHGAR	LEH	Yarkand and the Kilian and Karakorum Passes.	34	535 $\frac{1}{2}$	33	72
KASHGAR	NARIN	The Terekti and Bogashta Passes	8	184 $\frac{1}{4}$	7	13
KASHGAR	RANG KUL	The Akberdi Pass	10	151 $\frac{1}{2}$	23	44
KASHGAR	TOKMAK	The Turgat Pass and Narin (Verni-Kashgar Caravan Route).	25	374 $\frac{1}{2}$	6	12
KASHGAR	TOKMAK	Chadir Kul, Kurtka, and the Son Kul.	21	300 $\frac{1}{4}$	8	14
KASTEK	PISHPEK	The Kastek Pass and Tokmak.	5	92 $\frac{1}{4}$	1-A	5
KHOJEND	CHUST	Pungan	8	106 $\frac{3}{4}$	15	24
KHOJEND	GHARM	Ura Tapa and the Pakshif and adjoining Passes.	15	211	20	29
KHOKAND	ANDIJAN	Chust and Namangan	9	109 $\frac{1}{2}$	11	20
KHOKAND	AULIA-ATA	Namangan and the Bish Tash Pass.	20	301 $\frac{3}{4}$	12	21
KHOKAND	AULIA-ATA	Namangan and the Kara Bura Pass.	17	244 $\frac{1}{4}$	13	23
KHOKAND	CHIMKEND	The Postal Road <i>via</i> Khojend and Tashkend.	20	253 $\frac{1}{4}$	17	26
KHOKAND	GHARM	The Tarak Pass	2	?	19	28
KHOKAND	OSH	Wadil and Naukat	9	128	18	27
KULDJA	AK SU	The Chanchal and Muzart Passes.	15	249	2	5
KULDJA	AK SU	The Chalkodu Su Pass, Karakol, and the Bedal Pass.	23	447 $\frac{3}{4}$	3	8
KULDJA	CHIMKEND	The Postal Road	50	762	1	1
L.						
LEH	KASHGAR	The Karakorum and Kilian Passes and Yarkand.	34	535 $\frac{1}{2}$	33	72

INDEX--contd.

From	To	Via	Stages.	Miles.	Number of Route.	Page.
M.						
MARALBASHI ...	AKTAGH ...	Yarkand, Kugiar, and the Yangi Pass.	24	301	24	75
MARGHILAN ...	AKTAM ...	Namangan ...	7	79½	14	24
MARGHILAN ...	AK SU ...	Andijan, Osh, the Taldik, and Kashgar.	40	593	21	32
MARGHILAN ...	CHITRAL ...	The Kara Kazik Pass, Kila Khum, Zebak, and the Dorah Pass.	41	563½	28	55
MARGHILAN ...	GILGIT ...	Daraut Kurghan, Soma Tash, the Baroghil Pass, and Yasin.	40	?	27	53
MARGHILAN ...	TASHKEND ...	Khokand and Taliu ...	12	178½	16	25
MUZART ...	TOKMAK ...	Issyk Kul and the Postal Road.	20	343½	5	10
N.						
NARIN ...	KASHGAR ...	The Bogashta and Terekti Passes.	8	184½	7	13
NEZA TASH PASS.	YASIN ...	The Bash Gumbaz, Benderski, and Darkot Passes.	14	191½	26	51
O.						
OSH ...	CHITRAL ...	The Tnyuk and Khargosh Passes, Kala Panjah, and the Baroghil Pass.	44	583½	29	61
OSH ...	GILGIT ...	Ak Tash, the Little Pamir, and the Khora Bohrt Pass.	33	502	25	48
OSH ...	KHOKAND ...	Naukat and Wadil ...	9	128	18	27
P.						
PISHPEK ...	KASTEK ...	Tokmak and the Kastek Pass.	5	92½	1-A	5
R.						
BANG KUL ...	KASHGAR ...	The Akberdi Pass ...	10	151½	23	44
S.						
SHAHIDULLA ...	HUNZA ...	The Shimshal Pass ...	19	?	40	89

INDEX—contd.

From	To	Viâ	Stages.	Miles.	Number of Route.	Page.
SHAHIDULLA ...	TASHKURGHAN	The Kilian Pass and Kugiar	23	341½	39	86
SHAHIDULLA ...	YABKAND ...	The Sanju Pass ...	12	202½	32	71
SKARDU ...	SUGET JANGAL	The Mustagh Pass ...	15	150	40-A	92
SUGET JANGAL	SKARDU ...	The Mustagh Pass ...	15	150	40-A	92
T.						
TASHKEND ...	MARGHILAN ...	Talian and Khokand ...	12	178¼	16	25
TASHKURGHAN	HUNZA ...	The Kurbu and Shimshal Passes.	16	?	38	84
TASHKURGHAN	KALA PANJAH	Ak Tash and the Victoria Lake.	12	194½	36	82
TASHKURGHAN	SHAHIDULLA ...	Kugiar and the Kilian Pass	23	341½	39	86
TOKMAK ...	KASHGAR ...	Narin and the Turgat Pass (Verni-Kashgar Caravan Route).	25	374½	6	12
TOKMAK ...	KASHGAR ...	The Son Kul, Kurtka, and Chadir Kul.	21	300¼	8	14
TOKMAK ...	MUZART ...	The Postal Road and the Issyk Kul.	20	343½	5	10
U.						
UZKEND ...	ANDIJAN ...	.....	4	50¼	10	20
V.						
VERNI ...	KARAKOL (IS-SYK KUL).	Chilik and the Santish Pass.	12	209½	4	9
Y.						
YARKAND ...	HUNZA ...	Tashkurghan and the Khunjerab Pass.	23	?	37	8
YARKAND ...	SHAHIDULLA...	The Sanju Pass ...	12	202½	32	71
YASIN ...	NEZA TASH PASS.	The Darkot, Benderski, and Bash Gumbaz Passes.	14	191¼	26	51

PART II.

**ROUTES LEADING FROM THE CHIMKEND-KULDJA POSTAL ROAD TO THE
HINDU KUSH BETWEEN THE DORAH AND KARAKORUM PASSES.**

Part VII

Semirechia

Route No. 1.

FROM CHIMKEND TO KULDJA BY THE POSTAL ROAD.

Authorities—KOSTENKO, 1880; VENUKOFF; TURKISTAN GAZETTE, 1875.

Number and names of stages.	DISTANCE IN MILES.		Remarks.	
	Inter- mediate.	Total.		
1. MANKEND (AK SU)	13 $\frac{1}{2}$	13 $\frac{1}{2}$	<i>N. B.</i> —The stages and distances are taken from Kostenko.	
2. MASHAT ...	10 $\frac{1}{4}$	23 $\frac{3}{4}$	"This road was made when the Russians occupied the country. The whole of it is very well adapted for wheeled traffic, and is practicable at almost all seasons of the year. The passes over some second-rate and third-rate groups and the fords over some mountain streams only impede progress for a comparatively short time during winter and spring."— <i>Kostenko</i> .	
3. YAS KUCHU ...	12 $\frac{3}{4}$	36 $\frac{1}{2}$		
4. TULKU BASH ...	15 $\frac{1}{2}$	52		
5. CHAKPAK ...	15 $\frac{3}{4}$	67 $\frac{3}{4}$		
6. TERS (TEREK) ...	16	83 $\frac{3}{4}$		
7. KUIUK ...	12	95 $\frac{3}{4}$		
8. GOLOVACHEVSKI ...	11 $\frac{3}{4}$	107 $\frac{1}{2}$		
9. AULIA-ATA ...	9 $\frac{1}{2}$	117		Cross the Talas river (rapid), upon which is situated Aulia-ata, important only as the chief place of the district and as a Kirghiz market. From here Routes Nos. 12 and 13 go to Khokand.
10. UCH BULAK ...	14 $\frac{1}{2}$	131 $\frac{1}{2}$		The ground is at first flat; afterwards it is intersected by small ravines with rivulets, and approaching Kumarik it becomes undulating.
11. AKCHULAN (AK- CHULAK).	11 $\frac{1}{4}$	142 $\frac{3}{4}$		Here is a fort, a post office, and telegraph station.
12. AKER TAPA ...	14	156 $\frac{3}{4}$		
13. MALDABAR (MAL- DABAEFF).	10	166 $\frac{3}{4}$		
14. KUMARIK ...	14	180 $\frac{3}{4}$		
15. TARTI ...	15 $\frac{3}{4}$	196 $\frac{1}{2}$		
16. MANKINSKA ...	12 $\frac{3}{4}$	209 $\frac{1}{4}$		
17. MERKE ...	10 $\frac{3}{4}$	220		
18. CHALDAVAR ...	19	239	Many ravines are crossed. This is the boundary between Syr Daria and Semirechia.	
19. KABABalti ...	19 $\frac{1}{4}$	258 $\frac{1}{4}$	A small Russian fort.	
20. AK SU (SETTLE- MENT).	12 $\frac{1}{2}$	270 $\frac{3}{4}$		

Way

ROUTE NO. 1—*contd.**From Chimkend to Kuldja by the Postal road.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
21. SUKULUK ...	9 $\frac{3}{4}$	280 $\frac{1}{2}$	
22. PISHPEK (ALA- ARCHA).	16		
23. KONSTANTINOVSKA (CHUISKA).	15 $\frac{1}{2}$	312	The road crosses many rivers, marshes, and ravines. At Pishpek is a Russian fort. From here Route No. 1-A. goes <i>viâ</i> Tokmak to Kastek. On the Chu, a most rapid, turbid river. From Issyk Kul to Tokmak the Chu has a fall of 1,600 feet in 47 miles. The most frequented fords are at Kazangan, Bish Kurghan, and Kara Utkul. The reeds along the river extend to a width of 2 miles.
24. SUGATINS ...	15 $\frac{1}{4}$	327 $\frac{1}{4}$	Cross the Chu by a good wooden bridge.
25. KURDAIS ...	20		
26. OTAR ...	21 $\frac{1}{2}$	368 $\frac{3}{4}$	The road leads up the narrow valley of the Argaity river, and keeps close to the base of the mountain range, passing down the glen of the Kurdais stream (which in hot weather dries up where it leaves the mountains).
27. TARGAP ...	20 $\frac{1}{2}$	389 $\frac{1}{4}$	The road passes up the Kopa valley, and on one side are passed the Jamanty, Bish Mainak, and Kara Archu rivulets, which become completely dry in summer. The ground along this march is level.
28. KASTEK ...	22 $\frac{1}{4}$	411 $\frac{1}{4}$	The road traverses several hollows and ravines, and at the Och-Bulak stream the two roads to Pishpek separate. At Kastek is a Russian fort and a post office. Elevation 3,300 feet.
29. UZUN-AGACH ...	17 $\frac{1}{2}$	429	
30. KISKILENSK STA- TION.	17 $\frac{1}{2}$	446 $\frac{1}{2}$	
31. VERNI ...	17 $\frac{1}{2}$	464	Fort Verni was founded in 1854 (Schuyler says 1856), when the Russians first occupied the Trans-Ili region. Ranging along the foot of

the Ala Tagh, the small but picturesque Almatynka rivulet, issuing out of the mountains, branches out into several small streams that irrigate this military agricultural colony, the population of which consists of between 5,000 and 6,000 inhabitants. Crops consist of wheat, oat, barley, millet, buckwheat, and potatoes. No grain is exported. The Russian civil and military administrations are centred here. Although there is abundance of stone, and timber is scarce (being only grown on the mountains), Almati or Verni is entirely built of wood. But there are said now to be some brick buildings.

The elevation of Verni is about 2,430 feet. It has a great range of temperature, the heat in summer rising as high as 97° Fabr., and the cold in winter falling to 9° Fabr. It is the chief town of the province of Semirechia.

ROUTE No. 1—*contd.**From Chimkent to Kuldja by the Postal road.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
32. KARASU (KURASUI PICKET).	16	480	To Ilisk the country is partly flat and partly undulating.
33. KUTENTA ...	15	495	
34. ILISK (SETTLEMENT).	15½	510½	Here is a small fort commanding the ferry. Ilisk is on the left bank of the Ili, exactly opposite the ferry. It is a deep river here, and nearly 700 feet wide, and has a very strong current, which at times of strong winds frequently carries away the ferry boat. On such occasions the traffic is sometimes interrupted for days.
35. CHINGILDI PICKET	15½	526	
36. KARACHEKIN PICKET.	22¼	548¼	From this stage to Alintu, there are small pickets of Cossacks posted. The road from here to Altin Imel leads through a rolling country with hills in the distance. On the north the range of the Malaisar mountains, while in the east appears the southern extremity of the Krunki Tagh range. One of the spurs of the last-named range, nearly opposite the station of Karachedensk, yields the famous stone "Koliptash."
37. KUANKUZ ...	18½	566¾	
38. ALTIN IMEL ...	18½	585¼	At Altin Ime the Siberian trunk road leading to Semipalatinsk is left and the branch road to Kuldja is followed. On leaving the station the road ascends a high spur of the Krimki Tau
33. BASHCHI (BASHI)	17¼	602½	
range; this is the pass of Altin Imel, so called after the station, and the ascent to it is the most difficult part of the journey from Verni to Kuldja. It is called Yakshi (good) Altin Imel to distinguish it from Yaman (bad) Altin Imel. The pass has been adopted for carriages, but it is sometimes blocked during the winter for three months at a time. From the pass to Konar Olen the country is a high table-land and the road quite level.			
40. AINA BULAK PICKET.	18	620½	From Konar Olen to the fortlet of Borohudzir the road is at first extremely winding, and passes through many ravines and narrow defiles; afterwards the ground gradually changes into a monotonous steppe, which, although the soil consists of a mixture of clay and gravel, produces a fair growth of grass. Koi-bin is a natural cleft in the low hills, which serves as the bed of a small stream, and in most parts forms the only road. The road is rough at all times, but is almost dangerous in heavy rains.
41. KONAR OLEN ...	13½	634	
42. KOI-BIN ...	16½	650½	

tonous steppe, which, although the soil consists of a mixture of clay and gravel, produces a fair growth of grass. Koi-bin is a natural cleft in the low hills, which serves as the bed of a small stream, and in most parts forms the only road. The road is rough at all times, but is almost dangerous in heavy rains.

ROUTE No. 1—concl'd.

From Chimkend to Kuldja by the Postal road.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
43. BOROHUDZIR ...	16½	667	The small fort of Borohudzir stands on the right bank of the river Borohudzir, about 20 miles south of the former Chinese post of the same name. It was one of the first points the Russians occupied when they entered the region; it has now a garrison of one sotnia of Cossacks. The fortification consists of four long buildings, which form a quadrangle. Russian colonists from the Governorship of Tomsk have established a settlement, which now comprises 55 farm-yards, and is steadily growing (1875). The Government have established a model garden at Borohudzir. The vicinity of the fortlet is covered with brushwood, which abounds in pheasants, partridges, and hares.
44. AK-KEND ...	18½	685½	Ak-kend is literally "the white town or village." It is in ruins. Immediately beyond Borohudzir begins a dwarfish jungle, which chiefly consists of elms, white willows, and a small prickly shrub. It abounds with game. Intermixed with the jungle are many patches of green turf affording excellent pasture. About 8 miles further on the road is interrupted by the course of the Usek, which is crossed by a ferry. On the further side is a steep cliff. In the dry season the Usek is fordable.
45. KHORGOS ...	14½	700	About 6 miles beyond Ak-kend the jungle ends, and within a mile or so the steppe of Khorgos is entered on, consisting of alternate stony and sandy streaks with many ruins. The station of Khorgos stands on the river of the same name. The latter resembles the Usek, but its bed is much wider, and at times it floods great tracts of country.
46. ALIMTU ...	10	710	For several miles the ground is stony, and bears traces of the action of water. About 4½ miles are the ruins of the former Chinese town and fort of Chinpandzi, and a short distance before these are reached the stones disappear, a flat clay soil taking its place. The road leads through the ruins, and passes through a village called Mazar. From Chinpandzi to Alimtu, a distance of about 6 miles, the character of the steppe does not change. Alimtu, once a populous Solon village, lies now empty among gardens which are going to ruin.
47. CHINCHAHODZI ...	13¼	723¼	The road leads through undulating grass land. The town is a regular square, which is surrounded by a mud wall wide enough for a road, with a gate on each side; the gates are protected by semi-circular outworks, also of mud.
48. SUIDUN ...	12	735½	Suidun is an exact copy of Chinchahodzi. From here it is 10 miles to New Kuldja.
49. BAINDAI ...	13¼	748½	
50. KULDJA ...	13½	762	Kuldja stands about 2 miles from the river Ili, and is watered by two brooks which fall into the river. It is in the shape of an oblong square, and is surrounded by a broad mud wall with barbettes, and has a gate on each side. Its circumference is nearly 4 miles. In 1873 the number of stone or brick buildings was 49 mosques and 2,167 houses, shops, &c. The total population in 1873 was 10,114, of which 1,300 were Russians, the remainder being Taranchis, Chinese, Sarts, and Dunganis. About 10 miles north-west of the town are coal-mines; the coal lies 280 feet below the surface of the ground.

Routes in H.S. in Kharg

Part VII Semirechia

5

Alt to I

Route No. 1-A.

FROM PISHPEK TO KASTEK *via* TOKMAK AND THE KASTEK PASS.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
1. ISIGATI ...	15½	15½	Postal road.
2. TOKMAK ...	22½		
3. KARA BULAK ...	21½	59½	Here the Chu has a velocity of 6 miles per hour. Its valley is 37 miles wide, and noted for its abundant grazing grounds. The river is forded 2⅔ miles above fort Tokmak. 10 miles below here it is navigable.
4. SARIJAS ...	15	75	
5. KASTEK ...	17¼	92¼	

Route No. 2.

~~VII Semirechia~~ N.I.
HSIN KIANG

FROM KULDJA TO AK SU *via* THE CHANCHAL AND MUZART PASSES.

Authorities—KOSTENKO, 1872; CAPTAIN PEMBERTON, 1892.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
1. KAINAK ...	10½	10½	This route was followed by Captain Pemberton in July 1892, and the stages here given were those made by him. Kostenko gives the distance as 311 miles, but he had no information beyond

the Muzart.

“This is the shortest road from Kuldja to Ak Su, and as far as Muzart, with the exception of a few places in the Chapchal defile, is fit for wheeled vehicles. The preparation of the defile for wheel traffic is also possible without great expense. There is water, fuel, and forage everywhere.”—*Kostenko*. This route has long been used notwithstanding the glacier which lies to the south of the Muzart pass. The length of the glacier is 8 miles, and its width 5½ miles. On the way back from Ak Su the Bedal pass route is usually taken.

The Ili is crossed by ferry at a point 2 miles south of the town. Only one boat was seen by Captain Pemberton. It held 4 horses and 12 people. The river is in three branches. The main stream is 300 yards wide. In consequence of the swiftness of the current, especially with a wind, the passage is made very slowly.

ROUTE No. 2—*contd.**From Kuldja to Ak Su via the Chanchal and Muzart Passes.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
2. KAN ...	13½	23½	From the point of passage to the entrance to the defile is smooth and suitable, being occasionally crossed by ravines.
3. FOOT OF THE CHAPCHAL PASS.	5½	29	From the entrance to the defile for about 15 <i>versts</i> (about 10 miles) the route rises gently, and the road is excellent; then after that ascents and descents commence, in addition to which boulders and large pebbles form obstacles of no little importance for wheel traffic.
4. BOURRA ...	15	44	As the road approaches the summit of the pass, the defile becomes covered with vegetation (fir), which ceases at the summit of the pass itself. Elevation 900'. The descent from the pass is more convenient than the ascent; the ground falls gently, and there are no large stones on the road. At Bourra are 25 Yurts on the bank of the river.
5. KHANAKAI ...	20	64	From the southern foot of the pass the road turns west, and at first runs along the Uzun Tagh hollow, and then along the valley of the Tekes river. The hollow and valley abound with excellent pasturing grounds. Water in abundance. At Khanakai are some 20 Yurts. Grass good and very plentiful.
6. GEELAN ...	15	79	Track leads up the left bank of the Tekes through a level, monotonous country, and crosses several streams. The chief channel of the Tekes at the point of passage is 100 yards in width. The banks are low and firm; the bottom is also firm and covered with fine shingle. The depth of water is 5 or 6 feet; the current is swift. A good sized ferry boat here. The Uzun Tau, or Uzen Tagh, range abounds in fir forests. The valleys are clothed with splendid grass that is preserved from being parched by the sun in summer, and therefore the Kirghiz find abundant pasturage for their flocks and herds. The settled inhabitants who dwell in the country north of the range send their horses to the mountains during the summer to regain condition.
7. SHATTO ...	20	99	Track continues to ascend the Tekes valley, and leads across the great grass plain separating the river from the hills.
8. UDUNGEI ...	18	117	The gorge and pass along which this road goes are called after the range the Muzart. In the first half no serious obstacles bar progress either in summer or winter. It might even be adapted for wheeled traffic. In winter and autumn caravans of horses pass through it to Ak Su, but not back again owing to the impracticability of the road 8 miles south of Mazar Bash picket, where there is an ice wall 40' or 50' high, down which both men and horses descend with the aid of ropes; but it is difficult to get horses up by these means. Consequently

ROUTE NO. 2—concl'd.

From Kuldja to Ak Su viâ the Chunchal and Muzart Passes.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

caravans seldom return by this road from Ak Su. The post in 1880 consisted of half a sotnia of Cossacks.

The track from Shatto ascends the left bank. The river is forded at Udungei.

9 FOOT OF MUZART PASS.	12	129	At 6 miles is Toghri Su. From here the track crosses a moraine which skirts a glacier blocking the valley. At 12 miles the limit of grass and vegetation is reached.
10. TAMGA TASH ...	15	144	The rise from Udungei to summit of pass is 2,450 feet by aneroid, and the top is reached at 5 miles from the foot. The summit is about $\frac{1}{2}$ of a mile long, after which the track ceases, and a big moraine has to be crossed, followed by two hours on a glacier, when the ice wall has to be clambered down. Below the ice wall is another glacier which takes two hours to cross. From summit to Tamga Tash picket house the traveller descends 2,740 feet. No supplies of any kind.
11. KAILEK ...	18	162	Ford the river opposite the picket house, and follow along the left bank, recrossing 2 miles before reaching camp. Without a guide it is difficult to find these fords. Picket house.
No supplies. Descent 985 feet.			
12. KUHNA SHAHR ...	20	182	Track goes down right bank of Muzart river, here 50 yards broad and unfordable. At 10 miles pass Tuprak picket house. Descent to Kuhna Shahr 1,350 feet. The valley here is 200 yards wide, and blocked by a fort, through which the road passes. Fort rampart is 80 yards long, 20 feet high, 10 feet thick, with a ditch 10 feet deep and 15 feet wide. Supplies obtainable.
13. KIZIL ARVAT ...	24	206	At 12 miles pass Kizil Bulak (ruins). Grass now ceases and track enters a range of hills. Passing over the latter, it descends to plain, which is covered with small clay hillocks ranging from 10 feet to 100 feet. It goes by a gorge through another range, and descends a river to camp. Stream 100 feet wide; current very swift; fordable. No supplies. Grass scarce.
14. JAM ...	20	226	Across a wide uncultivated plain. Jam is a large, rich, populous village 1,075 feet below last stage. Much cultivation and supplies abundant.
15. AK SU ...	23	249	For Ak Su, see Route No. 21.
Road fit for wheels. Cultivation all the way.			
Shlenchi is passed at 15 miles.			

Route No. 3.

FROM KULDJA TO AK SU *via* THE CHALKODU SU PASS, KARAKOL, AND THE BEDAL PASS.

Authorities—VENUKOFF; SONARGULOF, 1887.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
1. YANI SHAHE ...	10	10	
2. HANAHAY ...	24 $\frac{3}{4}$	34 $\frac{3}{4}$	
3. KALIDJAT ...	15 $\frac{1}{4}$	50	
4. KETMEN ...	20	70	Here the direct road to Verni is left.
5. CHALKODU SU ...	28	98	
6. KARAGALI ...	12 $\frac{3}{4}$	110 $\frac{3}{4}$	Through a valley to the 10th stage.
7. CHEBITI BULAK ...	16	126 $\frac{3}{4}$	
8. KEGEN ...	13 $\frac{1}{2}$	140 $\frac{1}{4}$	
9. JAL KARKARA ...	17 $\frac{1}{4}$	157 $\frac{1}{2}$	Here Route No. 5 is entered.
10. TALDI BULAK ...	16 $\frac{1}{2}$	174	
11. JERGALAN ...	14 $\frac{1}{2}$	188 $\frac{1}{2}$	
12. AK SU ...	22	210 $\frac{1}{4}$	
13. KARAKOL ...	8	218 $\frac{1}{2}$	
14. SLIVKINO ...	24 $\frac{1}{2}$	243	A good wheel road.
15. JAN JUREK ...	49 $\frac{3}{4}$	292 $\frac{3}{4}$	For alternative route <i>via</i> the Barskaun defile, see Notes A and B, Route No. 9. No fuel along this route. Grass obtainable near the Kashka Su. The road is a bridle path. At 8 miles a road goes off right to the Zauka pass. At 38 miles the Kashka Su pass is crossed. Ascent very difficult; sharp stones obstruct the way; blocks of ice often fall into the road. Fierce snow-storms rage here. The descent is insignificant. Away to the right are seen the Barskaun and Zauka passes.
16. KARAWAL TAPA...	33	325 $\frac{3}{4}$	A bridle path. Descend the broad valley of Ak Bel, which serves as a place of emigration for the Kirghiz of the Issyk Kul district, and cross the Kara Sai river at 11 miles. From here ascend to Ishtik Bash, crossing a small pass at 17 miles; then along the defile of the Bedal Su. Water from a spring; dung for fuel.
17. AGACHA KUL RABAT.	16	341 $\frac{3}{4}$	The whole of this stage is difficult even for pack animals. The ascent to the Bedal pass (15,000 feet) is easy, but both sides are always covered with ice. The best time to cross is early

14 Sin Khan

ROUTE No. 3—*contd.*

From Kuldja to Ak Su via the Chalkodu Pass, Karakol, and the Bedal Pass.

Number and names of stages	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
18. UI TAL ..	19 $\frac{1}{4}$	361	Cross the Ui Tal river several times. Good water and fuel. This is a caravan halting place.
19. BASH AGMA ...	14 $\frac{1}{2}$		
20. USHTURFAN ...	18	393 $\frac{1}{2}$	Road good and fit for wheels. Cultivation begins just before reaching Ushturfan.
<p>About 50 houses surround the citadel of Ushturfan, which is occupied by a garrison of about 1,700 Jiggits (mostly armed with smooth-bore muskets) and 300 Sarbazes (armed with matchlocks). Of these troops, 1,000 men always remain in the walls of the fortress. Of the rest, 500 men form a guard at Kara Bulak, 100 are stationed about Ak Su, 100 at Bedal, and 100 at Kukrum; some smaller pickets guarding the country between these points. The armament of the citadel consists of 4 field guns of bad quality, which are no longer fit for the open country. The strong-hold proper forms a quadrangle, each frontage measuring about 1,400 feet. The walls are constructed after the usual style of Chinese fortification, and the western wall adjoins a rock. Plenty of water and fuel. There is no grazing, but clover can be obtained.</p>			
21. ACHTAGH (ACHA-TAG).	16	409 $\frac{1}{2}$	A wheel road all the way to Ak Su running through a well-populated district.
22. BARIN ...	17 $\frac{1}{4}$	426 $\frac{3}{4}$	Water in abundance. No grazing, but clover procurable, also fuel.
23. AK SU ...	21	447 $\frac{3}{4}$	Both sides of the road are lined by almost continuous rows of farmyards standing amidst their fields. The country people do not live in villages, but the farm-houses stand at a certain distance from one another, being separated by the fields appertaining to them.

For Ak Su, see Route No. 21.

Route No. 4.

FROM VERNI TO KARAKOL (ISSYK KUL) *via* CHILIK AND THE SANTISH PASS.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. SOPHI STATION ...	16	16	A good wheel road to Chilik.
2. NADAJAINSKI ...	15 $\frac{1}{4}$		
		31 $\frac{1}{4}$	Level country intersected by ravines. Bridge over the Talgar. Forage, water, and fuel.

ROUTE No. 4—*contd.*

From Verni to Karakol (Issyk Kul, viâ Chilik and the Santish Pass).

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
3. ASHCHI BULAK ...	20		
4. TOZABEK ...	20	51 $\frac{1}{4}$	Picket.
5. CHILIK ...	13 $\frac{1}{4}$	71 $\frac{1}{4}$	
6. SUGUTI PICKET ...	26 $\frac{1}{2}$	84 $\frac{1}{2}$	
7. AKTOGTOI PICKET	18	111	Ford the Chilik river, which is dangerous at full water.
8. KEGEN PICKET ...	20	129	At 8 miles the road enters the Turaigir defile. Ascent to the pass is steep. Descent into the Aktogtoi valley is gentle. The ford at full water is only passable by swimming, and the passage is generally dangerous. Road is not good. Water, forage, and fuel.
9. SANTISH PICKET...	18 $\frac{1}{2}$	149	Through the mountains by a road difficult for wheels. From the mountains descend into the Kegen valley.
10. JERGALAN PICK- ET.	13 $\frac{1}{4}$	167 $\frac{1}{2}$	Cross the Kegen by a ford easy at all times. Then over the Santish range. Snow-storms rage here in winter.
11. AK SU ...	21	180 $\frac{3}{4}$	Through the Tapa valley, and ford the Tapa river. Pass over the low Kizil Kuja hills, whence road descends to the Jergalan valley.
12. KARAKOL ...	7 $\frac{3}{4}$	201 $\frac{3}{4}$	} <i>Vide</i> Route No. 5.
		209 $\frac{1}{2}$	

Route No. 5.

FROM TOKMAK TO MUZART BY THE POSTAL ROAD AND THE ISSYK KUL.

Authority—KOSTENKO, 1882.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. KARA BULAK ...	21 $\frac{1}{2}$		Picket.
2. JILARIK ...	15 $\frac{1}{2}$	21 $\frac{1}{2}$	
3. KOKMAINAK ...	16	37	
		53	Here the Narin-Kashgar road is left.

ROUTE No. 5—*contd.*

From Tokmak to Muzart by the Postal road and the Issyk Kul.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
4. KUTEMALDI ...	16	69	Lake Issyk Kul is 115 miles long by $31\frac{1}{2}$ miles broad; height above sea-level 5,300 feet. Depth is very considerable, 1,000 feet in places. Its shores are desolate and barren, and are generally without forest growth of any kind. The eastern side is more favourable for habitation than the western. Consequently Russian settlers avail themselves of the former.

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Note A.—From Kutemaldi to Narin.

A good wheel road to junction of the Uch Tapa and Nar Ike rivers, 20 miles. Thence the road is very difficult. Crossing the Ulakhhol pass, ascent steep and stony, and descent still more steep and dangerous. Halt at the source of the southern Ulakhhol, $16\frac{1}{2}$ miles. Down the Ulakhhol defile and into the valley of Karahojur. Then cross the Kaika Tash pass (easy). Here enter the broad valley of the Sultan Sar, and halt near lake Kara Kul at $15\frac{1}{4}$ miles, joining Route No. 9 from Karakol.

5. TURAGIR ...	$16\frac{3}{4}$	$85\frac{3}{4}$	Picket.
6. CHAKTAL ...	$18\frac{3}{4}$	$104\frac{1}{2}$	
7. CHULPAK ATA ...	$18\frac{3}{4}$	$123\frac{1}{4}$	
8. KURUMDUNSKA (KURUMDI).	14	$137\frac{1}{4}$	
9. AK SU ...	$19\frac{1}{4}$	$156\frac{1}{2}$	Village.
10. UITAL ...	17	$173\frac{1}{2}$	
11. PRIORADJAN ...	$20\frac{1}{4}$	$192\frac{3}{4}$	Settlement.
12. KARAKOL ...	$19\frac{1}{4}$	213	Here Route No. 9 comes in from Narin.
13. AK SU ...	8	221	Village. A wheel road. Cross the Ak Su river by a good wooden bridge.
14. JERGALAN ...	22	243	The road runs at the foot of a snowy range over level country, passing hill streams. Wheel road.
15. TALDI BULAK ...	$14\frac{1}{2}$	$257\frac{1}{2}$	Cross the Santish pass (6,650 feet). About here Route No. 4 comes in from Verni and Route No. 3 takes off for Kuldja.
16. JAL KARKABA ...	$16\frac{1}{2}$	274	
17. SARIJEN TUTI (TUTE).	$16\frac{1}{2}$	$290\frac{1}{2}$	
18. KAP KAK ...	20	$310\frac{1}{2}$	
19. NABIN KOL ...	$16\frac{1}{2}$	327	Village.
20. MUZART ...	$16\frac{1}{2}$	$343\frac{1}{2}$	Here Route No. 2 comes in from Kuldja.

Route No. 6. VII

FROM TOKMAK TO KASHGAR *via* NARIN AND THE TURGAT PASS (VERNI-KASHGAR CARAVAN ROUTE).

Authorities—YARKAND MISSION, 1873; KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. KARA BULAK ...	21 $\frac{1}{2}$	21 $\frac{1}{2}$	A cart road as far as Narin. "This is the main caravan route between Verni and Kashgar. It is traversed by camels the whole distance, and is practicable all the year round, but is more difficult in summer, when the Toyanda stream has to be frequently forded and reforded."—(<i>Kostenko</i>). Trotter states that the road is good from Chadir Kul to Kashgar, and could easily be made available for guns. Reintal, who travelled over it in 1875, says it is difficult to imagine a worse road than that from Chakmak to Murza Terek. Schuyler says that the road is never closed, and that even carts and sledges are used throughout the winter, and that only at two stations, between Tokmak and Narin, is travelling difficult in winter. A fortified post on the Narin river. For alternative route <i>via</i> the Ulakhol pass, see Note A, Route No. 5. At Narin the road forks: one branch goes over the Turgat pass, the one here described, and the easier of the two; the other goes over the Terekti pass—Route No. 7.
2. JILARIK STATION	15 $\frac{1}{2}$	37	
3. KOKMAINAK ...	16	53	
4. KACHKARKA ...	20 $\frac{1}{2}$	73 $\frac{1}{2}$	
5. JUVAN ARIK DEFILE.	10	83 $\frac{1}{2}$	
6. SARI BULAK ...	16 $\frac{1}{2}$	100	
7. RIVER OTTUK ...	21 $\frac{1}{4}$	121 $\frac{1}{4}$	
8. ON ARCHA ...	15 $\frac{1}{4}$	136 $\frac{1}{2}$	
9. NARIN ...	15 $\frac{1}{4}$	151 $\frac{3}{4}$	
10. AK BASHA RIVER	20	171 $\frac{3}{4}$	The lake lies about 1,500' lower than the Turgat pass. Grass abundant; fuel scarce. At 7 miles reach the crest of the Turgat pass (12,760 feet). Road goes down stream, in some places through precipitous hills. Plenty of grass, but fuel scarce. Road continues down stream. Suek outpost is situated at the junction of the two streams from the Suek and Turgat passes. Two miles above the outpost is the camp, where is firewood, but little or no grass. According to Reintal, a road branches off west from Suek to Andijan.
11. SARI BULAK STREAM.	16 $\frac{1}{2}$	188 $\frac{1}{4}$	
12. SHIRIKTI ...	16 $\frac{1}{2}$	204 $\frac{3}{4}$	
13. MASALI ...	16 $\frac{1}{2}$	221 $\frac{1}{4}$	
14. CHIEMASH ..	16 $\frac{1}{2}$	237 $\frac{3}{4}$	
15. CHADIR KUL ...	16 $\frac{1}{2}$	254 $\frac{1}{4}$	
16. KARA KORUM ...	18 $\frac{1}{2}$	272 $\frac{3}{4}$	
17. TUYUN ...	13 $\frac{1}{4}$	286	
18. SUEK OUTPOST ...	14 $\frac{1}{2}$	300 $\frac{5}{8}$	
19. CHAKMAK ...	10	310 $\frac{1}{2}$		A fortified post. (Elevation 8,830 feet.) From here a road goes across the hills to Terekti forts.
20. MURZA TEREK ...	10	320 $\frac{1}{2}$	A picket. The Toyanda has to be forded about 40 times.

Semi-china

HSHW Kang

ROUTE No. 6—*contd.*

From Tokmak to Kashgar viâ Narin and the Turgat Pass (Verni-Kashgar Caravan Route).

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
21. AKCHI ...	20	340½	Still down the Toyanda valley, and through precipitous hills some 3,000 feet above the stream.
22. TESHİK TASH ...	13¼	353¾	An old Chinese outpost.
23. RIVER ARTISH ...	6¾	360½	Over level plain in the broad Artish valley. Road good, but stony.
24. MAZAR ...	10	370½	Through numerous gardens, and cross the Tuman by a bridge.
25. KASHGAR ...	4	374½	For details of Kashgar, see Route No. 21.

*Join routes in
HSIN KIANG*

The following stages and distances from Chadir Kul to Kashgar are given by the Yarkand Mission:—

16. TURGAT BELA ...	20	274¼	
17. GULJA BASHI ...	15	289¼	
18. CHAKMAK ...	10	299¾	
19. CHANG TEREK ...	20	319¼	
20. BESAK ...	20	339¼	
21. KASHGAR ...	26	365¼	Or about 9 miles less than the above.

Route No. 7.

VII Semirechia

FROM NARIN TO KASHGAR *viâ* THE BOGASHTA AND TEREKTI PASSES.

Authorities—KOSTENKO, FROM KAULBARS AND REINTAL, 1868.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	

The following is taken from Captain Reintal's account of his mission. He left Narin on the 23rd October 1868 accompanied by 9 Cossacks. On the same day he easily crossed the Ak-cheta chain of mountains stretching between Narin and the Atbash. He then entered the valley of the Atbash, crossing that river on the second day opposite the mouth of the Bogashta. There is good and abundant pasturage in this valley. On the 25th the travellers crossed the main range which forms the watershed between the Narin and Ak Sai. The Bogashta pass is exceedingly steep; this circumstance was aggravated by the snow which had fallen on the previous day. On this day a stage of only 7 or 8 miles was effected. Kashgar was reached on the 31st October.

ROUTE No. 7—*contd.*

From Narin to Kashgar via the Bogashta and Terekti.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. RIVER BORUNDU	14 $\frac{1}{2}$	14 $\frac{1}{2}$	The road runs at first in the narrow defile of the Char-Karitma; then passes over steep hills and only becomes good on redescending to the Char-Karitma valley. Camping-ground good.
Water, forage, and fuel.			
2. JUNCTION OF THE TUZ-ASHU AND KINDA.	19 $\frac{1}{4}$	33 $\frac{3}{4}$	Road intersected throughout by deep ravines, and goes over a difficult ford below the confluence of the Atbash and Tuz-Ashu. Dung and bushes for fuel.
3. JUNCTION OF THE TUZ ASHU AND KASHKA SU.	14 $\frac{1}{2}$	48 $\frac{1}{4}$	Through a difficult ravine, and ford the Tuz Ashu, and then over the flat Kinda (Bogashta?) pass. For fuel there is dung.
4. JUNCTION OF THE TEREKTI AND AKSAL.	28 $\frac{1}{2}$	76 $\frac{3}{4}$	Road good.
5. TEREKTI PASS ...	28	104 $\frac{3}{4}$	Good wheel road. Camping good near the Kashgar picket on north side of pass.
6. JALANTASH ...	26 $\frac{1}{2}$	131 $\frac{1}{4}$	Camp on the Jalantash river near its issue by the Kashgar picket.
stony. Dung for fuel.	Pasturage plentiful.		Ascent to the pass gentle; descent steep and
7. ISSIK KARAWAL PICKET.	26 $\frac{1}{2}$	157 $\frac{3}{4}$	A very good road.
8. KASHGAR ...	26 $\frac{1}{2}$	184 $\frac{1}{4}$	Over a plain; then over clay hills, and afterwards through the Uzun Su defile. Cross the river at Artish. A very good road. For Kashgar, see Route No. 21.

Route No. 8.

FROM TOKMAK TO KASHGAR *via* THE SON KUL, KURTKA, AND CHADIR KUL.

Authorities—KOSTENKO, FROM REINTAL, 1868, AND KAULBARS.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. SHAMSI DEFILE...	13 $\frac{1}{4}$	13 $\frac{1}{4}$	The road runs in a broad valley along the banks of the Northern Shamsi. Wheel road. Good camping-ground. Bushes at camping-ground.

ROUTE No. 8—*contd.*

From Tokmak to Kashgar viâ the Son Kul, Kurtka, and Chadir Kul.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
2. SHAMSI DEFILE ...	10 $\frac{3}{4}$	24	Good road for pack animals. Pine wood at camping-ground.
3. DEFILE OF THE SOUTHERN SHAMSI.	11 $\frac{1}{4}$	35 $\frac{1}{2}$	Road generally indifferent, as it runs over debris, slopes, &c. The ascent to the pass begins at about 2 miles 5 $\frac{1}{2}$ furlongs from the crest, and is very steep and stony. The descent is more gentle. Camping-ground good.
4. VALLEY OF THE KIZART.	18	53 $\frac{1}{4}$	The road runs over a perfectly smooth and sloping valley of the Southern Shamsi, and having crossed the Kochkur valley enters that of the Kizart. The fords are easy. Wheel road. Good camping-ground.
5. NORTHERN KIZART	13 $\frac{1}{2}$	66 $\frac{1}{2}$	The road runs up the even valley of the Kizart to the pass of the same name. Before reaching it there is a good camping-ground at the foot of the Chahar Archa pass.
6. RIVER JUNGAL ...	16 $\frac{1}{2}$	83	The road runs over the Kizart pass, almost the best in the whole district of the Narin; it is almost imperceptible. Road very good.
7. RIVER KARA KICHI.	16 $\frac{1}{2}$	99 $\frac{1}{2}$	The road runs over the Shil Bili pass, which does not present great difficulties. Road generally feasible. The Son Kul is 13 miles long and 12 $\frac{1}{2}$ miles broad; height above sea level 9,000 feet. Roads from the level of the lake lead by the following streams:—(1) Tash Tapa, a road over the Mulda-Ashu pass; (2) Boz-Agir, over the Narin; (3) a whole group of streams, along the sides of which lead nomad tracks to Jungal; (4) Tuz Ashu (a road across the pass of the same name and leading to the Taluk pass). The streams Kojjerti issues from the lake, and along the gorge which it cuts for itself there is a road to Narin; (5) Sari Bulak; (6) Sari Tash (a road to Kilemchek). The depression of the Son Kul is greater than the lake itself, so that on its shores there are flat places, the widest of which covers 3 $\frac{1}{2}$ miles, and skirts its western shore. On the eastern and western halves of the southern shore there are also stretches of level ground, which likewise have a width of about 3 $\frac{1}{2}$ miles. Spurs of the mountains border the south-west and north-west angles of the lake. The level of the Son Kul is subject to considerable yearly variations. Almost the whole of its basin is covered with thick grass. Its shores are marshy in places, and water-fowl are not very numerous. Its water is fresh. As far as is known, this lake contains fish of small size.
8. RIVER TASH TAPA	11 $\frac{1}{4}$	110 $\frac{3}{4}$	The road runs in the broad valley of the Son Kul. Wheel road.
9. JUNCTION OF THE MULDA-ASHU AND KARAKAIN.	11 $\frac{1}{4}$	122	The road crosses the Mulda-Ashu pass (9,500 feet), which is not difficult, and then runs in the defile of the river of the same name by a very narrow, steep, and stony descent. It soon, however, enters a flat broad valley. Wheel road.
10. KURTKA ...	9 $\frac{1}{4}$	131 $\frac{1}{4}$	The road crosses the Narin near the ruins of a Sart settlement. Here there is a ford over six branches of the river. The fords are dangerous and impracticable at full water. At the camping-ground is a foliaceous wood.

ROUTE No. 8—concl'd.

From Tokmak to Kashgar viâ the Son Kul, Kurtka, and Chadir Kul.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
11. RIVER BAIBICHE	17 $\frac{1}{4}$	148 $\frac{1}{2}$	The road is good. Forage is not altogether plentiful at the camping-ground.
12. JUNCTION OF THE CHALKODU AND A SECOND RIVER WITHOUT NAME.	14 $\frac{1}{2}$			163
13. RIVER TASH RABAT	13 $\frac{1}{4}$	176 $\frac{1}{4}$	The road runs to the second Baibiche pass in the Kalkagar-Tagh mountains, from which it descends by the gently sloping Tuz-Ashu ravine to the desert valley of the Karakain. The road intersects this, and rises by the defile of the Tash Rabat on its right bank to the camping-ground. The position of camping-ground is almost quite undetermined, but the higher up the pass it is selected the better, as it diminishes the next difficult march over the Tash Rabat.
14. LAKE CHADIR KUL.	13 $\frac{1}{2}$	189 $\frac{3}{4}$	The road crosses the Tash Rabat by an inconvenient ford, and afterwards runs in a narrow and a stony defile, in part on cornices. The ascent to the pass is steep, as is also the descent, but only for a distance of $\frac{2}{3}$ mile. The road then runs in the smooth ravine of the Tash Rabat to its issue in the valley of Chadir Kul. The lake is 14 $\frac{1}{2}$ miles long by 10 $\frac{1}{2}$ miles wide. From here to Kashgar is about 111 miles.
15 TO 21. KASHGAR...	111	300 $\frac{3}{4}$	<i>Vide</i> Route No. 6.

Route No. 9.

FROM ANDIJAN TO KARAKOL viâ NARIN AND THE BARS-KAUN DEFILE.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1 TO 4. FOOT OF JASI PASS.	66 $\frac{1}{4}$	66 $\frac{1}{4}$	As a rule caravans from Andijan use this route but little. By an easy ascent leave the Ferghana valley and reach the Jasi pass. The descent is steep and difficult, and crosses many deep ravines of the affluents of the Bichan on the right bank. Brushwood and dung at the camping-ground.
5. RIVER MANAKEL-DA.	8	74 $\frac{1}{4}$	A wheel road.

ROUTE No. 9—*contd.**From Andijan to Karakol viâ Narin and the Bars-kaun defile.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
6. RIVER ALABUGA	21½	95½	Along the left bank of the Alabuga to Kalmak fort, where the road goes by a ford to the right bank. Fordable only at low water, and even then the water is knee high. Two very steep ravines are afterwards crossed. Trees and bushes in abundance.
7. TURGAI ...	13½			108¾
8. CONFLUENCE OF MUKACHI WITH THE NARIN.	14½	123¾	Road generally good. Firewood at camp. Road intersected by canals, forming the only difficulty for wheeled traffic. Firewood.
9. KURTKA BOUNDARY	14	137¾	Through the wide and sterile valley of the left bank of the Narin far from the course of the stream. Wheel road. Fuel.
10. LEFT BANK OF NARIN.	26	163¾	Road good along the Narin, and crossing the Ar Bash by a suspension bridge.
11. NARIN ...	29	192¾	Road good for wheels.
12. JUNCTION OF THE GREAT AND LITTLE NARIN RIVERS.	20	212¾	The remainder of the road as far as the village of Slivkino is for pack animals. From the Narin post the road runs under the Nura mountain chain by the right bank of the Great Narin. The valley is much hemmed in by mountains, and consequently the road in places runs along their slopes, and is besides intersected by the mountain streams in very deep ravines. The gorge of the Terek-Tekes and Nura streams are particularly deep.
13. LITTLE NARIN VALLEY.	20	232¾	From the point of junction of the Great and Little Narin the road runs to the snowy Kalmak-Tash pass (12,000 feet). The pass is steep. Northern slopes covered with vegetation (fir), but not thickly. Descent is by a very narrow defile covered with pebbles. Beyond the road is good.
14. RIVER KEREGETASH.	26½	258¾	From the camping-ground the road runs in a broad, fine valley on the right bank of the Little Narin. The hill streams of Uratas, Jan Bulak, Jalangach, Balgar, Uruktas, and Janbulat intersect the road. They are all practicable and not deep. Their banks are scantily covered with bushes.
15. KEREGETASH PASS	26½	285¾	From the point where the Keregetash flows into the Little Narin the road rises up the former. The road is good, and leads to the Keregetash pass. The summit of the pass is covered with eternal snow and ice-fields. Its height is about 13,000 feet. On the summit a tolerably broad plateau is formed, on which are marshy places.
16. JUNCTION OF KEREGETASH AND BARS-KAUN RIVERS.	13½	298¾	The descent from the pass is very gradual, but the road is not a good one, as it is obstructed with large stones, and incessantly crosses from one side of a stream to the other. The stream flows swiftly, and the bottom is covered with

ROUTE No. 9—*contd.**From Andijan to Karakol viâ Narin and the Bars-kaun defile.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
round pebbles. This stream, the north Keregetash, runs into the Bars-kaun. From here a road goes <i>viâ</i> the Bedal Pass to Ak Su (<i>see Note A</i>).			
17. NORTHERN MOUTH OF BARS-KAUN DEFILE.	26½	325	The road leads by the very narrow, but picturesque, defile of the Bars-kaun. The width is about 150 <i>sajens</i> (350 yards); the sides are vertical, high, and covered with fir woods. The path leads along the right bank of the river; the bank is steep, but wide; it is covered with pebbles. Half way through the defile the woods from the heights come down to the very bed of the river. At 6 miles 5 furlongs before reaching lake Issyk Kul the road crosses to the left bank by a ford; the width of the stream is here about 15 <i>sajens</i> (35 yards), and the bottom covered with round stones. In summer the passage is difficult. The defile ends within 2 miles of the lake. Wood ceases within 4 miles 5 furlongs of the lake.
18. RIVER ZAUKA ...	13¼	338¼	After its exit from the defile the road takes an easterly direction, and runs along the southern shore of lake Issyk Kul until close to Karakol, over quite flat country. Several streams are crossed, but, with the exception of the Zauka, none are difficult to ford.
19. SLIVKINO ...	15¼	353½	Here Route No. 3 goes south to Ak Su <i>viâ</i> the Bedal pass.
20. KARAKOL ...	24½	378	The road runs at 7 to 10 miles from the lake.

Note A.—From Bars-kaun defile to the Bedal Pass and Ak Su.

1. JUNCTION OF KEREGETASH AND BARS-KAUN RIVERS.	...	...	There is water, fuel, and forage along the whole route. The road traverses steep, stony, and deep ravines. Beyond there are deep fords; then wood with large masses of stone. The route is for pack animals.
2. SIRTA RIVER ...	8	8	From the camping-ground the road turns sharply to the west up to the confluence of the river Keregetash; then crosses the Bars-kaun by a ford, and again, turning south, avoids by a lateral ravine the defile of the river, which is here impassable for a distance of about 1½ miles. Having again descended to the bed of the river, the road often crosses from bank to bank by stony slopes, and finally rises, but not steeply, to the summit of the pass. The road generally is little suitable for traffic. Beyond the pass the soil is so saturated with water that a horse sinks up to his knees at every step in wet shingle. At 3¼ miles from the summit of the pass there is a dry spot to encamp on. There is water and dung for fuel.
3. JUNCTION OF YAK-TASH AND BARS-KAUN RIVERS.	15¼	23¼	The road runs south-east along the Sirta, crosses the south Bars-kaun, and then enters the defile of the Jitim Su (almost opposite the Juka pass).

The ascent to the Jitim Bel pass, about 3½ miles, is a very suitable one. The descent is worse, but it could be easily turned into a wheeled route. Fuel dung.

ROUTE No. 9—*concl'd.**From Andijan to Karakol viâ Narin and the Bars-kaun defile.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
4. NEAR LAKE UKU- BIN-KUL.	19½	42½	The road runs for about 7 <i>versts</i> (4 miles 5 furlongs) along the Yaktash, crosses it by a ford, and enters the broad valley of the North Ak-Bel-Su. At the camping ground there is little dung. From it the road goes to the Bedal pass.
<i>Note B.—From the junction of Yaktash and Bars-kaun rivers to the Ak Sai Valley.</i>			
1. JUNCTION OF THE YAKTASH AND KARAGAI RIVERS.	20	20	The road runs in a broad valley on the right bank of the Yaktash. No fuel.
2. RIVER BEL BULAK	12	32	A very good wheel road, running for the most part in the wide valley of the Chakir Korum.
3. JUNCTION OF SARI- TUE AND KARA- CHEKUR-SU.	10	42	The road is good up to the Chakir Korum pass, 7½ miles; but the descent is so steep that a horse can with difficulty keep himself up on the crumbling débris with which it is obstructed.
The road here winds through huge stony clumps.* Two miles from the pass the road crosses the broad bed of the Arik-Karatash-Su. The ford is good, as is also the camping-ground.			
4. JUNCTION OF KO- GELYACHAP AND TUYAMAINAK.	19½	61½	The road rises on the right bank of the Kara-Chukursu to the Kuburgend pass, 8 miles 5 furlongs. The pass is gently sloping and the ascent almost imperceptible. Further on the road runs on the broad valley of the Kogelyachap, crossing several insignificant streams; but the passage of the ford to the left bank of the Kogelyachap near its junction with the Tuyamainak is somewhat difficult. The camping-ground is good.
5. RIVER ICHKILI SU	14½	75½	From the camping-ground the road again crosses to the right bank of the Kogelyachap, and runs over very stony soil along a steep cliff, and afterwards in a broad valley. Finally, after again crossing to the left bank of the river, it leads to the Ichkili Su. On the left bank is a good open space for a camping-ground. There is small brushwood and a little dung for fuel.
6. JUNCTION OF MU- DURUN AND BA- LIK SU.	17½	93	The road runs in the broad valley of the Mudurun. At 13 miles 2 furlongs from the camping-ground the Mudurun is crossed by a ford, and afterwards the road crosses the steep, but not high, Kegichebel pass, whence it descends into the valley of the Balik Su. Close to its junction with the Mudurun there is a ford to the right bank of the Balik Su. A good camping-ground.
7. NEAR THE AK SAI	15½	108½	The road is a very good one (wheel). The ford over the Ak Sai is not difficult. The camping-ground is good.

* In order to avoid the inconvenient descent from the Chakir Korum pass, caravans travel from the junction of the Yaktash and Kara Sai by the broad valley of the Taragai to where the Karakol flows into it from the left, and then up its gently sloping valley to the junction with the direct road. It is necessary to observe that this circuitous route is the more often used by loaded caravans from Kashgar, for which the ascent to the Chakir Korum is difficult. Empty caravans do not fear the descent from this pass.

Part VI

Route No. 10.

FROM ANDIJAN TO UZKEND.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. TISHIK TASH ...	12	12	} Wheel road.
2. AIM KISHLAK ...	$8\frac{1}{2}$	$20\frac{1}{2}$	
3. KHANAVAT ...	$12\frac{1}{2}$	33	
4. UZKEND ...	$17\frac{1}{4}$	$50\frac{1}{4}$	
<i>Note A.—From Aim Kishlak to Uzkend via Jalalabad village.</i>			
3. SUZAK ...	$10\frac{1}{2}$	$10\frac{1}{2}$	} Wheel road.
4. JALALABAD ...	$5\frac{1}{4}$	$15\frac{3}{4}$	
5. UZKEND ...	$21\frac{1}{2}$	37	
<i>Note B.—Alternative Route from Andijan to Uzkend.</i>			
1. KHARA BEG ...	8	8	Wheel road all the way.
2. KURGHAN TAPA ...	$14\frac{1}{2}$	$22\frac{1}{2}$	
3. SULTAN RABAT ...	12	$34\frac{1}{2}$	
4. TURA TUL ...	$10\frac{1}{2}$	45	On the Kurshab river.
5. UZKEND ...	$10\frac{1}{2}$	$55\frac{1}{2}$	

Route No. 11.

FROM ANDIJAN TO KHOKAND *via* NAMANGAN AND CHUST.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. AK TAPA ...	$7\frac{1}{4}$	$7\frac{1}{4}$	} By the postal road.
2. KHAKIKHOVAT ...	$8\frac{1}{2}$	$15\frac{3}{4}$	
3. BALIKCHI ...	$13\frac{1}{4}$	29	
4. NAMANGAN ...	$11\frac{1}{2}$	$40\frac{1}{2}$	
5. TAPA KURGHAN ...	$8\frac{3}{4}$	$49\frac{1}{4}$	
6. CHUST ...	$17\frac{3}{4}$	67	

ROUTE No. 11—*contd.**From Andijan to Khokand viâ Namangan and Chust.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
7. SANK ...	10 $\frac{1}{4}$	77 $\frac{1}{4}$	} Wheel road.
8. SULTAN BEGI ...	18 $\frac{1}{2}$		
9. KHOKAND ...	13 $\frac{3}{4}$	109 $\frac{1}{2}$	

Route No. 12.

FROM AULIA-ATA TO KHOKAND *viâ* THE BISH TASH PASS AND NAMANGAN.*Authority*—KOSTENKO (ACCORDING TO M. KAULBARS), 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

The affluents of the Talas are—(1) the Kalba Su, along which there is a road across two passes, the Chichkan-Bel leading to Katman Tapa, and the Tobei Bel to Uzun Ahmad; (2) the Bish Tash, along which there is a road to Uzun-Ahmad; (3) the Uyul Moral, a road to the Tabulguta pass, and thence to the Chatkal defile and to Uzun Ahmad; (4) the Kara Su, with a road to Namangan through the Kara Tapa gorge. On the right banks of the Karakol and Taldi Bulak there are roads to the steppe and the Susamir, and below it. Along the Kenkol a road passes to the Chu. Finally, in the valley of the Talas itself, there is a cart-road from Aulia-ata to the mouth of the Utmak.

4. BISH TASH ...	76 $\frac{1}{4}$	76 $\frac{1}{4}$	To Bish Tash by a very good wheel road. Forage, water, and fuel (dung) in abundance.
5. MOUTH OF TIRAK SU.	16		92 $\frac{1}{4}$
6. SOUTH OF TIRAK BEL PASS.	8	100 $\frac{1}{4}$	The road bifurcates at the north mouth of the Tirak Su; the first branch runs up the Bish Tash to the pass of the same name on Katman Tapa; the second runs up the Tirak Su to the pass of that name. Near the summit of the pass the ascent is steep, and the path runs over landslips. The descent for 1 <i>verst</i> (5 $\frac{1}{4}$ furlongs) is very steep. Further on the road enters a fir wood. The camping-ground is good.

ROUTE No. 12—*contd.*

From Aulia-ata to Khokand via the Bish Tash Pass and Namangan.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
7. JUNCTION OF KURGHAN SU AND UZUN AHMAD RIVERS.	10 $\frac{1}{2}$	110 $\frac{3}{4}$	The road runs through woods, at first in the narrow defile of the river south of the Tirak Su, and then down the course of the Uzun Ahmad, after which it rises on to the high left bank of the river, and then runs along a sinuous narrow cornice to the camping-ground.
8. MOUTH OF AYAKTIK RIVER.	14	124 $\frac{3}{4}$	The road runs along the left bank of the Uzun Ahmad by dangerous cornices. From the point where the Kara Kungez falls into the Uzun Ahmad, the road soon enters a broad valley grown over with reeds and bushes.
9. KATMAN TAPA ...	18 $\frac{1}{2}$	143 $\frac{1}{4}$	The road runs down the broad valley of the Uzun Ahmad, and after 8 miles comes out in the broad valley of Katman Tapa, where it crosses the Chitchkan Su by a stony, but not deep, ford.
10. NARIN RIVER ...	10	153 $\frac{1}{4}$	Near the camping-ground is a ford over the Narin, which is dangerous. After this the road runs in the valley of the Kara Su. There is wood and bushes at the camping-ground.
11. JUNCTION OF THE KARAKOL AND KABA SU RIVERS.	11 $\frac{1}{4}$	164 $\frac{1}{2}$	The road for the first 8 <i>versts</i> (5 $\frac{1}{4}$ miles) runs in a broad valley through bushes and reeds, but afterwards the valley is suddenly so closed in by a spur from the south range that the road runs round the almost impassable defile of the river, rising to the steep, but not high, pass of Euker Bel. The western descent from this is less steep, and leads to a broad valley covered with thickly grown meadows and bushes. The road is quite level, but the soil is marshy. The camping-ground is a luxurious one, with wood and bushes.
12 to 14. UCH KURGHAN.	60*	224 $\frac{1}{2}$	Here the road bifurcates, one branch leading by Buta Kara and Paitik to Andijan, distance about 40 miles, and the other to Namangan. Both are wheel roads.
15. CHARTAK ...	15 $\frac{1}{4}$	239 $\frac{3}{4}$	At 14 miles from Namangan the Syr Daria is crossed by ferry, 2 boats, at Tapa Kurghan.
16. NAMANGAN ...	8	247 $\frac{3}{4}$	
17. SHAGAND ...	13 $\frac{1}{4}$	261	
18. MAZGIL ...	9 $\frac{1}{4}$	270 $\frac{1}{4}$	
19. BURAI DI ...	19 $\frac{1}{2}$	289 $\frac{3}{4}$	
20. KHOKAND ...	12	301 $\frac{3}{4}$	

* This distance is taken from Walker's map.

Fergana

Fergana

Route No. 13.

FROM AULIA-ATA TO KHOKAND *via* THE KARA BURA PASS AND NAMANGAN.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. BOUNDARY ON THE GREAT KAPKA RIVER.	13 $\frac{1}{4}$	13 $\frac{1}{4}$	Caravans travel on this road in preference with horses, and complete the journey to Namangan in eight days.
2. KARA BURA DEFILE, (COMMENCEMENT OF).	13 $\frac{1}{4}$	26 $\frac{1}{2}$	Along the Talas to the Great Kapka.
3. TAS MUINAK BOUNDARY.	12	38 $\frac{1}{2}$	Halt in the Kara Bura defile.
4. MAYATASH BOUNDARY.	10 $\frac{1}{2}$	49	Halt in the Kara Bura defile.
5. KARA KISPAK DEFILE.	11 $\frac{1}{4}$	60 $\frac{1}{4}$	Cross the Kara Bura pass and descend the Kara Kispak defile.
6. CHITKE TEREK BOUNDARY.	13 $\frac{1}{4}$	73 $\frac{1}{2}$	On the Chatkal river.
7. ARCHALI MAZAR BOUNDARY.	16 $\frac{1}{2}$	90	On the Chatkal river.
8. TOKAI BASHI BOUNDARY.	15 $\frac{1}{4}$	105 $\frac{1}{4}$	Cross the Chanash pass and halt in the Chanash defile.
9. KASHKA SU BOUNDARY.	18	123 $\frac{1}{4}$	In the Chanash defile.
10. AK-TASH BOUNDARY.	20	143 $\frac{1}{4}$	
11. SAFID BULAN ...	14 $\frac{1}{2}$	157 $\frac{3}{4}$	
12. KARA PULWAN ...	17 $\frac{1}{4}$	175	
13. NAMANGAN ...	1 $\frac{1}{4}$	190 $\frac{1}{4}$	
14. SHAGAND ...	13 $\frac{1}{4}$	203 $\frac{1}{2}$	A wheel road the whole way from Namangan to Khokand. Near Shagand are two ferry boats.
15. MAZGIL ...	9 $\frac{1}{4}$	212 $\frac{3}{4}$	
16. BUVAIDI ...	19 $\frac{1}{2}$	232 $\frac{1}{4}$	
17. KHOKAND ...	12	244 $\frac{1}{4}$	

Semirechya

Fergana

? KISMAK

? CHANASH
OR CHANAR?

into Fergana

Ferghana

Part VI

24

Route No. 14.

FROM AKTAM TO MARGHILAN *via* NAMANGAN.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
1. ISKOVAT (CANAL)...	13 $\frac{1}{4}$	13 $\frac{1}{4}$	Aktam is 34 $\frac{1}{2}$ miles north of Namangan. A wheel road all the way.
2. YANI KURGHAN ...	8	21 $\frac{1}{4}$	
3. NAMANGAN ...	13 $\frac{1}{4}$	34 $\frac{1}{2}$	A wheel road comes in here from Kasan <i>via</i> Kokan Bai, distance 20 miles.
4. MIN BULAK ...	10 $\frac{1}{2}$	45	At 8 miles the Syr Daria is crossed by ferry at Kara Kul. Here there are four boats.
5. YAZAVAT ...	14 $\frac{1}{2}$	59 $\frac{1}{2}$	
6. ARA MAZAR ...	8	67 $\frac{1}{2}$	For Marghilan, see Route No. 16.
7. MARGHILAN ...	12	79 $\frac{1}{2}$	

Ferghana

VI

Route No. 15.

FROM CHUST TO KHOJEND *via* PUNGAN.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
1. PAP ...	11	11	A wheel road all the way.
2. BURIM SARAI ...	10	21	
3. PUNGAN ...	8 $\frac{1}{2}$	29 $\frac{1}{2}$	
4. AMLIK ...	7 $\frac{1}{4}$	36 $\frac{3}{4}$	
5. AK KUDUK ...	10 $\frac{3}{4}$	47 $\frac{1}{2}$	
6. KAMISH KURGHAN (CANAL).	10 $\frac{1}{2}$	58	
7. SANGAR ...	34 $\frac{1}{2}$	92 $\frac{1}{2}$	
8. KHOJEND ...	14 $\frac{1}{4}$	106 $\frac{3}{4}$	

Ferghana

AMARKAND

VI
Fergana

FROM TASHKEND TO MARGHILAN *via* TALIAU AND KHOKAND.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. CHIRCHIK STATION	8 $\frac{3}{4}$	8 $\frac{3}{4}$	A wheel road all the way to Taliau. Route No. 17 goes from here to Khojend. At the village of Kuluk, which lies at 5 miles from Tashkend, a very practicable ford used to
<p>exist. Opposite this village the Chirchik flows in several channels of various depths over a wide bed, with rolling stones and boulders. The swiftness of the torrent is here very considerable, especially when the flood season has set in, when it reaches 12 feet per second. At other times the crossing at the Kuluk ford presents no special difficulties. As crossing in the flood season became dangerous, in 1872 they began to build a bridge, or rather several bridges connected with each other by dams. These bridges were finished in 1875. Their length was 770 feet, but with the connecting dams they measured 1$\frac{1}{2}$ miles. The ford opposite the ruins of the former fort of Niaz Beg is perfectly impracticable at high water.</p>			
2. KARA SU. ...	9 $\frac{1}{4}$	18	
3. ZIMORKA KONCHE- GALL.	17	35	
4. TALIAU ...	15	50	A fortified post.
5. SHANGAZ PASS ...	12 $\frac{1}{4}$	62 $\frac{1}{4}$	Hence to Khokand a caravan road practicable for baggage animals.
6. DOLONALI (WINTER HUTS).	12 $\frac{1}{2}$	74 $\frac{3}{4}$	
7. KAMISH KURGAN...	20	94 $\frac{3}{4}$	
8. CHAHIL MAKHRAM	6 $\frac{3}{4}$	101 $\frac{1}{2}$	Ferry boats (2).
<i>Alternative Route from Taliau.</i>			
5. KANDARDARAN PASS.	18 $\frac{1}{2}$	68 $\frac{1}{2}$	A caravan route practicable for baggage animals.
6. MULLA MIR ...	5 $\frac{1}{4}$	73 $\frac{3}{4}$	
7. SHAIDAN ...	10	83 $\frac{3}{4}$	Pass Bahadar Khan at 4 $\frac{3}{4}$ miles. There is a wheel road from Shaidan to Chust; thence to Marghilan (<i>see Note A</i>).
8. CHAHIL MAKHRAM	14	97 $\frac{3}{4}$	
9. KHOKAND ...	24	121 $\frac{3}{4}$	
10. KARAWAL TAPA STATION.	18	139 $\frac{3}{4}$	By the postal road to Marghilan.
11. ALTI ARIK STATION	18 $\frac{3}{4}$	158 $\frac{1}{2}$	
12. MARGHILAN ...	19 $\frac{1}{4}$	178 $\frac{1}{4}$	"Marghilan is a very large military cantonment. It is something like Sealkote. The cantonments extend over miles of country, with good broad avenues at right angles, and planted with

aspen, mulberries, and other trees. The soldiers have good barracks, seem to be of good material, and are well disciplined. The native city is 12 versts from the cantonments."—*Dauvergne.*

SIRDARIA

Fergana

ROUTE No. 16—*contd.**From Tashkend to Marghilan via Taliau and Khokand.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
<i>Note A.—From Shaidan to Marghilan via Chust.</i>			
8. ASHABA ..	6 $\frac{3}{4}$	90 $\frac{1}{2}$	A wheel road the whole way.
9. ASH ...	13 $\frac{1}{4}$	103 $\frac{3}{4}$	
10. CHADAK ...	14 $\frac{1}{4}$	118	
11. CHARKASAR ...	8 $\frac{1}{2}$	126 $\frac{1}{2}$	
12. ALMAZ ...	9 $\frac{1}{4}$	135 $\frac{3}{4}$	
13. CHUST ...	8	143 $\frac{3}{4}$	
14. KASH KAIRAGACHI	11 $\frac{3}{4}$	155 $\frac{1}{2}$	
15. TOKALI ...	24 $\frac{1}{2}$	180	
16. SHAMURGA TAPA	12	192	
17. MARGHILAN ...	13 $\frac{1}{4}$	205 $\frac{1}{4}$	

Route No. 17. VIFROM CHIMKEND TO KHOKAND BY THE POSTAL ROAD *via* TASHKEND AND KHOJEND.*Authority—KOSTENKO, 1880.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. AK-TASH ...	9 $\frac{1}{4}$	9 $\frac{1}{4}$	The Keles river is crossed by ferry here.
2. BEGLIAR-BEK ...	9 $\frac{1}{4}$	18 $\frac{1}{2}$	
3. SHARAF-KHANA ...	14 $\frac{1}{4}$	32 $\frac{3}{4}$	
4. JERI ...	8 $\frac{1}{4}$	41	
5. AKJAR ...	11 $\frac{1}{4}$	52 $\frac{1}{4}$	
6. KHUSH KUPRIUK (KHISH-KUPIR).	9 $\frac{3}{4}$	62	
7. TASHKEND ...	12 $\frac{1}{2}$	74 $\frac{1}{2}$	
			Tashkend is the head-quarters of the Turkistan administration. There are two towns—the Asiatic and the European. In size and extent Tashkend is one of the largest towns of Central

Zens kana

SIPARIA

ROUTE No. 17—contd.

From Chimkend to Khokand by the Postal road viâ Tashkend and Khojend.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
Asia. Population (1868) 76,000 in Asiatic Tashkend and 5,000, exclusive of troops, in Russian Tashkend (1875).			
8. CHIRCHIK ...	8 $\frac{3}{4}$	83 $\frac{1}{4}$	For alternative route hence to Khokand, see Route No. 16.
9. KARA SU ...	9 $\frac{1}{4}$		
10. BISKEND ...	13 $\frac{1}{2}$	92 $\frac{1}{2}$	
11. URALSKA (URAL) ...	12	106	
12. JAN BULAK ...	17 $\frac{1}{2}$	118	
13. MURZA RABAT ...	18	135 $\frac{1}{2}$	
14. KHOJEND ...	16 $\frac{1}{2}$	153 $\frac{1}{2}$	Khojend is considered by its inhabitants to be one of the oldest cities in Central Asia. On two sides it is surrounded by extensive gardens. The town has a circumference of 8 miles. On three sides is
		170	
a double wall, and on the side of the Syr a single wall. Population about 30,000 souls. They are nearly all Tajiks. In 1888 a bridge over the Syr Daria was in course of construction; the river is rather deep, and very rapid. A great many pine logs are floated here from Namangan.			
15. KOSTAKOZ ...	13 $\frac{1}{4}$	183 $\frac{1}{4}$	
16. KARACHI KUM ...	14 $\frac{1}{2}$	197 $\frac{3}{4}$	
17. PATAR ...	18 $\frac{1}{2}$	216 $\frac{1}{4}$	
18. BISH-ARIK ...	16	232 $\frac{1}{4}$	
19. CHIKI (CHUCHAI) ...	13 $\frac{3}{4}$	246	
20. KHOKAND ...	7 $\frac{1}{4}$	253 $\frac{1}{4}$	

Route No. 18.

FROM KHOKAND TO OSH viâ WADIL AND NAUKAT.

Authority—KOSTENKO, 1880.

Number and names of stages	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. ULTARMA ...	11	11	A wheel road the whole way.
2. RISHTAN ...	13 $\frac{1}{4}$		
		24 $\frac{1}{4}$	From here a wheel road goes to Marghilan, distance 31 miles.

ROUTE No. 18—*contd.**From Khokand to Osh viâ Wadil and Naukat.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
3. KURGHAN TAPA...	10 $\frac{3}{4}$	35	
4. CHIMION ...	8	43	
5. WADIL ...	10	53	
6. UCH KURGHAN ...	20	73	
7. KOK JAR ...	18	91	
8. NAUKAT ...	14	105	
9. OSH ...	23	128	<i>Vide</i> Route No. 21.

Note A.—Alternative Route from Khokand viâ Isfara.

1. YAIPAN ...	13 $\frac{1}{2}$	13 $\frac{1}{2}$	Wheel road all the way.
2. RIBAT ...	15	28 $\frac{1}{2}$	
3. ISFARA ...	9 $\frac{3}{4}$	38 $\frac{1}{4}$	Hence a wheel road goes to Varukh, 34 miles.
4. LIAKHAN ...	12	50 $\frac{1}{4}$	
5. SARI KURGHAN...	20 $\frac{1}{2}$	70 $\frac{3}{4}$	From here a wheel road (Route No. 19) goes to Sokh, distance 27 $\frac{1}{2}$ miles; thence over the Tarak pass to Gharm.
6. RISHTAN ...	14 $\frac{1}{2}$	85 $\frac{1}{4}$	

Route No. 19.

FROM KHOKAND TO GHARM *viâ* THE TARAK PASS.*Authority—KOSTENKO, 1880.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. SARI KURGHAN ...	16 $\frac{1}{2}$	16 $\frac{1}{2}$	} This is the shortest road from Khokand to Karatigin, but is only just practicable for footmen. } A wheel road.
2. KARNAN ...	11	27 $\frac{1}{2}$	
3. SOKH ...	16 $\frac{1}{2}$	44	
4. ZARDOL ...	27	71	From Sokh the road goes up the gorge of that river, and as far as the Polial winter quarters is very practicable. Further on cornices begin. At the mouth of the Dugmar the road turns on

ROUTE No. 18—*contd.**From Khokand to Osh viâ Wadil and Naukat.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
3. KURGHAN TAPA...	10 $\frac{3}{4}$	35	
4. CHIMION ...	8	43	
5. WADIL ...	10	53	
6. UCH KURGHAN ...	20	73	
7. KOK JAR ...	18	91	
8. NAUKAT ...	14	105	
9. OSH ...	23	128	<i>Vide</i> Route No. 21.
<i>Note A.—Alternative Route from Khokand viâ Isfara.</i>			
1. YAIPAN ...	13 $\frac{1}{2}$	13 $\frac{1}{2}$	Wheel road all the way.
2. RIBAT ...	15	28 $\frac{1}{2}$	
3. ISFARA ...	9 $\frac{3}{4}$	38 $\frac{1}{4}$	Hence a wheel road goes to Varukh, 34 miles.
4. LIAKHAN ...	12	50 $\frac{1}{4}$	
5. SARI KURGHAN...	20 $\frac{1}{2}$	70 $\frac{3}{4}$	From here a wheel road (Route No. 19) goes to Sokh, distance 27 $\frac{1}{2}$ miles; thence over the Tarak pass to Gharm.
6. RISHTAN ...	14 $\frac{1}{2}$	85 $\frac{1}{4}$	

Route No. 19.

FROM KHOKAND TO GHARM *viâ* THE TARAK PASS.*Authority—KOSTENKO, 1880.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. SARI KURGHAN ...	16 $\frac{1}{2}$	16 $\frac{1}{2}$	This is the shortest road from Khokand to Karatigin, but is only just practicable for footmen.
2. KAENAN ...	11	27 $\frac{1}{2}$	
3. SOKH ...	16 $\frac{1}{2}$	44	A wheel road.
4. ZABDOL ...	27	71	From Sokh the road goes up the gorge of that river, and as far as the Polial winter quarters is very practicable. Further on cornices begin. At the mouth of the Dugmar the road turns on

ROUTE No. 19—*contd.**From Khokand to Gharm viâ the Tarak Pass.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

One side in order to avoid a gorge. The circuitous road makes for the boundary of Urmazan, whence it turns to the hamlet of Zardol, situated at the fall of the Ak Terek into the Sokh river.

5. ITEK BOUNDARY ...	11	82	From Zardol the road continues to go along the Sokh gorge by difficult and dangerous cornices as far as the boundary of Itek.
6. TARAK PASS ...	7		
		89	The road is quite impracticable for horsemen, and people on foot can only get along it with difficulty. The Tarak pass is especially difficult, as may be supposed when it is stated that the

road lies over glaciers. Those who traverse it always go in bands and attach to their bodies long sticks crosswise, so that if they fall into a *crevasse* their companions are able to pull them out. Notwithstanding the great risk, many Karatigins go over the Tarak pass: It is notorious that the great mass of Karatigins who cannot find in their own poor country a means of subsistence make for Khokand, where they engage themselves for daily hire and work as agriculturists, or even lease lands for cultivation. These Karatigins or, as the Sarts and Kirghiz call them, *Gulchas* extend as far as Tashkend, where they are renowned as being indefatigable workmen.

7. YARKUSHI ...	?	?	South of the Tarak pass the road is much better. In one day Yarkushi, a Karatigin settlement, can be reached, whence, according to native statement, there are but 27 miles to
8. GHARM ...	27	?	

Gharm, the chief town of Karatigin.

Note A.—From Zardol there branches off to the right along the Ak Terek another road leading over a pass of the same name to the valley of Macha, an affluent of the Zarafshan. This is a much more practicable road, but even along it horsemen can only pass with difficulty.

From the boundary of Urmazan a road turns off sharply to the right (to the west) up the Dugmar to lake Kara Kul, and on to the Kashemish winter quarters on the Varukh-Isfairam road. From Urmazan to Kara Kul is $9\frac{1}{2}$ miles, and the road is quite practicable for pack-animals. At Kara Kul a low range has to be crossed, but the crossing presents no sort of difficulty. From this pass to Kashemish is 15 miles, and thence to the village of Varukh 16 miles.

Route No. 20.

FROM KHOJEND TO GHARM *viâ* URA TAPA, THE PAKSHIF AND ADJOINING PASSES.

Authority—KOSTENKO, 1880.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. NAU ...	25	25	} Postal road.
2. NAUKAND ...	25		
3. URA TAPA ...	15	65	

ROUTE No. 20—contd.

From Khojend to Gharm viâ Ura Tapa, the Pakshif, and adjoining Passes.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
<p>double wall, which is pierced by seven gates. Population about 5,000 souls. Ura Tapa lies in the mountains of the Turkistan ranges, to the north of which extends a mountainous plateau. The town is at an elevation of 2,700 feet above the sea level. The breadth of this plateau is about 16 miles.</p>			
6. PASTIGAN ...	50	115	Road passes Mugin, and presents no difficulties to the village of Dohket, where a short-cut comes in from Nau. Follow the Ak Su to Metke, 30 miles, from whence begin the difficult ascent to the Pastigan pass over compact ice and snow. The pass is only practicable in summer. A better route would seem to be <i>viâ</i> the Auchi pass and Oburdan. By the latter Yangi Arik is reached by a level road at 18 miles. Here commences the Bismandi defile. This stream crosses from the valley which connects Metke with Auchi. Length of defile 8 miles. The defile leading to the pass commences at Auchi; the road is narrow and bad. Height of pass 11,200 feet. Descent on the other side is steep at first, but is easier afterwards. From the top of the pass to Oburdan is not more than 5 miles. Thence to Pastigan 10 miles. Total by this route about 41 miles. There is another route from Khojend by the Yani Sabak pass. This pass was traversed twice by a Russian detachment in 1870. Elevation 13,278 feet. The troops had to use ropes to help the men, horses, and mules in the escort. At Lyalak a road comes in from Khokand. The road over the Yani Sabak strikes the Zarafshan-Samarkand route at Tabushin about 13 miles from Pakshif. There is still another pass over this range—the Yarkut. It is practicable for horses with difficulty, and only for a short summer month. It follows the Ak Su from Nau to the village of Dinau; thence over the pass to the Zarafshan at 2 miles from Langaruz.
7. RIVAMUT ...	6½	121½	The road seems to be difficult, frequently crossing and recrossing the river, but it was followed by the Russian expedition of 1870. Clover for about 2 sotnias of Cossacks was procurable and fuel. Barley had to be carried, and provisions could not be obtained. There is no grazing in this valley.
8. LANGARUZ ...	10	131½	
9. TABUSHIN ...	10	141½	
10. PAKSHIF ...	8½	150	
11. PAKSHIFF PASS...	7	157	Over the Pakshif pass leads the main road connecting the Macha with Karatigin. Commencing at the Zarafshan village of Pakshif, the road along the border of a small stream rises to the pass. The pass is double. Descent good. This pass is considered the best from the valley of the Zarafshan to the valley of the Surkhab. The ascent of the pass and the pass itself are comparatively easy.
12. GORIFF (VILLAGE)	8	165	The road then runs down the Goriff, which on uniting with the Didikhi is called the Sor-Bokh.
13. KHOJA-CHAUK ...	18½	183½	
14. BENI SOFIAN (VILLAGE.)	17	200½	The village of Beni-Sofian is situated above the junction of the Sor Bokh and the Surkhab.

Samarkand

Bokhara

ROUTE No. 20—concl'd.

From Khojend to Gharm viâ Ura Tapa, the Pakshif, and adjoining Passes.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
15. GHARM ...	10½	211	From Beni-Sofian the road turns westward down the Surkh ab viâ the villages of Karaiman, Kocha Maldi, Kasnek, Shul, and Saripul to Gharm. This road is practicable for pack animals.

Note A.—From Pakshif viâ the Wadif pass (Footpath).

11. WADIF ...	14	164	Follow the Zarafshan for 11½ miles east to the village of Wadif.
12. WADIF PASS (FOOTPATH.)	6	170	Passing along the Wadif defile, the road crosses the Hisar range, and descends to the village of Dubursab.
13. ZIA JANGIL PASS	18½	188½	Pass village of Didikhi.
14. KHOJA-CHAUK PASS.	10	198½	Here join the Pakshif pass route.
16. GHARM ...	27½	226	

Note B.—From Pakshif viâ the Zarafshan Glacier and the Yarkhich Pass.

13. ZARAFSHAN GLA- CIER.	34½	184½	Up the Zarafshan viâ Wadif and Mazar.
14. YARKHICH PASS	5½	190	The road up to the pass and the pass itself are very difficult, and accessible only for a short time in summer. From the pass it descends into the defile of the river Deh-i-Mil-i-Udal, at the commencement of which it divides into two branches; the left crossing the mountains leads to the insignificant hamlet of Nagar-Ailak, situated on a small stream running into the Deh-i-Mil-i-Udal. The right road runs down the river Deh-i-Mil-i-Udal, and at the village of Sokau leads into the valley of the Surkhhab (Kizil Su or Red river). From the village of Hisarak (2¾ miles from Sokau) a road branches off to the right, and crossing some low hills leads to Gharm. This latter road is very practicable, and it passes through an inhabited district abounding in pasture and water. The main road from Alai to Gharm passes through the village of Sokau (see Route No. 28).
15. DEH-I-MIL-I-UDAL OR DEH-I-MULLAH BADAL.	14½	204½	
17. SOKAU ,, ...	32	236½	
20. GHARM ...	40	276½	

Bokhara

Route No. 21.

VI
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FROM MARGHILAN TO AK SU *via* ANDIJAN, OSH, THE TALDIK, AND KASHGAR.

Authorities—SCHUYLER, 1873; KUROPATKIN'S MISSION, 1876; KOSTENKO, 1880; DAUVERGNE, 1888; LIEUTENANT BOWER, 1889-90; LITLEDALE, 1890; DAVISON, 1891.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

N.B.—All distances in this route as far as Kashgar are taken from Kostenko.

1. KARA TAPA ...	17	17	A cart road to Gulcha; thence to Ak Su by the caravan road. It is believed, however, that but little labour would be required to make it practicable for wheels the whole way. In summer, when the snow is melting, the trade route from Irkeshtam to Osh goes <i>via</i> the Alai valley (<i>see</i> below).
2. SHARIKHANA ...	13 $\frac{1}{4}$	30 $\frac{1}{4}$	
3. ANDIJAN ...	16 $\frac{1}{2}$	46 $\frac{3}{4}$	
4. JULIA-KUDUK STA- TION.	16	62 $\frac{3}{4}$	
5. OSH ...	17	79 $\frac{3}{4}$	

A Russian military station and telegraph terminus.

Note A.—Alternative Route from Marghilan.

1. KUVA ...	20 $\frac{3}{4}$	20 $\frac{3}{4}$ 35 43 $\frac{1}{2}$ 59 $\frac{1}{2}$	} By the postal road.
2. MIN TAPA ...	14 $\frac{1}{4}$		
3. ARAVAN ...	8 $\frac{1}{2}$		
4. OSH ...	16		

Captain Kuropatkin's mission left Madi (*see* next stage) on the 20th October 1876 and reached Kashgar on the 6th November, halting for two days at Sufi Kurghan. The following is taken from Kostenko's account:—"The whole distance from Osh to Kashgar amounts to 249 miles according to Kuropatkin's survey. The most serious obstacle on this line is the pass over the Terek Davan (12,700 feet in height). Progress over this is not possible throughout the year, but only from the beginning of October to the end of April, *i.e.*, during the seven winter months. From the end of April till the beginning of October caravan communication across this pass is brought to an end because of the melting of the snows. Caravans are then sent from Osh by a somewhat more circuitous route over the Alai, either by one which crosses the main range by the Shart pass, or by one over the Taldik Davan (this is the most practicable road to the Alai from the Ferghana valley—*see Note C*), which then passes along the Alai valley over the Tagh Murun pass, separating the basins of the Amu Daria, Alai Tau, and Kizil Su from the basin of the Kashgarian Kizil Su, which later on becomes the Tarim Gol. Beyond the Tagh Murun pass both roads unit at Irkeshtam—that is, the direct one over the Kashgar* Davan, and the more circuitous one by the Tagh Murun. The Tagh Murun road is not, however, practicable throughout the year. It admits of progress only during the four summer months, *viz.*, from the middle of June to the middle of October. From the middle of October this pass on account of its high position above the level of the sea lies deep in snow. Hence trade by it is stopped for eight months of the year. From what has been said it is apparent that caravan communication between Osh and Kashgar takes place during 10 $\frac{1}{2}$ months of the year. In other words, during May and the first half of June it is not possible by any route, but by the beginning of October it is practicable by either route."

M. Severtsoff crossed the Shart pass in October 1877.

ROUTE NO. 21—*contd.*

From Marghilan to Ak Su viâ Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

6. LANGAR ...	20	99 $\frac{3}{4}$	Between Osh and Gulcha there are two roads—the longer one is a cart road, and is about 50 miles; the other is only suitable for pack animals, and there are two passes to cross, the first one, Karavan Kul, being slightly the higher; it has the advantage of saving 12 miles.

Taking the cart road, pass Madi at 5 $\frac{1}{2}$ miles, and along a hilly, but well cultivated, country. From Madi the road begins to follow the steppe over an elevated locality as far as the Taldik pass. Here it enters a gorge, and follows the pebbly bed of the river as far as the Langar post. Wheat, melons, and cotton are grown on either side of the route. Fuel and forage.

7. GULCHA ...	29 $\frac{1}{2}$	129 $\frac{1}{4}$	At Langar the road to Gulcha bifurcates. One branch was made into a cart-road in 1876; the other is not made, but it could easily be adapted for wheeled traffic. The former continues to go

along the upper course of the Taldik, bending to the east at 13 miles, and going along the Chigirchik Bel Su gorge. It then goes over the Chigirchik Bel pass (7,700 feet), which lies 2 $\frac{1}{2}$ miles from the mouth of the Taldik river. From the pass the road goes down the river, and through a second gorge, from which it emerges at the point where the Chigirchik and Gulcha meet, and at the spot where fort Gulcha is situated. The other road crosses the Taldik by a ford, and turns by the Karvan Kul gorge to the pass of the same name (7,400 feet). Two miles further on the Tak pass (6,800 feet), is crossed. At 4 four miles from this, after passing the Kaplankul lake (5,600 feet), the road ascends the Kaplankul pass (7,000 feet). From the lake to the pass the distance is 7 miles. From the pass descend into the Karogan Sai gorge, and then into the Kurshab valley, along which the road goes to Gulcha. The passes along this route are steep, but practicable for baggage animals. Distance from Osh by this route 43 miles. On its return journey (26th March) the mission was obliged to take the horse track, the carriage road over the Chigirchik being covered with snow. Forage is everywhere procurable, and fuel is to be had in the shape of cow-dung. A small bazar.

Note B.—Alternative Route from Osh to Gulcha viâ Uzkend.

By a wheel road to Uzkend, halting at Kara Su 13 $\frac{1}{4}$ miles, Tura Kul 14 $\frac{1}{2}$ miles, Uzkend 10 $\frac{1}{2}$ miles. Thence to Gulcha by a road practicable for animals, halting at mouth of Yalpak-tash river 11 $\frac{1}{4}$ miles, River Tar 11 $\frac{1}{4}$ miles, River Lai 15 $\frac{1}{4}$ miles, Gulcha 12 $\frac{1}{2}$ miles—total distance 88 $\frac{1}{4}$ miles. There is another route from Osh to Uzkend practicable for pack transport, by which the distance is 29 $\frac{3}{4}$ miles; thence to Gulcha by the Isi Su boundary to Gulcha 35 $\frac{3}{4}$ miles. Total distance from Osh 65 $\frac{1}{2}$ miles.

8. KIZIL KURGHAN...	10 $\frac{1}{2}$	139 $\frac{3}{4}$	Up the Gulcha river, and along cornices as far as Kizil Kurghan.

9. SUFI KURGHAN ...	15 $\frac{1}{4}$	155	At five miles reach Yangi Arik. Here the road crosses over two hanging bridges, of which the second is over the Belarli, an affluent of the Gulcha. From this point the road is difficult in

places, passing over cornices and balconies. The gorge opens out, and the road, which goes along the bottom of it, is frequently covered with thick and succulent grasses. Groves of poplars at 1 $\frac{1}{2}$ miles from Sufi Kurghan.

10. SARI KUCHUK ...	10	165	At Sufi Kurghan the road bifurcates; one goes left along the Terek Su to the Terek Dawan pass. This is the nearest road to Kashgar. Mr. Little-dale says this pass is open from August till end

of May, but see stage 5. However, the same authority states that on the 31st May 1890 a caravan was met returning from the Terek; the snow was too soft for them to get over (see also Note C).

ROUTE No. 21—*contd.*

From Marghilan to Ak Su viâ Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
11. TASH UI ...	12	177	Horses pass with difficulty between the strewn rocks, and the Terek Su is frequently forded. The fords are not deep. Cross the Terek Davan pass. The mountains on either side are 500 feet higher and are covered with eternal snow. No fuel.
12. EKEZEK ...	10½	187½	The road* passes along the stony bed of the eastern Terek in the Terek defile; then down the Kok Su, past a post, and then up a steep ascent to the Ekezek pass (10,000 feet). No fuel. Grass plentiful.
13. IRKESHTAM post	11¼	198¾	The road goes down the narrow valley of the Ekezek, following the course of the river. Further on it leaves the river and turns north-east, ascending Ekezek pass No. 2. Ascent tolerably easy, and the road could be made practicable for wheels by clearing away the boulders. Height of pass 11,000 feet. Fuel, forest brier, and archa only along the second half of the road. Irkeshtam is a Russian cantonment on the Russo-Chinese frontier. Occupied by 30 Cossacks.

Note C.—Alternative Route from Sufi Kurghan viâ the Alai Valley.

10. KIZIL JAR ...	12	167	
11. TALDIK DAVAN PASS.	12	179	
At Kizil Jar the roads again branch. One to the left leads to the Archat pass (12,000 feet), distance 7 miles. The other turns to the west, and goes, <i>vid</i> forts Uch Tapa and Bossaga, to the passes which lie at 1½ miles distance from each other. The eastern one, Koijol Davan (11,400 feet), is the more sloping; the western one is Taldik Davan (11,500 feet). Dauvergne describes the latter as easy. He found no snow on it in June 1888 (see also Route No. 29).			
12. SARI TASH ...	8¾	187¾	On the Alai. There is a road down the valley to Daraut Kurghan and Gharm (see Note A, Route No. 28).
13. AK TASH ...	13¼	201	
14. RIVER KIZIL SU	13¼	214½	
15. IRKESHTAM ...	12	226½	
14. YEGIN ...	13¼	212	The road from the Irkeshtam post to the Yegin post runs for two <i>verst</i> s along the broad projections along the right bank of the Kizil Su. The ground is rather stony. Small patches of cultivation are met with. The road then descends to the valley of the Kizil Su* by a steep channel bearing the name of Sari Bulak.

After crossing a ford (not deep in October) over the Kizil Su, the road approaches the right side of the valley, which for 1½ miles runs under a perpendicular wall of conglomerate. The road then makes an inconsiderable turn to the west along the bed of the Kosh Ishug (pair of shoes) brook overgrown with bushes. Then crossing the Chakhandi rave it rises

* The Kizil Su of Kashgar.

ROUTE No. 21—*contd.*

From Marghilan to Ak Su viâ Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

past the point of Takai Bash on to a highland called the Kara Bel at 4 miles from the camping-ground. The road here first crosses a broad plateau, covered with gravel, and by a low pass amongst inconsiderable spurs comes out on a still larger plateau, also covered with gravel. By a very steep rocky descent it then enters the Ittig valley (succulent grass). The locality of Kara Bel is very sterile. Lying at a height of 9,300 feet above the sea (by aneroid), it forms an elevated highland with very irregular masses of low rocky hills destitute of vegetation. Having descended into the broad Ittig channel, the road takes an easterly direction, which it keeps up to the Yegin post. After passing along the bed for $1\frac{2}{3}$ miles, it issues on the Yegin valley, presenting a still greater contrast than the Ittig valley to the Kara Bel. The valley of this stream is 80 *sajens* (186 $\frac{2}{3}$ yards) in width, and, as far as the eye can see, is thickly grown over with wood, poplars, willow, and brushwood. Crossing the Yegin stream by a shallow ford, the road reaches the Yegin post (junction of roads).

From the post road continues along the bank of the Yegin stream, crosses a small transverse water channel (the road here requires repair), and then crossing to the right bank reaches the camping-ground on a moderately-sized glade covered with grass and surrounded by old poplars and willows. There is no fuel or water along the bed of the Takai Bashi and on the Kara Bel. In the Ittik and Yegin valley, owing to the abundance of grazing and especially of fuel, *a considerable detachment might be quartered for a prolonged period.*

15. FORT ULUGCHAT	12	224	From camp the road crosses to the right bank of the Yegin, which it follows along a broad open space covered with stones, and sloping down to the river. High vertical mountains
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come almost down to the left bank of the stream. The road following the bends of the river crosses several inconsiderable water channels (requiring work to make a wheel road). It then descends into the widened valley of the Yegin, and runs along in a south-easterly direction to the junction of the Yegin with the Kizil Su. The valley of the Yegin is thickly grown over with wood, large poplars and willows, and bushes of wild rose, &c. Many poplars have a diameter of 10 *vershoks* (17 $\frac{1}{2}$ inches), and are fit for building. At 4 miles 5 furlongs the Yegin flows into the Kizil Su, here having the local name of Yas Kichu; the road runs on along the valley of the latter river in a north-easterly direction to the post of Ulugchat. At the junction of the two rivers just named the inconsiderable Nagra Chaldi post stands on the right bank of the Kizil Su. The quadrilateral wall of this post, with flanking towers, is surrounded by yet another wall 2 feet high. The width of the Kizil Su valley, which reaches 250 *sajens* (583 $\frac{1}{3}$ yards) at the confluence of the Yegin, expands beyond to one *verst* ($\frac{2}{3}$ mile); it is rich in woods, which cover it thickly in places. Near Ulugchat the wood thins. At 2 miles from Nagra Chaldi the road crosses to the right bank of the stream (ford not deep), rises on to a projection of this bank, and runs along it for 2 $\frac{1}{2}$ *versts* (1 $\frac{3}{4}$ miles). At this spot the route is rendered difficult by great masses of conglomerate obstructing the road. The road then again descends by a steep water channel to the river valley, by which it runs on to Ulugchat. In the valley the road crosses several water channels and gorges, and in places runs over very stony ground. Within $\frac{2}{3}$ mile of Ulugchat the valley of the Kizil Su receives the Uch Tash from the north and expands to 1 $\frac{3}{4}$ miles. The road reaches Ulugchat after crossing a moderate spur which conceal it.

The fort of Ulugchat lies in low ground, and is surrounded by commanding heights. The descent from the above mentioned spur, across which the Yegin road runs, is an especially suitable position for artillery. Ulugchat fort is a mud structure with many inner walls and gates. It is not strong, but is sufficient to keep the Kirghiz in awe of their master. There is sufficient grazing only in the neighbourhood of Ulugchat. There is plenty of fuel and wood for material along the whole march. Water everywhere of good quality.

ROUTE No. 21—*contd.*

From Marghilan to Ak Su viâ Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	

16. FORT AKSALAR ...	26½	250½	The road from Ulugchat at first runs along the valley of the Kizil Su by its right bank over soft ground, overgrown with thorn at first, and afterwards also with "chi." Poplar and wil-
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low woods then commence. The river runs under the vertical left bank. At about 2½ miles the road crosses to the left bank by a rather deep ford. Beyond this thickly growing willows commence, in which there is much game (pheasants). At 4 miles 2½ furlongs from the camping-ground the road again crosses to the right bank, and in spring and summer hangs over the river on a cornice, which is now much broken down. (In autumn one can travel by the bed of the river.) Further on the cornice descends down to the very stream, and is revetted with logs on that side.

The cornice ends in gates which it is impossible to avoid. Beyond the gates is constructed a small guard-house. Rock-salt is procured not far from this spot. Further on the road, following a bend of the river, turns south, and now runs along the high bank, covered with large masses of conglomerate, and then descends to the bed of the river. At this part the route is difficult and only fit for pack train. The stream flows slowly; it is broad, and there are no fords. The valley is covered with wood. At 5 miles 7¾ furlongs commences the most difficult part of the route. Large blocks of conglomerate completely block the road, obliging it to cling for short distances to narrow cornices. These cornices might be easily destroyed by the spring floods. The road then descends on to a broad gentle slope, covered with rugged stones, along which it runs for about 1½ miles.

At 8 miles the road turns east into the broad channel of the Tugarak Saz Sai, along which it runs for 6 miles 5 furlongs, gradually rising to the Shur Bulak pass. This ascent is considerably steep towards the end. The height of the pass is 9,200 feet. A gentle descent runs along the bed of the Shur Bulak Sai over ground of the same character as the ascent, following the course of the Shur Bulak stream (with brackish water). This stream loses itself at 4 miles from its source.

At 10 *verst*s from the pass the road reaches the Mashrut fort, and passes it within 60 paces through gates constructed in a defensive wall run out from the fort. It is apparently difficult to avoid this fort, but easy to take it. It is surrounded by commanding heights, from which it would be easy to destroy it by artillery fire.

After passing through the Mashrut gate, the road descends to the valley of the Aksalar by a narrow and steep passage between vertical walls. The descent is so long and steep that guns could only be taken down by men. The clay soil of the descent with trifling rain becomes slippery, and riders had then better dismount. The hills on which Fort Mashrut stands form the right bank of the Aksalar. The left bank consists of some broad terraces, the lowest of which nearest the river is very little above the level of the water. The valley itself is up to 100 *sajens* (233¾ yards) in width and covered with large willow trees.

Between forts Mashrut and Aksalar, 3 miles 2½ furlongs, the road runs along the valley, and when near Aksalar rises on to the first terrace which continues up to the fort. The ascent over *débris* is very steep. The valley is very marshy in front of the fort.

The fort, which is rather insignificant, stands in the middle of the valley on the left bank of the stream. Fuel and wooden material abound in the Kizil Su and Aksalar valleys. Along the remainder of route there is only thorn. In autumn the grazing is insufficient for the most inconsiderable detachment. The water is good only in the Kizil Su and Aksalar. In the Shur Bulak it has a brackish taste.

17. KURGASHIN KANI	18	268½	For the first 2 miles the road runs along the valley grown over with wood. To the left (north) of the road, behind a low ridge of hills, there are many winter huts of the Kirghiz.
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At 2 miles the valley expands and takes the name of Maral Tugai. There are many winter huts hereabouts. Beyond the road turns north along the broad valley

Hsin Kiang

ROUTE No. 21—*contd.*

From Marghilan to Ak Su viâ Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

of Kosh Uki (birds' camp). The valley of Kosh Uki gradually contracts to 100 *sajens* (233 $\frac{1}{3}$ yards). Almost precipitous mountains of compact red clay border it. These hills to the east of the road bear the name of Elki-Yailau or Elki-Yurti (the summering place of horses). Many willow trees grow in the valley. At 2 miles from the turn the valley of Kosh Uki again expands and runs north-west from the road. It extends for about 6 miles 5 furlongs, and forms an excellent summering place for herds. In the valley are seen wintering huts with stores of hay. The road after crossing several small hills turns east at 6 miles, and runs through a narrow passage bearing the name of Malagehat. Up to the entrance to this passage the road may be reckoned a wheel one. The road runs through this corridor, from 6 to 15 paces wide, between vertical walls several hundred feet high of compact clay. In several places these walls overhang the road. Twice the road runs in steps, and twice, leaving the passage in consequence of its impracticability, makes a small circuit with inconsiderable, but steep, ascents. The passage is very winding. Its length is about 1 $\frac{1}{4}$ miles. The making of a wheel road through it would require great labour. It is easy to defend this passage, and it could be quickly destroyed. The passage can be circumvented by infantry. Beyond the passage an ascent commences by narrow water channels, and partly by cornices, on to the Kuruk mountains, after crossing which the road descends into the wide, but sterile, bed of the Kuruk Sai (dry bed). Beyond the bed the road runs along slopes over slippery flag-stones. This place is called Taigak Tash (the slippery stone). Beyond this a second pass follows less considerable than the first, after which the road descends into the bed of the Kucha Bulak. This channel is very narrow and in places becomes a passage (corridor). The heights forming it have excessively fantastical shapes, reminding one of huge buildings, towers, walls, &c. In it flows the Kucha Bulak stream, which, after receiving the Oi Bulak on its left bank, obtains the general name of Kichik Shur Bulak. The water of this stream is brackish, as its name betokens. At 11 $\frac{1}{2}$ miles the road enters the Elki-Yailau hills, turning sharply to the north, and for several hundred *sajens* (1 *sajen* = 2 $\frac{1}{3}$ yards) runs along a broad, as it were, artificially-cut passage and natural *chaussée*. The Kichik Shur Bulak flowing through the passage breaks through to the east by a narrow gorge, and the road running straight on enters a third small, but very winding and narrow, passage called Bur (lime) formed of limestone rocks. To make a wheel road through this passage would require very considerable amount of blasting. Beyond the road issuing on the Katta Shur Bulak valley follows this stream for about a *verst*. It then leaves it, and reaches the Kurgashin Kani mountains by small cornices and steep slopes permitting of only one single horse passing. It then makes a rather steep ascent, and a still steeper descent, and issues on the valley of the Kurgashin Kani (the lead mine), on the left bank of which is constructed a "rabat" (traveller's house). There is not sufficient fuel along the road, but at a few *versts* from Kurgashin Kani coal is worked. There is also little grazing. The water along the whole march is brackish. The water in the Kurgashin Kani at the camping-ground is good.

Note D.—From Aksalar to Opal, 84 $\frac{3}{4}$ miles.

At about 4 miles south of Aksalar a pack road leads direct along the Kizil Su valley to Opal, which, according to native information, is 84 $\frac{3}{4}$ miles distant.

18. KANJUGAN POST	14 $\frac{1}{2}$	283	From the sarai the road rises on to a projection of the right bank, over which it runs on even ground for about 1 <i>verst</i> ($\frac{2}{3}$ mile). The ascent to the Kurgashin Kani mountains then follows. The ascent is steep, stony, and narrow, and requires working at. From the pass an insignificant descent into a channel follows; the road crosses this channel, and rises over débris to the second pass, less steep than the first, named the Kizil Davan. From this pass a grand view opens out over an extensive basin, having several local names in its different parts—Baka, Kizil Oi, Kanjugan, and Terek. The width of this basin reaches 5 miles 2 $\frac{1}{2}$
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ROUTE No. 21—*contd.*

From Marghilan to Ak Su via Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	

furlongs, and its length 13 miles 2 furlongs. Its height above the level of the sea according to barometric observation is 7,000 feet. In the basin and in the hills surrounding is grouped a Kirghiz population of the Chunbagish tribe to the number of 1,000 "kibitkas." The descent into this basin is steep, and runs over slippery flag-stones with steps. After this descent the road may be considered a wheel one right up to Kashgar, requiring only the most insignificant repairs, which would only delay the leading portion of a detachment. After descending from the pass the road runs along the course of the Bagha Bulak (the stream of frogs) to the boundary of Bulak. The road after running for 4 miles 5 furlongs on the level approaches the mountains of Kizil Oi, and crosses several insignificant water channels. The Kizil Oi hills then recede in a southerly direction, and the road continues straight on eastward, and again runs over the level. The Bagha Bulak stream, along which the road runs for the first 5 *verst*s (3 miles $2\frac{1}{2}$ furlongs) from the foot of the pass, breaks through the Kizil Oi mountains to the south, and runs into the Kizil Su. In the portion along the Bagha Bulak the locality is called Bagha. Beyond the basin bears the name of Kizil Oi (the red ravines) right up to the Kanjugan post, where it takes the latter name. After leaving the Kizil Oi hills, the road runs for some yards over stony ground. Further on hillocks commence, overgrown with "chi" and bushes, and beyond them about 1 *verst* the road runs through a marshy locality inundated by the overflow from the Kuz Gun, which, issuing from the Kuz Gun hills, flows through the basin in a southerly direction, and then traversing the Kizil Oi hills flows into the Kizil Su. The Kuz Gun stream is crossed at 15 *verst*s from the camping-ground by a ford, which is not deep, but sticky. Beyond the ford wintering huts, with good towers and stores of hay, become more and more frequent near the road.

At 19 *verst*s from the camping-ground the road again approaches the Kizil Oi hills, winds round their base in a south-easterly direction, crosses the Kanjugan, which has its source in the Kuz Gun mountains, and, following the left bank of the stream, approaches the Kanjugan post. The Kanjugan post consists of an irregular-shaped four-sided wall with loopholes, and has several covered places inside. A second wall about 2 feet high surrounds the first. Kanjugan signifies "washed in blood." According to tradition, a great fight took place here between the Mogul and the Turk nations. Bushes and "chi" serve for fuel, and were met with along the road. There is generally a want of fuel along the route. There is grazing in abundance ("chi"), although not altogether of a satisfactory quality (in autumn). During movements in peace time, fuel, forage, and cattle can be obtained in abundance from the Chunbagish Kirghiz. The water in the Bagha Bulak, Kuz Gun, and Kanjugan streams is in autumn slightly saltish, but fit to drink.

19. MONYUL (MIN-UL) POST.	20	303	The road following the Kanjugan stream enters a broad defile bordered by hills, which are bare and destitute of vegetation. On the south are the Kanjugan, and north the Urta Bulak (middle stream). The width of the defile reaches 250 <i>sajens</i> ($583\frac{1}{2}$ yards), and the bottom is grown over with "chi" and occasional bushes. At $4\frac{1}{2}$ miles the Urta Bulak stream runs into the Kanjugan. At 8 miles the road issues on to the valley of Karvankul, about $1\frac{1}{2}$ miles in width, along which it runs at the foot of the Karvankul hills which form the valley. After traversing this valley for $1\frac{1}{2}$ miles, the road crosses the Uruk, into which the Kanjugan flows at this point. Having run along the left bank of this river for a <i>verst</i> , the road issues on the second extensive basin of Min Ul Dala. The ford across the Uruk is rather deep.
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Min Ul Dala basin is oval in form, and about 10 miles long by 6 miles broad, and the road runs along the centre of the basin in an easterly direction. The Uruk recedes from the road in a south-easterly direction. Along it runs the road to the town of Opal, and the Kapka post lies on it in the locality of Kapka. The surface of Min Ul Dala present an

Asim Kiang.

ROUTE No. 21—*contd.*

From Marghilan to Ak Su via Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Intra-mediate.	Total.	

open plain covered with shingle, making the road across it very difficult. It is only covered with small bushes of "ishkar." At 16 *verst*s is constructed a small monastery, which, in bad weather, would shelter several men. Not far from this mullah's hut the road crosses a moderate-sized canal with water in it running from the Uruk to the Min-UI [Monyul] post. This post also consists of a quadrangular wall with flanking towers; the face is about $81\frac{2}{3}$ yards. Within are some covered dwellings. The walls are very thin. The post looks very neat, and some gardens and fields give it an appearance of life. There is no grazing or fuel. The Kirghiz of the Chunbagish tribe can furnish these as well as cattle. There is water almost along the whole march, and it is of good quality.

Note E.—Kanjugan to Chakmak.—At about 9 miles south-east of Kanjugan a road runs up the Uruk to the Agach-chat post, and then on to post Chakmak. This route, according to native information, is very difficult; in places it is necessary to lead one's horse.

20. LANGAR	...	$17\frac{1}{2}$	$320\frac{1}{2}$	Up the valley of the river Siliab. This valley is formed on the north by Mushi, and on the south by the Ak Tash hills. At some <i>verst</i> s distance from the encamping-ground the road
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crosses the dry bed of the Ak Tash, whence the whole of the locality receives its name. The Ak Tash hills are at first of some height, but gradually get lower, and finally the road merely runs under the vertical edge of the valley. At 6 miles 5 furlongs the hills cease, and the road issues on the Kashgar plain. Near its issue on to it the road passes an ancient watch-tower built by the Chinese, and now almost ruined.

The plain is covered with pebbles and occasional shrubs of "ishkar," and there is neither forage nor fuel. It becomes inundated with water from the hills almost right up to the village of Langar. At 12 miles $4\frac{3}{4}$ furlongs the road crosses the Andijan Kichik canal. The ford across this canal even in autumn is something over $2\frac{2}{3}$ feet in depth. For pack horses some felled logs are thrown across. About 3 miles further on it crosses a second. They both have their origin from the Kizil Su. They both at first flow in a northerly direction, but then describe a curve and run east parallel to the road. Along the canals occasional trees are planted and small "rabats" constructed. Before reaching the village of Langar, 2 miles to the south of the roads, there are constructed in a direction perpendicular to it four watch-houses $\frac{2}{3}$ miles, one from the other. When the locality is inundated by water from the Kizil Su, these buildings show the direction to the fords across the canals. With very high water it is necessary to take the direction of the most southern "rabat." The village of Langar forms the commencement of a cultivated belt which runs up to Kashgar. There are a few huts in it, rather considerable corn-fields, and many mulberry and other trees. There is no forage or fuel along the road, but in Langar both can be obtained. Cattle can be driven in in the requisite quantity from the neighbourhood of the town of Kashgar. Water in abundance and of good quality.

21. KASHGAR	...	$11\frac{1}{2}$	332^*	Pass through the Langar gardens, and, after crossing a locality covered with pebbles, enter on a clayey soil. The road is so narrow that an <i>araba</i> can with difficulty pass. There are several little
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bridges only fit for pack-train. Corn-fields, and then trees, commence, and the road runs imperceptibly into the village of Sarman. At about $3\frac{1}{4}$ miles from Kashgar the road widens. The town walls only become visible at a *verst* ($\frac{2}{3}$ mile) from the town; the gardens end at 200 *sajens* ($466\frac{2}{3}$ yards), and form an esplanade very much cut up by the holes. "The Kuniar Shahr (old city) of Kashgar is surrounded by a mud wall about 10 to 20 feet thick, 24 feet high, and crowned with two small loopholed walls, one on the inside and one on the outside, and has flanking towers. There is cover right up to the walls on almost every side, the cover on the north being the best. There are three gates—one on the north, one on the south, and one on the east. The Yangi Shahr is much the best and strongest fortress in

* Captain Pemberton gives the distance from Kashgar to Ak Su as 307 miles. This is 46 miles more than that here given, and which has been taken from Captain Bower's diary.

As in Kashgar

ROUTE No. 21—*contd.*

From Marghilar to Ak Su viâ Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
<p>Turkistan. The wall is about 26 feet high, 60 feet thick at base, and 20 feet at top, where there is a wall 6 feet high, loopholed for musketry; the ditch is 30 feet wide, 20 feet deep. The garrison consists of 2,000 men. The circumference of the fort is about 4,000 yards.—(Bower.) Kostenko says:—"There are no guns. On the whole, if an attack were carried out direct on the fortress of Yangi Shahr, you could count on the surrender of the town of Kashgar without fighting." The road from the Kuniar Shahr to the Yangi Shahr lies in part through occasional buildings and gardens, and then crosses a marshy locality forming the Kizil Su valley. A splendid <i>chaussée</i> built by Yakub Beg is run across this ground.</p>			
22. YANDAM ...	10 $\frac{1}{2}$	342 $\frac{1}{2}$	<p>The road runs along the Kizil Su to Chaharbagh.</p> <p>From Kashgar to the village of Yandam it runs through a cultivated locality, and is quite fit for carriages. There is no want of either fuel, water, or forage.</p>
23. SHAPTALI ...	21 $\frac{1}{2}$	364	<p>From the village of Yandam the character of the road is the same. Salt soil is met with in places, owing to which the road is very tenacious. There is fuel everywhere. Forage and cattle can be furnished by the inhabitants. There is water in abundance in the canals along the road.</p>
24. FAIZABAD ...	9 $\frac{1}{4}$	373 $\frac{3}{4}$	<p>From the village of Shaptali there is less salt-soil, and the road is better. Plenty of water, forage, and fuel. Village of 450 houses and garrison of 120 cavalry.</p>
25. YANGIAWAT (YANGIABAD) ...	10	383 $\frac{1}{4}$	<p>Road very good. Water obtainable from canals and ponds in the villages along the road. For fuel thorn bushes on the road-side. Cultivated country most of the way.</p>
26. KARA ZULGHUM...	16	399 $\frac{1}{4}$	<p>The road runs through scrub jungle. In summer the road is well beaten and very dusty, and in the bad season muddy to a degree. At 13$\frac{1}{4}$ miles the road crosses an extent of very sandy plain for $\frac{1}{2}$ <i>verst</i>. There is plenty of fuel everywhere. There is no forage along the road or at the serai at the camping-ground. The road is generally quite fit for wheels.</p>
27. URDAKLIK ...	16	415 $\frac{1}{4}$	<p>Through jungle with a good deal of water about. There is little forage, but plenty of fuel. The water at the camping-ground is muddy. Elevation 3,850 feet. Supplies procurable. 20 houses.</p>
28. KARA KACHAN RABAT ...	16	431 $\frac{1}{4}$	<p>The road runs into a "turgak" wood, and runs through it up to the camping-ground. Fuel in abundance, but little forage even in spring. Cattle must be taken with one. Water in abundance at the camping-ground (a canal from the Kizil Su).</p> <p>The Kara Kilchin rabat is of the same proportion as the former one.</p>
29. SHUGEH (TSHURGA) RABAT ...	10	441 $\frac{1}{4}$	<p>Through the jungle as before. Plenty of water and fuel, but no forage. A large inn and a few log huts. Elevation 3,870 feet.</p>

75 in Kunyng

ROUTE No. 21—*contd.*

From Marghilan to Ak Su viâ Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
30. MARALBASHI ...	16	457 $\frac{1}{4}$	The Kashgar river is crossed by a floating bridge at about 14 miles. From the Tshurga rabat the road at first runs through wood, and at 18 miles enters an extensive tract of reeds, which extends right up to the Kashgar river. At 13 $\frac{1}{4}$ miles enter the fields and settlement of Maralbashi. At Maralbashi there is a rectangular fort measuring 500 paces each side; walls 28 feet high, and faced with brick. At the corners there are bastions surmounted by small towers. Elevation 3,800 feet.
31. CHAHARBAGH ...	14	471 $\frac{1}{4}$	From Maralbashi the road at first runs through cultivated country, but from 11 <i>versts</i> swampy places commence for 3 $\frac{1}{4}$ miles. Then, when within 4 $\frac{1}{2}$ miles of the camping-ground, the road passes through a growth of reeds, and is consequently difficult in summer, but easy when frozen. There are some detours. Reeds serve for forage and fuel. Water in abundance. 40 houses.
32. TUMCHUK ...	14	485 $\frac{1}{4}$	For the first half of the march inundations from the Kashgar river make the road swampy in places. One place about 4 miles 5 furlongs from Chaharbagh is particularly difficult, where the river has to be crossed. The length of this portion is 400 <i>sajens</i> (933 $\frac{1}{2}$ yards), which would require regular making. There is water along the march. At the camping-ground it has a marshy taste. There is plenty of forage in the Tumchuk village. Ample fuel. Cattle and sheep in considerable numbers. Elevation 3,600 feet. The village of Tumchuk consists of 40 to 50 houses.
33. CHADIE KUL ...	12	497 $\frac{1}{4}$	Over salt-soil covered with hillocks and tamarisk. At 11 miles 2 $\frac{1}{4}$ furlongs wood commences, which afterwards gets thicker. The road is good. A small river is crossed just before reaching camp. There is no forage. Fuel ample. Plenty of water, and of good quality.
34. YAKA KUDUK ...	11	508 $\frac{1}{4}$	Road good. Ample water and fuel. Little forage. Elevation 3,500 feet.
35. JAIDI ...	13	521 $\frac{1}{4}$	An alternative road can be taken from here to Chilian <i>viâ</i> Sujet, by which the distance is 45 miles. There is no water on this route.
From 1 $\frac{1}{3}$ miles to 7 $\frac{1}{4}$ miles the road crosses deeps and drifts, and is therefore difficult. Beyond this it runs to the Jaidi station over an even, salt-soil locality, here and there grown over with thin bushes of tamarisk and thorn. The Jaidi station consists of several small buildings. There is sufficient fuel along the whole march, but no forage. The water at the camping-ground is of bad quality (salt), and the ground is marshy.			
36. CHILIAN ...	11	532 $\frac{1}{4}$	From Jaidi the road runs over an even salt locality, grown over with tamarisk, thorns, and <i>kuiruk</i> . The road is good. There is no water on the march, and that at the camping-ground is slightly saltish. Plenty of fuel; no forage. Thirty poor houses with a little cultivation. The Maralbashi district ends here. Elevation 3,700 feet.

Hsin Kiang

ROUTE No. 21—concl'd.

From Marghilan to Ak Su viâ Andijan, Osh, the Taldik, and Kashgar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
37. SHOR KUDUK ..	16 $\frac{1}{2}$	548 $\frac{3}{4}$	From Chilian the route runs over the open steppe. The road is firm and good. Plenty of fuel; no forage. Water at the camping-ground is furnished from two wells 4 <i>sajens</i> deep (20 feet); it is slightly salt, but drinkable. Elevation 3,500'.
38. SAI ARIK ...	14 $\frac{1}{2}$		
39. CHUKTAL RABAT	16 $\frac{1}{2}$	579 $\frac{3}{4}$	Road good; it passes through several villages. At the village of Ai Kul alone it is marshy in spring (there is a depression here). Water in abundance and of good quality.
Forage can be had in the villages. There is no fuel along the route.			
40. AK SU ...	13 $\frac{1}{4}$	593	From Chuk Tal rabat the road runs through a populated tract, and in places well cultivated. It is quite good. There is water, forage, and fuel along the whole route.

The Ushturfan is crossed in this stage. It runs in three channels, one of which is crossed by a ferry in the cold season. Ak Su consists of two large towns 7 miles apart; both are walled. Supplies abundant and cheap.

The Ak Su is about 6 miles from Yangi Shahr, and its bed is about 1 mile in width.

When in flood, communication across the river ceases. Solid bridges are constructed for foot passengers and horses. The soil about Ak Su produces good rice and wheat crops, and the gardens contain much valuable building wood. The district is chiefly irrigated by the Tushkan Daria, commencing approximately opposite the sources of the Narin, and discharging into the Ak Su Daria above the Kashgar road. Some of the irrigation canals are also fed by the last-named river. The roads to the north to Kuldja, to the south to Khotan, and the west to Kashgar, all passing through Ak Su, render the situation of that town of great strategical importance.

Route No. 22

FROM KASHGAR TO AK SU viâ THE BELOWTI PASS.

Authorities—YARKAND MISSION, 1874; LIEUTENANT YOUNGHUSBAND, 1887.

Number and names of stages.	DISTANCE OF MILES.		Remarks.
	Inter-mediate.	Total.	

This route is an alternative one to No. 21. It is a little shorter, but is not, like the latter, practicable for carts, as it passes through a hilly country, where the ascents and descents are difficult at times even for ponies. The first 50 miles the road goes over a plain,

ROUTE NO. 22—*contd.**From Kashgar to Ak Su via the Belowti Pass.*

Number and names of stages,	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
<p>passing through the rich district of Artish. After crossing the Belowti pass, it descends to the Ak Su valley, down which it goes over some rough country, which is only practicable for baggage animals. From Ushturfan the country is level, and cultivation extends almost continuously between the two places. The river is generally fordable, but is liable to floods, which make it quite impassable. These floods come down very suddenly, and carts, horses, and foot passengers are often swept away by them.</p>			
1. ALTIN ARTISH ...	22	22	Over plain for a great part of the way. Continuous cultivation to Kalti Ailak. Road good. Cross Kashghar river by wooden bridge (in cold season), and subsequently cross two smaller streams and canals, and traverse a low ridge before entering the Artish village, which contains numerous villages, aggregating perhaps 2,000 houses. Fruit in abundance.
2. KALTI AILAK ...	22	44	Good road over level plain.
3. KYE BULAK ...	33	77	Road good. Passes over plain, and then through a range of low hills up the Sorgon streams, on which is a military outpost; then crosses a low pass, and emerges into a large plain. Camping-ground is occasionally used by Kirghiz.
4. JAI TAPA ...	20	97	An occasional camping-ground of Kirghiz. Water scarce. Situated near the centre of an extensive forest of stunted poplar trees. Good road, passing over level plain. Plenty of grass and fuel.
5. ILI BULAK ...	27	124	Road good, but stony. Crosses a low spur into the Ili Bulak valley, where there is plenty of firewood and a moderate amount of grass. Water scarce, but plenty of snow.
6. TIGAREK ...	17	141	Road up stream, and then over a spur from the main ridge, stony, but otherwise not difficult. Tigarek is in a large grassy plain (no water) surrounded by hills. Is sometimes used by Kirghiz as a winter pasture ground, where snow is used as a substitute for water.
7. BELOWTI PASS ...	9	150	Road crosses some low spurs, and then passes up a ravine, a steady ascent of 4 miles, followed by a sharp pull of 2 miles up to the pass (11,350 feet). No high peaks near the crest, but undulating grassy ridges. Both ascent and descent are perfectly easy. The road descends on the north side of the pass in the valley of the Kokshal river.
<p>The Belowti pass was the furthest point reached by Captain Trotter, and from it the marches to Ushturfan were said to be as follows:—</p>			
8. AKCHI ...	10	160	On Kokshal river.
9. KUYOK TOKAI ...	22	182	

ROUTE No. 22—*concl'd.**From Kashgar to Ak Su via the Belowti Pass.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
10. SAFR BAI ...	22	204	A road is said to lead from here to the Beda pass (<i>see</i> Route No. 3).
11. KABAWAL ...	22		
12. USHTURFAN ...	16	226	Route No. 3 is probably entered in this stage. <i>Vide</i> Route No. 3.
13. ACHTAGH ...	16	242	
14. BABIN ...	17 $\frac{1}{4}$	258	
15. AK SU ...	21	275 $\frac{1}{4}$	
		296 $\frac{1}{4}$	

Route No. 23.

FROM KASHGAR TO RANG KUL *via* THE AKBERDI PASS.*Authority*—LIEUTENANT DAVISON, 1891.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	

This route is only used when the regular route up the Yamun Yar is impracticable, *i.e.*, from the end of June to the beginning of September.

1. BORA KATAI ...	24	24*	Road good through a thickly populated and well cultivated country.
2. TASH BULAK ...	15 $\frac{1}{2}$	39 $\frac{1}{2}$	Road passes through several villages and cultivated fields. About 5 miles before reaching Tash Bulak is Tash Bulak bazar. Here supplies are obtainable. Tash Bulak possesses a Chinese Karawal or fort, a number of which line the foot of the mountains, useful only against Kirghiz raids, rarely occupied by troops. Shape square, with sides about 100 yards long, containing quarters within.
3. TARILGU ...	8 $\frac{1}{2}$	48	The road passes across a maidan for about 3 miles, when it turns off to the south-east at a point where the Yamun Yar river skirts a spur running in a north-north-east direction. Then ascending about 1,000 feet, it again descends very quickly, almost precipitously, to the river, up the right bank of which it runs to Tarilgu. Tarilgu consists of a stone house and a few trees. Fuel and water procurable.

* These distances were estimated only by Lieutenant Davison.

ROUTE No. 23—contd.

From Kashgar to Rang Kul via the Akberdi Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
4. SIRWAI ...	13	61	Road continues about $\frac{1}{2}$ mile along the right bank of the river, which it then leaves, crossing a small pass, Shagullik, 6,650 feet, the ascent to which is about 1,200 feet; then, rejoining the river, it again continues up the right bank for about $2\frac{1}{2}$ miles, where it leaves the river and passes up a valley to the east, the gorge of which is of red clay and conglomerate. After winding its way in a zigzag manner for several miles, it crosses the Serwai pass, 7,850 feet to Serwai. Fuel, but water scarce.
5. KURUK KURGHAN ...	16	77	The road after a distance of about 2 miles crosses the Serwai Bel pass, 8,250 feet, ascent 500 feet, descent very steep, difficult for laden animals; also the Aktikan pass, 8,280 feet, equally difficult. It then continues for about 2 miles, when it again crosses a small pass, Kosh Ailak, about 8,750 feet; also the Ululak pass, 9,100 feet; then, descending steep and narrow ravines of limestone formation, it passes two springs, after which a long and gradual ascent brings you to the Kuruk Art pass, 8,050 feet. The road then descends a spur at a gradient of $\frac{1}{3}$ or 20° to Kuruk Kurghan. Here there is a small fort and one or two stone houses. Fuel and water procurable. The road here rejoins the river.
6. KUL AILAK ...	11	88	Passing up right bank of river for about 3 miles, it crosses the foot of a spur by an ascent of 150 feet; then descends and crosses to left bank of river by timber bridge, up which it continues to Gez, where it crosses to the right bank. It has here cut its way through beds of conglomerate, and has about three miles further up entered what was probably a lake, through the bed of which it now flows. This is Kul Ailak. Fuel and water plentiful.
7. BULUN KUL* ...	21	109	Road rough over fragments of rock and boulders for about 2 miles; then crosses to left bank, running up a valley which has visible traces of glacial action; then across timber bridge Kasin Kappa, so named from three mud-domed houses, the only sign of such a place existing; then along more debris, you reach Lal Kum, or lake of sand, which is dried up in the cold weather, the wind covering the rocks which bound the lake with sand. Here the Ulung Akt and Chakar Aghil rivers join. About $4\frac{1}{2}$ miles further is Bulun Kul, where there is a Kirghiz encampment. To the south-east is Mount Dufferin, the Tagharma peak being still more to the south. It is Mount Dufferin that is seen from Kasghar, and not the Tagharma as usually supposed. Captain Younghusband and Lieutenant Davison both took particular care to note this, as Mr. Ney Elias draws attention to this piece of new geography. Here road to south-west reaches Little Kara Kul and Tashkurghan.
8. KURA SU ...	$9\frac{1}{2}$	$118\frac{1}{2}$	Road runs almost west from Bulun Kul, up right bank of Bulun Kul river to Kara Su, so named from the dark appearance of the spring water existing there. From here a road via Chon Kathoi Jilga runs in a curve over a pass of that name, said to be more difficult than the Akberdi pass to Rang Kul. A road also up the Kul Jilga valley leads to Musi. Up central valley to the Akberdi pass, 15,100 feet. Fuel and water.
9. AKBERDI ...	13	$131\frac{1}{2}$	The ascent to the pass is gradual and easy for laden animals. A slope of 20° brings you down into a wide valley, through which the Akberdi stream flows. The road continues about 3 miles

* Not to be confounded with the Bulun Kul near to Soma Tash—Route No. 30.

leave HSIH KIANG

Kashgar

ROUTE No. 23—concl'd.

From Kashgar to Rang Kul via the Akberdi Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
10. SENG JILGA ...	20	151½	From below Akberdi a splendid view of the Tagharma peak is obtained. The road crossing a ridge descends to the Kizil Billai Jilga, so named from the rocks of red sandstone. Here Rang Kul appears, and finally on passing the Chiragh Tash one reaches Seng Jilga. A Kirghiz pasture ground.

Route No. 24. VI

FROM THE GREAT KARA KUL TO BAR PANJAH via THE MURGHABI.

Authorities—KOSTENKO, 1880; NEY ELIAS, 1885.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
1. RIVER CHON SU ...	23¼	23¼	The direction taken by this route is not quite clear, but it probably crosses No. 27 in stage 12, and thence by the Kudara valley.
2. & 3. KIZIL TUGAI	41	64¼	From Kara Kul the road runs, through Russian possessions, first along the eastern portions of the lake, and then enters a defile joining the basin of lake Kara Kul with the river Panjah.
4. PASSAR ...	17¼	81½	Shignan territory here commences. Having passed the points of Kizil Tugai and Passar, the road leads to the fort of Tashkurghan, the first point of settled habitation in Shignan.
5. TASHKURGHAN ...	14	95½	Tashkurghan possesses a rickety little fort of uncut stones and mud. Above Sonab there are two cultivated spots, both on the Murghabi.
<i>Note A.—From Tashkurghan to Sarez.</i>			
From Tashkurghan a difficult road for foot men leads to Sarez. Osaid, 3 houses, is reached after a long day's journey, and Sarez is about an equal distance beyond. At Sarez Route No. 27 is struck.			
6. RAH SHARIB ...	13¼	108¾	From here the road runs down the Murghabi by the left bank to the village of Shugda, crossing several low ridges.
7. BASIT ...	9¼	118	

ROUTE No. 24—*contd.**From the Great Kara Kul to Bar Panjah via the Murghabi.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
8 AK KURGHAN ...	14	132	From the Kudara confluence, 2 miles above Tashkurghan, the road down the Murghabi is quite impracticable for baggage animals, and riding ponies can only be used at intervals, though it is possible by leading and swimming them in certain places to take them as low down as Wamar during the low-water season. At the high-water season the road must be considered closed to ponies altogether. In some places ledges of rock, slightly improved, serve as a footpath; in others a path has been made of poles, twigs, stones, &c., bound together in a very rough way, or of twig ladders suspended against the face of the cliff by means of sticks or pegs let into holes and crevices of the rocks. From Shugda a track continues along the Murghabi to Kila Wamar.
9. SHUGDA ...	13½	145½	
10. IMS ...	14½	159¾	
11. BASTAL ...	10½	170¼	
12. YAMICH ...	11½	181¾	
13. BAR PANJAH ...	7½	189	

Note B.—Passes leading across the range dividing the Yaz Ghulam and Bartang valleys.

“There are six passes between Wamar and Sonab, but not one of them can be a source of danger to the Afghan provinces as affording a road to an invader. All of them were closed by the autumn snow at the time of my visit (October 1885), so that I was unable to examine any of them; but from what I could see from a distance and learn from the inhabitants of the neighbourhood, I do not think the above opinion is likely to prove incorrect. The passes are:—

- | | |
|---|--------------------------------|
| (1) Behind the village of Yams. Footpath. | } Closed from October to July. |
| (2) Behind Bhagu. Footpath. | |
| (3) Behind Sipanj. Footpath. | |
| (4) Baju ravine between Sipanj and Darjanj. Footpath. | |
| (5) Behind Upper Bijraud village. Practicable for led ponies for 2 months of most favourable season by crossing a snow top closed even for men on foot early in November, 1885. | |
| (6) Behind Rah Sharo, a pass called “Khurjin.” Practicability the same as (5). | |

“It will be seen that none are practicable for baggage animals. Moreover, as regards the four upper passes, the road along the Murghabi is so bad that supposing an enemy to have crossed from Yaz Ghulam during the summer, it would only be necessary to destroy the ladders of twigs and basket work which form the road along the face of the cliffs at some places to prevent him from descending the valley. There are no fords during the season that these passes are open, so that boats or rafts would be necessary in descending the valley, for the only practicable track crosses and recrosses the river at intervals of every few miles from Tashkurghan to Wamar.”—*Ney Elias.*

Note C.—From the left bank of the Lower Murghabi two long *nalas* lead up to passes over the range bordering the Ghund valley on the north. The lower of these is the pass above the Romed village which leads to Shetam, and the upper is beyond Bar Dara, whence a difficult footpath is said to lead to a point near Sardim. The Romed stream is a considerable one, and adds visibly to the volume of the Murghabi.

Bokhara

Route No. 25.

FROM OSH TO GILGIT *via* AK TASH, THE LITTLE PAMIR, AND THE KHORA BOHRT PASS.

Authorities—IVANOFF; YARKAND MISSION, 1874; KHUSHWAKT KHAN, 1890; LITTLEDALE, 1890; STEWART, 1891.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
16. AK SU-AK BAITAL JUNCTION.	244	244	<i>Vide</i> Route No. 29.
17 to 20. AK TASH ...	70*	314	From the junction of the Ak Baital and Ak Su (stage 16, Route No. 29) the road follows the latter up to the village of Ak Tash. Mr. Littledale writes:—"From the Murghabi (<i>i.e.</i> , junction of Ak Su and Ak Baital rivers) to Wakhan there are two roads—the first leads up the Murghabi valley to Ak Tash, and I was told there was a good road and lots of grass, fuel, and water all the way to the Little Pamir lake."
21. ANDEMIN ...	25	339	Khushwakt Khan describes the road from Ak Tash to Gilgit as passing through a maidan the whole way, by which he means there are few steep ascents and descents, and says it is possible to ride all along it, except in a very few places. There is only one glacier to be crossed running into the main valley from the Karambar on the side of Hunza, and that has been rendered easy of late years by a flow of mud and gravel over it from the hill sides. Lieutenant Stewart says the Karambar route is quite impracticable in summer for all animals; and even for men carrying loads it is almost impossible for them to get along the numerous difficult <i>paris</i> between Bohrt and Chilingi. It would be very difficult to make a road owing to the large amount of sheer rock to be blasted or avoided. In winter the river can be forded, and the route then becomes open, but far from easy. But <i>see Note A</i> .
<p>Between Ak Tash and Baikra there is no wood, but a grass that burns well and bushes are plentiful.</p> <p>Several streams coming down to Ak Tash from the Great Pamir have to be crossed, but all are fordable.</p> <p>At 5 miles from Ak Tash is a Kirghiz grazing ground called Bazar Durrak, where is abundant grazing. At 7 miles the road passes Kizil rabat, where there are five Kirghiz tombs. At 11 miles another Kirghiz camp at Kunja Bay is reached. At 19 miles Issyk Bulak is passed. At Andemin there are some <i>ziarats</i> as well as Kirghiz tents.</p>			
22. CHILAB ...	12	351	Still along the Chilab lake, generally called by Wakhanis Kul-i-Pamir-i-Khurd. According to Trotter, the lake has only one outlet, and its waters flow into the Ak Su. At 7 miles the camping-ground of Yach Kali is passed. Here the Chilab lake ends about 2 miles wide. A Chinese kotwal is stationed here. Route No. 26 over the Benderski pass enters about here.
23. BOZAI GUMBAZ ...	12	363	Road easy and practicable for laden animals up to the Bohrt pass. The grazing ground of Gurgati Yasi is reached at 4 miles. No supplies, and only wormwood root for fuel.

From here a route goes by the Wakhujuui pass to the Tagdumbash Pamir (*see Note D*, Route Nos. 35, and No. 41, Eastern Hindu Kush). To Hunza by this route and the Kilik pass there are 12 stages, distance 127 miles.

ROUTE No. 25—*contd.*

From Osh to Gilgit viâ Ak Tash, the Little Pamir, and the Khora Bohrt Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

The practicability of the Khora Bohrt route seems to be as follows:—In a normal year, as soon as the snow has melted sufficiently to render the pass feasible, the Karambar river has thereby become so swollen that the river portion of the route is no longer practicable, and it remains in this state until all the snow has melted, or owing to the approaching cold weather it ceases to thaw. Ordinarily the pass may be considered open from July to end of September. In 1891, however, troops could not have moved over it before September. In order to make sure of not being blocked, the safest course would seem to be to move by the Darkot pass route (*see Note A*). There would be no chance of being stopped by water, and no greater chance of being blocked by snow than on the Khora Bohrt pass itself. Further, more supplies are obtainable on the Darkot route than on the Karambar. The Karambar glacier in some years might offer an almost insurmountable obstacle to animals, although it was quite easy in 1891.

24. BAIKRA	...	12	375	A very easy road, throughout over open grassy downs. Along the right bank for 5 miles. Here the river is forded, water waist-high in the deepest places. From here pass along the left bank of the Ab-i-Panjah to the plain of Kara Jilgha.

At Baikra the Irshad stream and Ab-i-Panjah unite. A few supplies procurable.

25. LUPSUK	...	10	385	The road runs along the bed of the nala through open country and grazing grounds to Kuldarshid at 4 miles, where an ancient Wakhan king was killed in battle. Hence easy to Gazan, and afterwards there are several ascents and descents. The Irshad pass route to Hunza takes off at Lupsuk. There are 7 marches; distance 55 miles to Gircha on Route No. 35 (<i>see</i> Route No. 8, <i>Gazetteer of Upper Oxus</i> for description). Firewood scarce; supplies <i>nil</i> .

26. CHILINGI	...	16	401	Cross the Irshad stream, and by a gradual ascent, through a valley which narrows to a defile, reach the Khora Bohrt pass at 3 miles. From the top of the pass the Chatibu lake, or Karambar Sar, is clearly visible, and also the road leading to the Baroghil on the south side of the lake. Snow was lying on the pass in September 1891. Descend steeply for a mile to a plain about 4 miles long, perfectly open, and covered with grass. The main valley from the Baroghil joins in about here (<i>see Note A</i>). Suktarabad is passed at 11 miles. The Karambar stream is crossed by a ford just before reaching camp. Firewood plentiful; supplies <i>nil</i> . From here a difficult road leads to Hunza. There is usually less snow on the Khora Bohrt pass than on the Darkot, but the descent is steeper and more severe. Still it is by no means difficult otherwise for laden animals.

There is another pass, the Gazan, by which the Hindu Kush may be crossed in this stage. It is situated a few miles west of the Khora Bohrt; altitude 16,000 feet. The camping-ground on the north and southern sides are the same, and the pass is practicable for animals in summer, but difficult.

27. BOHRT	...	16	417	Road goes through a number of boulders, but is practicable to animals across the Zakhband plain for about 5 miles. While crossing this plain, a large glacier coming down to the Karambar stream is passed. From here the road traverses a <i>pari</i> . Pass through the Chatibu defile, where for a short distance horsemen and laden ponies have to wade the stream at the foot of the hill, whilst a footpath runs along the hillside. From about here there are three roads to within 2 miles of Bohrt, where the Karambar glacier has forced its way into the main valley. The first goes up the Karambar valley to the east, and then crosses the glacier.

ROUTE No. 25—*contd.*

From Osh to Gilgit viâ Ak Tash, the Little Pamir, and the Khora Bohrt Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

This road has during recent years, in consequence of a deluge of mud and gravel over the upper portion of the glacier, become practicable for laden traffic. The middle road is only passable for footmen and unladen animals, and crosses the glacier at a point where it is 500 yards wide only; thence it goes direct to Bohrt.

The third road keeps close to the left bank of the river, and, crossing the bottom of the glacier, rejoins the other two roads some distance from Bohrt. This path also is practicable for footmen and unladen animals. Bohrt is a small village. No supplies.

28. IMIT ...	12½	429½	Cross the Bohrt nala by means of a natural rock bridge. Stream is, however, easily fordable. At 6 miles pass a small hamlet, and proceed along the main valley. At 7 miles the village and stream of Bilhauj are reached (16 houses). Just before reaching Imit, a stream coming from the Munjawir nala is crossed by a wooden bridge. This stream has a great volume of water, but is always fordable. The Imit stream is afterwards crossed. No supplies; they should be obtained from Ashkuman. A good deal of cultivation in this march.
29. CHATORKAND ...	14½	444	
30. JUNCTION OF ASH- KUMAN AND YASIN RIVERS.	13	457	
31. BUBUR ...	7⅓	464½	
32. CHER ...	14	478½	
33. GILGIT ...	23½	502	

Vide Route No. 35, Eastern Hindu Kush. Between Bubur and Cher there is a stiff descent of 700 feet, difficult, but practicable, for laden animals. In the cold weather this may be avoided by crossing and recrossing the river.

Note A.—Alternative Route from Lupsuk to Imit viâ the Darkot and Alang passes.

The Darkot and Alang passes are both easy and practicable for animals. The Chatibu glacier is the only real obstacle. It could be easily improved and made more practicable.

26. FOOT OF GLACIER	17	432	Cross the Karambar nala near Suktarabad; the bed is full of boulders, and water as high as the knees in September. At 5 miles reach the Chatibu glacier, which completely blocks the valley. It is over a mile in breadth, and is very difficult for laden animals.
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27. ZJOE SAR LAKE	14	416	Along the right bank of the stream to the 4th mile. Here cross to the left bank, and gradually ascend for 7 miles to Zjoe Sar, the watershed between the Yarkhun and the Karambar rivers. It is about 3 miles long, and is almost covered by two lakes—one, a few hundred yards in diameter, in the north-west corner; the other filling nearly the whole of the eastern side of the watershed, about 2 miles long by 1 mile broad.
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ROUTE No. 25—concl'd.

From Osh to Gilgit viâ Ak Tash, the Little Pamir, and the Khora Bohrt Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
28. SOWARSHEEN ...	12	428	First 3 miles rather stony and marshy in places; thence down a long, easy, very gradual descent, fording the Yarkhun river at 12 miles. There is no fixed spot for a camp, but anywhere below the glacier it is easy to find suitable ground. Firewood scarce; supplies <i>nil</i> .
29. DARKOT ...	14	442	From the left bank of the Yarkhun river bear south-west up an easy ascent over a glacier, and cross the Darkot pass.
30. ALANG ...	14	456	Passable for animals; for the most part easy, though there are a few steep places. Along the right side of the nala for Darkot, and ascend to the Alang pass; thence descend steeply, last mile easy. Firewood scarce; supplies <i>nil</i> .
31. ASHKUMAN ...	16	472	Except the first few miles, the road has an easy descent throughout, running through birch woods, &c., for the last 6 miles. At 10 miles cross to the left bank. Ashkuman, a big village.
Supplies and transport obtainable.			
32. IMIT ...	6	478	Cross by a wooden bridge immediately opposite village, and again at the junction of the Karambar and Ashkuman rivers. This latter crossing, though easy in the cold season, is difficult in summer. About 9 A.M. is the best time.

N.B.—It will be observed this route is about 50 miles longer than the one *viâ* Bohrt.

Route No. 26. VI

FROM NEZA TASH PASS TO YASIN *viâ* THE BASH GUMBAZ, BENDERSKI, AND DARKOT PASSES.

Authorities—IVANOFF, 1883; LITLEDAL, 1890; YARKAND MISSION, 1874.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. CHADIR TASH ...	8	8	<i>Vide</i> Route No. 29. A rock standing alone in the centre of the valley.

ROUTE No. 26—*contd.*

From Neza Tash Pass to Yasin via the Bash Gumbaz, Benderski, and Darkot Passes.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
4. LITTLE PAMIR LAKE.	70 ²	78 ²	This distance is taken from the map. Ivanoff describes the Bash Gumbaz as very difficult. Mr. Littledale was told that near the entrance to the Bash Gumbaz valley there is

excellent grazing. He was also told that the pass was impassable till the middle of July. It is high and little used. Probable height 14,000 feet. Ney Elias says:—"I was unable to examine the Bash Gumbaz owing to the deep snow. I went up the ravine, however, for some distance, and should judge it to be an easy pass in summer, as far as the ascent from the Alichur side is concerned; but my guide told me that the descent towards the Great Pamir is much more difficult. The pass may be considered practicable for horses for about four months in the year at the outside."—*October 1885.* The route descends from the pass to the Victoria lake, which it skirts, and crosses to the Little Pamir by the Benderski pass. Mr. Littledale, who journeyed from Osh to Yasin *via* the Khargosh pass and Victoria lake, says the lake was half covered with ice in June 1890. Altitude 13,980 feet. At the east end there is much grass, and higher up the hillside any amount. Ten miles east of Victoria lake is the Kirghiz Aideen Kul, $1\frac{3}{4}$ miles long by $\frac{1}{4}$ mile in width. Close to the east end of the lake is a broad valley with several small lakes at its entrance, at the head of which is the Shore Kara Jilga pass, open only one month in the year. The Benderski pass is said to be open all the year round. The Urta Bel is open in winter and summer; the Kizil Robot is only used in summer; and the Year Meuse, the last and most easterly pass, is open in winter and summer.

Route No. 25 is entered at the Little Pamir lake.

5. CHILAB	...	12	90	} <i>Vide</i> Route No. 25.
6. BOZAI GUMBAZ	...	12		
7. LANGAR	...	14		
8. SHAOR	...	$13\frac{3}{4}$	$129\frac{3}{4}$	} <i>Vide</i> Route No. 41, Eastern Hindu Kush.
9. SARHAD-I-WAKHAN	...	$9\frac{1}{2}$			$139\frac{1}{4}$
10. DASHT-I-BAROGHIL	...	$12\frac{1}{2}$	$151\frac{3}{4}$	<i>Vide</i> Route No. 56, Eastern Hindu Kush.
11. CAMP	...	9	$160\frac{3}{4}$	} <i>Vide</i> Route No. 84, Eastern Hindu Kush.
12. DARKOT	...	7		
13. HANDUR	...	$10\frac{1}{2}$	$167\frac{3}{4}$	} <i>Vide</i> Route No. 84, Eastern Hindu Kush.
14. YASIN	...	13	$178\frac{1}{4}$	
			$191\frac{1}{4}$	

Route No. 27.

FROM MARGHILAN TO GILGIT *via* DARAUT KURGHAN, SOMA TASH, THE BAROGHIL PASS, AND YASIN.

Authorities—KOSTENKO, 1880; LIEUTENANT DAVISON, 1891.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. UCH KURGHAN ...	21 $\frac{1}{4}$	21 $\frac{1}{4}$	Yonoff with between 800 and 1,500 troops marched from Soma Tash to Marghilan in 1892 in three weeks by this route.
2-6. DARAUT KUR- GHAN.	68	89 $\frac{1}{4}$	Kostenko, Volume I, page 110, gives the distance from Uch Kurghan to Daraut Kurghan as 68 miles, but, according to Lieutenant Davison's report, the party with which he marched from Soma Tash would seem to have made but one march from Daraut Kurghan to Marghilan. The latter seems to be improbable. The road goes along the gorge of the river Isfairam. On leaving Uch Kurghan, it immediately enters the gorge just spoken of, and lies over cornices constructed on either bank of the

river according to the direction of the road. Small bridges have been thrown over the Isfairam, and up to the top of the Tengiz pass about twenty of these may be counted. Especially difficult and bad is that portion of the road, a distance of 7 miles, between the Tutek stream and the boundary of Langar, wherein the track passes over steep ascents and small turnings between huge stones that roll down with the movement of either man or beast. Along this road marched one of the columns during the Alai expedition of 1876. This column here lost several horses laden with provisions. The animals were killed by rocks, which fell on them from above. Besides the loss in horses, several commissioned and non-commissioned officers were wounded.

Throughout the extent to the top of the Tengiz pass there is no green fodder. Nothing but bare rocks, except in the two districts of Langar and Tengiz near the summit of the pass. The pass is soft, practicable, and not steep. Its summit is grass-grown and covered with green fodder. The height of the crest is 11,800 feet. Along a gorge of the Upper Karagandi there are junipers, and between the Kitchi Alai and the boundary of Archali (8 miles) before Tengiz is reached there are a few birch trees. From Archali wood vegetation comes to an end. Tengiz pass is reached at 59 miles. The descent from the pass leads to the Kizil Su. Out of the 5 miles the road goes for a distance of 2 miles over steps cut in huge rocks, causing the horses to slip and stumble. In order to avoid this bit of the road, one can turn off to the left and go along the Kizil Ichme over the pass of the same name. There the road goes the whole distance over a soft, grass-grown soil. The Kizil Ichme pass is of the same height as the Tengiz, and is also practicable. In descending, the road by the Kizil Ichme bifurcates, one branch going along a second stream of the same name (an affluent of the Kizil Su), and the other along the Kavuk Su (also an affluent of the Kizil Su) to the Kavuk pass (13,300 feet according to Fedchenko).

Between the Kavuk and Sarik Mogol passes two others across the Alai range are known. These are the Tuz Ashu and Kindik, but neither is practicable.

Lieutenant Davison says the Tengiz pass is not difficult. There is a made road over it by which artillery can go. A fort at Daraut Kurghan commands the Marghilan road.

A lateral road leads hence to Great Karamukh (*see* Note A, Route No. 28).

7. ALTYN MAZAR ...	?	?	The stages here given as far as Soma Tash are those made by the party of infantry who escorted Lieutenant Davison from Soma Tash to Marghilan.
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Cross the Altyndi pass, about 12,000 feet. The descent is easy, over grassy slopes, which on leaving Daraut Kurghan are varied by yellow crops of barley. Altyndi Mazar is a Kirghiz encampment on the right bank of the Muk Su. Kostenko says:—"The course of the Muk Su from Altyndi Mazar to its mouth (*see* stage 9, Route No. 28) is known only by inquiry."

Parts III
VI
Jes hames

Tengiz

ROUTE No. 27—*contd.*

From Marghilan to Gilgit via Daraut Kurghan, Soma Tash, the Baroghil Pass, and Yasin.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
<p>"According to native statements, the road along the valley is very difficult, and is impracticable for pack animals." Elevation of Altyn Mazar 9,600 feet.</p>			
8. NORTH FOOT OF KAI INDI PASS.	?	?	At 2 miles the Suk Dara and Bilunkeek rivers join. From here the road goes up the Kai Indi river, crossing and recrossing several times. Water and fuel obtainable. Elevation 12,300 feet.
9. SOUTH FOOT OF KAI INDI PASS.	?	?	Rough road, along a talus of shale, gorge, and wide narrow gully. Cross the Kai Indi pass, 16,200 feet. Fuel scarce. Water obtainable.
10. BILLUNKEEK ...	?	?	Road goes up right bank of the Bilunkeek river, which cuts its way through beds of conglomerate and a form of loess. Fuel scarce. Grass plentiful.
11. KOKDJAR ...	?	?	Direction S. E. Cross Takhta Kuram pass (about 15,500 feet). Ascent very rough, over fragments of rock, perhaps the moraines of glaciers. First part of descent difficult.
12. TULKUGOR ...	?	?	South-east over a stretch of gravel and fine land, and afterwards down the right bank of a river. A few Kirghiz tents. Fuel scarce.
13. KARA BULAK ...	?	?	South, passing a lake, and ascend to the Kara Bulak pass, 14,600 feet. Thence the road is one mass of rock down to the Murghabi river, 4,000 feet below the pass. Fuel and water abundant.
14. SURKUMUSH ...	?	?	Down the right bank for a few miles; then ford (difficult) to the left bank. Five ponies of Lieutenant Davison's party were carried away. Fuel and water abundant.
15. SAREZ ...		?	Road, very rough, ascends 1,000 feet to the Boz Taki pass, 11,500 feet. In the winter the road is by the river, which is frozen, and skirts the spur. At $\frac{1}{2}$ mile from Sarez the river is crossed.
<p>It here flows in a regular torrent. Lieutenant Davison says:—"The baggage was got over by means of a swing bridge, the boat of which was constructed <i>en route</i>, and consisted of a framework of wood put together with nuts and bolts and covered with canvas. This was made buoyant by means of two inflated goat skins on either side. I saw 30 men cross the river in this. The force of the stream was tremendous here. Sarez is a very pretty little place with an old fort situated on the right bank of the Murghabi. About 50 Tajiks. Elevation 10,200 feet.</p>			
16. MARZENAI PASS...	?	?	The greater part of the way is strewn with fragments of rocks, and is very rough. The road goes along a talus of argillaceous shale, resembling large roofing slates. Fuel scarce. Water plentiful.

Ferskanda

ROUTE No. 27—concl'd.

From Marghilan to Gilgit viâ Daraut Kurghan, Soma Tash, the Baroghil Pass, and Yasin.

Number and names of stages	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
17. SOMA TASH ...	?	?	A steep ascent to the Marzenai pass, 15,700 feet. Thence south-west to the Bugrumal pass, and afterwards turns south to the north shore of Yeshil Kul; thence along that side for about 3 miles. A little snow lay on the Marzenai pass in August 1891.
18. MOUTH OF KHARGOSH RAVINE.	?	?	The path leads at one point over some very difficult rocks on the margin of the Yeshil Kul. Ney Elias says the road in all probability is passable by baggage animals. } <i>Vide</i> Route No. 29.
19. KHARGOSH PASS ...	14	?	
20. YOL MAZAR ...	15	?	
21. YUMKHANA ...	13	?	
22. LANGAR KISHT ...	18	?	
23. BABATANGI ...	18	?	
24. RACHAU ...	16	?	
25. SARHAD-I-WAKHAN	10 $\frac{3}{4}$?	
30. YASIN ...	52 $\frac{3}{4}$?	Five stages,— <i>vide</i> Route No. 84, Eastern Hindu Kush.
40. GILGIT ...	86	?	Ten stages,— <i>vide</i> Routes Nos. 30, 33, and 34, Eastern Hindu Kush.

Route No. 28.

FROM MARGHILAN TO CHITRAL viâ THE KARA KAZIK PASS, KILA KHUM, ZEBAK, AND THE DORAH PASS.

Authorities—KOSTENKO, 1876; THE HAVILDAR, 1874; KOSYAKOFF, 1882; YARKAND MISSION, 1873; NEY ELIAS, 1885.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
1. WADIL ...	17 $\frac{1}{4}$	17 $\frac{1}{4}$	For the shortest route, <i>see</i> No. 27. This route was followed from Marghilan to Great Karamukh by the Russian expedition to the Alai in 1876. Wheel road to Shah-i-Mardan.

ROUTE No. 28—*contd.*

From Marghilan to Chitral viâ the Kara Kazik Pass, Kila Kham, Zebak, and the Dorah Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
2. SHAH-I-MARDAN...	15 $\frac{1}{4}$	32 $\frac{1}{2}$	Shah-i-Mardan is at the junction of several ravines, and is a much frequented resort of Kho-kand pilgrims. Forage and fuel.
3. KARA KAZIK PASS	30	62 $\frac{1}{4}$	Up the Shah-i-Mardan river by a rather difficult ascent. Cavalry crossed the pass in September 1876, but they had to lead their horses owing to newly fallen snow. Height of pass 14,400 feet. The ridge is barely 28 inches wide at the pass. Forage and fuel.
4. FOOT OF KARA KAZIK PASS.	8	70 $\frac{1}{2}$	Descend to the valley, the height of which is 9,500 feet above sea level. The locality is perfectly devoid of vegetation, even the centre of the valley being quite barren.
5. KOK SU VALLEY	20	90 $\frac{1}{2}$	Down the left bank of the Kok Su; hills rocky and precipitous on either side.
6. GREAT KARAMUKH	12 $\frac{3}{4}$	103 $\frac{1}{4}$	Leave Kok Su valley, and cross the Gurundi pass (easy). The highest ridge is 10,600 feet high. At the confluence of the Kok Su with the Kizil Su the land is very fertile. Barley, wheat, clover, and oat-fields occur, which are irrigated by small canals. The valley is about two miles wide at Karamukh, and the richness of the pass attracts many nomads, who make this part their winter dwelling.
<p><i>Note A.—From Great Karamukh to Archa Bulak on Route No. 21.</i></p> <p>Along the right bank of the Kizil Su to Daraut Kurghan, 19 miles. Mountains rise on either side to an altitude of about 9,000 feet. Near the foot there is some little cultivation. From the fortification of Daraut Kurghan, which stands on the right bank of the Kizil Su, continue up the Alai valley. At 26 miles the mountains approach close to the bank of the Kizil Su, completely cutting off the path, and the Russian detachment had to march across the spurs. At 46 miles from great Karamukh, Route No. 21 is struck. The Kizil Su can be forded with difficulty between Great Karamukh and Daraut Kurghan, but only when it contains little water.</p>			
7. LITTLE KARAMUKH	15	118 $\frac{1}{4}$	There are three bridges over the river between Great Karamukh and Gharm—one at Duvana, one at Damburochi, and one at Sar-i-Pul just below Gharm. All three are said to be made on the usual Central Asian plan for bridging torrents. In places where the Surkhab flows by several branches, it is possible to get across on a horse.
8. JILGAN ...	17 $\frac{1}{4}$	135 $\frac{1}{2}$	Ascend steeply the Kichik-Karamukh Su, and enter Karatigin territory. There are two roads; the one by the bank of the river consists of a succession of bad cornices; it is only used in the

ROUTE NO. 28—*contd.*

From Marghilan to Chitral via the Kara Kazik Pass, Kila Khum, Zebak, and the Dorah Pass.

Number and names of stages	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

winter season, the other descends direct from the Kashka-Shiriak pass. The descent is steep, but it runs over soft ground. Just before reaching Jilgan, the river is crossed by a rather unsafe bridge. Jilgan is a large wintering place.

9. ZANKU ...	28½	164	Road fairly good. From the junction of the Kizil Su with the Muk Su the river is called the Surkhab. About 1 mile above this junction is a winter hut, and near it a bridge across the Surkhab. The hills come down to the river, but the road is good. Pass Muinak, and ascend steeply to the Jul Terek pass. From here descend to a lateral valley, and cross the Zanku by a ford. The water is trace high, and the ford is generally not easy. Zanku is a wintering place some 1½ miles from the river (see stage 7, Route No. 27, for route from Altyn Mazar on the Soma Tash road).
10. PILDAN ...	10	174	The road at first is bad, going over cornices, and crossing by a ford, a branch of the Surkhab. For the last 2 miles the going is over even ground. Pildan is an isolated garden lying on the Zanku (Surkhab?)
11. KHAIT ...	11	185	Road good up to Sarian (Sokan?), the first important Tajik settlement at 2 miles. Thence over cornices by a difficult road rising some 700 feet above the Surkhab. At 10 miles the road goes by the Ab-i-Kabud. Down this stream the Yarkbich pass road comes (see Note B, Route No. 20). Khait has 150 houses.
12. NAMAKI-BOLO ...	16½	201½	Ford the Ab-i-Kabud, and through a thickly inhabited valley. By a tolerably easy ascent reach the Turpa pass, descending sharply to the village of Namaki-Bolo. This ridge separates the Surkhab valley from that of the Ab-i-Yasman.
13. GHARM ...	18¼	219¼	The last six miles of this stage is over tolerably even ground. Gharm stands on the right bank of the Surkhab; 200 or 300 houses. There is no town wall, but a fortification is constructed on the bank of the river. It is the chief town of Karatigin. Below here the river is called the Waksh.
14. KAMCHARAK PASS	10½	230¼	Down the right bank, crossing to the left by a bridge at Sar-i-Pul fort. Here the road divides into two branches, re-uniting at the fort of Chabil Dara. One branch goes by the Kamcharak pass; this is the most direct route.
15. CHAHIL DARA ...	9¼	239½	From the pass the road runs along the Shakab, at the mouth of which is situated Chabil Dara, on the right bank of the Khulias. The road over the Kamchirak is not practicable in winter. The second road leads from Sar-i-Pul down the left bank of the river, passing through a defile

ROUTE No. 28—contd.

From Marghilan to Chitral via the Kara Kazik Pass, Kila Khum, Zebak, and the Dorah Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
16. TAVIL DARA ...	16	255½	Practicable for pack animals. The Khulias is only fordable here and there in autumn and winter. Consequently a bridge has been built over it below Chabil Dara at the Darwaz village of Pas-hal. The road goes by the right bank of the Khulias through a well cultivated and thickly populated valley, passing the hamlets of Yorgan, Jira, Dashta Kosan, Kham Dara, Ribodnal, and Girdan. See <i>Note B</i> , next page, for road up the Bala Wakhia. Opposite the fort of Taval Dara is a bridge. The fort covers an area of 210 feet in length by 175 feet in breadth built of stone and wood. At each angle is a tower.
17. SAGHIR DASHT ...	10½	266	Leave the Khulias valley, and reach the village of Saghir Dasht. The valley of Saghir Dasht in its lower part changes into a narrow defile passable with difficulty; it is only used when the winter snows render the direct route from Taval Dara to the Zakh Bursi pass impracticable. The distance by the direct road (summer route) is about 10½ miles, and by the winter one about 16 miles. A fort and village of 40 houses.
18. KHOP ...	16	282	By the Khobu-Rabat pass cross the Darwaz range, which here forms the watershed between the Surkhab and Ab-i-Panjah river systems. This pass is lower than the Zakh Bursi, but more stony and steeper, especially the descents. On its southern side are situate, opposite each other on the banks of the Khum, the two villages of Khobu or Khop and Rabat.
19. KILA KHUM ...	16	298	Road stony and very difficult, but fit for cavalry, running along the Khum defile by narrow cornices constructed now on the right bank and now on the left bank of the river, which is crossed frequently by bridges. There are altogether 15 bridges in this part. Kila Khum is on the right bank of the Ab-i-Panjah. It was for a long time the capital of Darwaz and the residence of the Shah. Since the annexation of Darwaz to Bokhara, it has still remained the chief point of administration. The citadel is reckoned strong. The area of the fort is 280 feet long by 210 feet broad. It is built of stone interlaid with wood and cemented together. Walls 14 feet high and nearly 6 feet thick. Six towers are built on the walls. In the town there are about 100 houses. The passage of the Ab-i-Panjah is practicable by boats in autumn and winter. At full water it is crossed on "guspars," <i>i.e.</i> , inflated skins.
20. JOUF OR JARUF ...	9	307	Along the right bank of the Oxus or Ab-i-Panjah; stony and difficult. Villages of Madrasa, Kila Nisai, Zingaru, Rizwai, and Keoran are passed.
21. KORGAWAD ...	12	319	Road stony and difficult. Passes the village of Vishkar.

Bokhara

ROUTE No. 28—*contd.*

From Marghilan to Chitral via the Kara Kazik Pass, Kila Khum, Zebak, and the Dorah Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	

Note B.—Up the Bala Wakhia river to Karatigin.

The road goes up the right bank, and passes the following hamlets:—2 miles, Langar; 3rd mile, Sikhuni; 4th mile, Girkham; 10th mile, Pashter; hence a road to Saghir Dasht; 18th mile, Zapsi-Kharpi; hence a road up the Ab-i-Shurab to Karatigin; 24th mile, a road goes over the Ayuli Kharvi pass to Karatigin; 35th mile cross by a bridge the Raznau. Hence another road to Karatigin over the Raznau pass. So far the road is good, a few places excepted. Further on it becomes bad. At the 45th mile is Langar. From here another road to Karatigin *via* the Kaftar Gardan pass. At the 50th mile is Lyajur, and at the 59th is Sangur. Further on, according to native information, there are no hamlets.

The Bala-Wakhia valley is said to afford excellent pasturage. Hence the road goes over the Akba-Istargi pass and along the Ab-i-Sitar to the Wanj valley. The road is practicable for footmen in June and July only; in August and September the ice cracks and forms crevasses, over which it is impossible to make one's way.—(*Kosyakoff, 1882.*)

Note C.—A very practicable road is said to lead from the hamlet of Uz-Harf, up the stream of the same name, to Kurghan Liajur on the Waksh (see *Note B*) over the Akbai-Uz-Harf pass. Uz-Harf is 19 miles from Kila Khum.

22. WAKHUD	...	15½	334½	Road difficult over rocks. Passes the village of Ghuch, Wand, Rawand, Pashkar, and Binigah. Wakhia stream is crossed by a bridge near Kor-gawad.
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Note D.—From Wakhud up the Wanj to Mazar.

North-east along the right bank of the river. At 5 miles pass Vitch Harf; Rau at 7 miles; Wanj fort at 12 miles.

From here still keep up the river, passing Gum Mayak at 3 miles and Bulai at 5 miles. Here ford to the left bank. At 14 miles is Ubda, at 26 miles Gumas, and at 29 miles Sitar. From here a road goes to the Bala Wakhia (see *Note B*). At 34 miles is Wanvan. Here all signs of a riding road disappear, and beyond Mazar there is no road at all. The Wanj people have no knowledge of any direct road going from Mazar to Karatigin. Ten miles beyond Mazar further progress is said to be impossible owing to huge blocks of ice and masses of snow which cover all the gorges issuing from the Dara Abduk and Kashelayak streams.—(*Kosyakoff, 1882.*)

23. YAZ GHULAM	...	15	349½	Pass fort Kalaban. At Yaz Ghulam are 80 houses and a fort. Road difficult.
24. KILA WAMAR	...	15	364½	Fort Wamar is situated 1½ miles below the junction of the Murghabi and Ab-i-Panjah. Route No. 24 comes in here from the Great Kara Kul. Wamar is the capital of Roshan.
25. SACHARV	...	22	386½	At 6 miles pass the Darband tower built on a rock, the boundary between Shignan and Roshan. Here the valley is very narrow.
26. BAR PANJAH	...	9	395½	From Sacharv the Panjah valley is wide and comparatively populous. Fruit is abundant—mulberries, apples, pears, apricots, and walnuts are the most common.
				At 4½ miles reach Yumj village. Road good. Supplies plentiful. For the river at 6 miles at Dishar, or cross by ferry at Bar Panjah, a village of 29 houses on the right bank. From here

Route No. 30 goes to Faizabad. Bar Panjah is the capital of Shignan. Adjacent to it stands a stone fort on the margin of the river.

Sokehana

ROUTE NO. 28—*concl'd.*

From Marghilan to Chitral viâ the Kara Kazik Pass, Kila Khum, Zebak, and the Dorah Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

Note E.—From Bar Panjah to Kala Panjah up the Shakh Dara.

Leave the Ghund at its junction with Shoohan at about $1\frac{1}{2}$ miles east of Bar Panjah. The valley as far as Raj is locked in by high base precipitous mountains. No trees, and cultivation is confined strictly to the cultivated places. Above Raj the valley opens out and grassy slopes take the place of barren crags. Mountains on the southern side give rise to glaciers. From Upper Joshangaz a path strikes off up the mountain side, and by it in fine weather a path goes up the mountain side to Kala Panjah. Up the main valley, as far as could be seen by the native explorer, a level track passable for horsemen leads by the Joshangaz pass to Ab-i-Matz.

27. DARMARAKHT ...	20	415 $\frac{1}{2}$	Road good. Pass Deh-i-Kurghan at 2 miles, and Vear at $5\frac{1}{2}$ miles, the latter a scattered village of about 40 houses. Camp on the left bank. Darmarakht is on the opposite bank, from whence supplies are procured by means of wooden bridge; then across the river. A road is said to go from here over the hills to Tusian, a village on the left bank of the Shakh Dara.
28. NAWABAD ...	11 $\frac{1}{2}$	427	Road bad and stony. Pass through a tunnel called the Kuguz Parin, the Gharan-Shignan boundary. At $8\frac{1}{2}$ miles is the ruined village of Shekh Beg. No supplies. Grass and wood in plenty. Nawabad is a deserted village.
29. BARSHAR ...	14	441	Road as in last stage. Pass Zich at 9 miles. At 12 miles ford the river near the deserted village of Kazideh. Barshar is a small village belonging to the Gharan district situated on the right bank of the river. Supplies plentiful.

Note F.—There is a road from the Panjah valley nearly opposite Barshar which goes to Faizabad by the Yugh Dara pass, and which is said to be practicable at all seasons.—Trotter's Gazetteer.

30. YAGHDURA ...	9	450	River forded three times above the village of Sari Shakh. Left bank is avoided, being dangerous for horses. Supplies plentiful.
31. ISHKASHIM ...	11	461	Road good and through cultivation. <i>See also Route No. 64, Eastern Hindu Kush.</i>
32. BAZGIRAN ...	8 $\frac{1}{4}$	469 $\frac{1}{4}$	} <i>Vide Route No. 64, Eastern Hindu Kush.</i>
33. ZEBAK ...	10 $\frac{1}{2}$	479 $\frac{3}{4}$	
34 TO 41. CHITRAL ...	84	563 $\frac{3}{4}$	<i>Vide Route No. 87, Eastern Hindu Kush.</i>

Shoohan

Route No. 29.

Part } III
VIFROM OSH TO CHITRAL *via* THE TUYUK AND KHARGOSH PASSES, KALA PANJAH,
AND THE BAROGHIL PASS.*Authorities*—YARKAND MISSION, 1874; KOSTENKO, 1876; LITLEDALE, 1890.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

Mr. Littledale says :—There is only one road by which the Russians can come from Osh to the Murghabi, that is, up the Gulcha river, over the Taldik or Shart passes, across the Alai plateau and Kizil Art pass, through the Kara Kul basin, and over the Tuyuk pass, and down the Ak Baital to the Murghabi (Ak Su). A very little labour would make the route quite practicable in summer for carts of the country."

1. LANGAR ...	20	20	} <i>Vide</i> Route No. 21.
2. GULCHA ...	29½	49½	
3. KIZIL KURGHAN...	10½	60	
4. SUFI KURGHAN ...	15¼	75¼	
5. FORT KIZIL JAR	14¾	90	
6. KOIJOL DAVAN PASS.	10½	100½	
At Kizil Jar the road forks; one leads left to the Archat pass (12,000 feet), the distance to which is 7 miles; and the other turns west, and goes <i>via</i> forts Ucha Tapa and Bossaga to two passes which lie at 1½ miles distance from each over. The more eastern of these is the Koijol Davan (11,400 feet). The other is the Taldik, 11,600 feet (<i>see</i> Route No. 21).			
7. VALLEY OF THE ALAI.	9	109½	Cross the low Katin pass at 5 miles. Further on a track leads down to the Alai valley (<i>see</i> Note A, Route No. 28).

Note A.—Alternative Route via the Sarik Mogol pass.

By this route the road from Osh to the Kukunat gorge goes along a wide valley, and then turns this gorge by bending east and crossing the low Kukunat pass, after which it immediately descends into the Ak Bura by fort Ropan. Passing along Ak Bura for 12 miles, the road goes through a narrow gorge by fort Sari-Kuja. Seven miles further on the shot falls into the Ak Bura through its left bank, and along the tributary stream is a road to the Osh-Gulcha road by the Shot* pass. This comes out at the Langar post.

The Sarik-Mogol pass lies 13 miles from the mouth of the river of the same name. Altitude 14,000 feet. The northern slope is very steep; the southern one is less precipitous. This is a much more difficult route than the one given above. Distance from Osh 100 miles.

Note B.—Alternative Route via the Jiptik pass.

The road from the Alai by the Jiptik pass leads up the stream of the southern Jiptik. From the foot of the mountains to the summit of the pass is not more than 7 miles. The road follows a narrow gorge, and this at a height of 11,000 feet becomes exceedingly rocky. Near the crest, 13,000 feet, the ascent is still more steep and rocky; nevertheless pack-animals can make their way, though with difficulty. The height of the Jiptik pass is about 14,500 feet. The crest is very narrow and stony. On the reverse slopes of the mountain there is always snow, and to the left of the road in the gorges are seen snowfields, and even a small glacier.

* Shart ?

ROUTE No. 29—contd.

From Osh to the Chitral via the Tuyuk and Khargosh Passes, Kala Panjah, and the Baroghil Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	

The descent is rendered still more difficult by the snow, and, if not more steep, is certainly quite as much so as the previous ascent. Here the horseman has constantly to dismount. The track is often crossed by ridges formed by fragments of detached rock. This *débris*, which consists of sharp stones, very greatly impedes progress. The length of the descent is from $3\frac{1}{2}$ to 4 miles. At this distance, and from a height of about 11,000 feet, can be traced the regular course of the northern Jiptik, which towards its source is made up of numerous springs and affluents, which converge towards it. The gorge now opens out, and bushes and grass make their appearance. Two miles lower down succulent pasture and dendroid juniper come in sight. These attract the Kirghiz, whose tents are to be seen around. Still further down the gorge, at a height of about 8,000 feet, patches of barley and wheat are presented to the view. These are watered by canals. Lower down, at a height of 7,500 feet, there are willows, birches, roses, &c. The road throughout is practicable, and goes along a smooth and soft incline, down to the bed of the northern Jiptik. The road passes from one bank of the river to the other by fords, which are shallow and practicable. It is of the same character as far as the boundary of Kurgan-Tikhtir, which lies at a distance of 11 miles from the pass. At this point the northern Jiptik cuts deeply into the sides of the gorge, so that the route for about $1\frac{1}{2}$ miles lies over a high cornice on the right bank of the river. It afterwards sharply descends into a wider part of the gorge, which is called Khoja-Kiliat. Here the road again passes over a soft soil, and is very practicable. The valley of Khoja-Kiliat is 5 miles long and about 2 miles wide. Almost the whole of it is taken up with cultivated patches and the winter quarters of the nomads. The abundant deciduous tree forest along the river bed aids in attracting the Kara Kirghiz to this spot.

The river at this point is fordable everywhere. From the valley of Khoja-Kiliat the northern Jiptik enters a very narrow defile, and the road is taken over a cornice overhanging the left bank of the river. The length of this cornice is from 1 to $1\frac{1}{2}$ miles. The road then descends in zigzags in such a way that between the beginning and the end of the descent the distance in a straight line is about 1,000 feet. It is impossible to ride over this part of the road, so that the horseman is compelled to dismount. At the base of the descent just described bridges across the river appear. These are on the same principle of construction as obtains generally throughout the Central Asian mountains. Further on the road is equally difficult, for it lies over cornices and the so-called balconies. It preserves this character right up to the junction of the Jiptik and the Turuk (the upper Ak Bura), *i.e.*, for a distance of 7 miles from the point where it left the Khoja-Kiliat valley.

8. KIZIL ART DEFILE	$11\frac{1}{4}$	120 $\frac{3}{4}$	The lofty basin of the Alai is covered with excellent grass and well watered.
9. KIZIL ART PASS ...	$16\frac{1}{3}$		
		137 $\frac{1}{4}$	Good forage begins to cease, and the road becomes stony. The ascent goes amongst masses of sharp stones, but is practicable for pack animals. The gradient is moderate all

through, and a road could easily be made for the big wheeled Turkish carts of the country. Mr. Littledale found no snow on the pass on the 7th June 1890.

The ridge of the pass affords a good view of the entire Pamir with the Kara Kul lake in the south of it, especially of that part known as Pamir Khargosh or Hare Pamir. Here the long wide valley of the river Kurun Sai joins that of the Sak, which runs from east to west. The perfectly bare hills about this valley consist of efflorescent clayey sandstone, and do not reach the snow line.

The valley of the Sak steadily ascends for 13 miles in an easterly direction, and terminates at the top of a mountain range composed of conglomerate, and about 11,700 feet in height. Beyond this range lies the mountain-locked dale of lake Kara Kul.

ROUTE No. 29—*contd.*

From Osh to the Chitral viâ the Tuyuk and Khargosh Passes, Kala Panjah, and the Baroghil Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
10. KICHKINE-KIZIL ART PASS.	20	157 $\frac{1}{4}$	Beyond the pass the road offers no obstacles, except the want of forage and fuel. The south side has a gentle slope down to the Markan Su (13,600 feet), where there is a little grass in places; also root fuel. Thence there is no grass on the way, but on the north side of Kara Kul is some fuel. In October 1890 Captain Younghusband returned from Kara Kul to Kashgar by a road down the Markan Su. The lake is about 14 $\frac{1}{2}$ miles long from north to south, and about 11 miles broad from east to west. It has several large islands and peninsulas. It absorbs several torrents, but has no efflux whatever. It is surrounded by mountains at a distance of about 7 miles on the east, while on the west the mountains close on to the lake. The bottom is of sand and the water clear, but having a slightly bitter taste, horses will only drink it when very thirsty.
11. CAMP NEAR THE LAKE.	8	165 $\frac{1}{4}$	Road follows the east shore of the lake, rather sandy. Here and there pools of water and a very little grass. The ground is loose, consisting of sand intermixed with salines; towards the hills it grows stony, and close to the foot of the ranges rock takes the place of stones. Numerous lakelets and pools cover the plain about the Kara Kul, from which only narrow sand downs separate them, thus confirming the idea that the lake is rapidly desiccating.
12. LITTLE CHON SU DEFILE.	19 $\frac{1}{2}$	184 $\frac{1}{2}$	After passing the lake, the road goes due south up a sandy waterless valley to Oksali Mazar.
13. TUYUK PASS ...	19 $\frac{1}{2}$	204	The defile of the Chon Su is broad, and the road might be easily made fit for wheels. At 6 miles reach the confluence of the Chon Su and Uzel Su, where grazing is to be found. There is a branch road hence over the Uzel pass to Rang Kul, 16 miles.* The whole valley of the Chon Su is seen very plainly from this point. The ranges are composed of clay slate, and the height was estimated at 12,000 feet above sea level. The ascent to the ridge leads over a steep slope. The valley of the Chon Su measures from 1 to 2 miles in width, and extends from south-east to north-west. Altitude of Tuyuk pass, 15,525 feet. The pass is presumed by the Russians to be open from June to December.
14. CAMP ...	13 $\frac{1}{4}$	217 $\frac{1}{4}$	The descent is very steep for about 500 yards, but the soil is soft, and the road is not difficult. The path follows the Ak Baital. As the elevation decreases, small patches of grass become numerous; but Mr. Littledale could not find enough for the horses of his party. The foot of the pass in the Murghabi valley is 14,000 feet. Hence the road is quite even.
15. CAMP ...	16 $\frac{1}{2}$	233 $\frac{3}{4}$	Road even and gravelly. Grass increases, but not much fuel. Route No. 30 is entered in this march.
16. AK SU RIVER ...	10 $\frac{1}{4}$	244	The current of the river is not very swift. M. Severtsoff found out three fords, over two of which he passed. In the beginning of August these fords are only suitable in the early morning,

* Nearer 30 miles.

Fenshama

ROUTE No. 29—*contd.*

From Osh to the Chitral via the Tuyuk and Khargosh Passes, Kala Panjah, and the Baroghil Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
17. YAMAN TAL ...	6	250	} <i>Vide</i> Route No. 30.
18. URUS BULAK ...	26	276	
19. ABDULLA KHAN RABAT.	17	293	
20. BURZILLA ...	17	310	
21. MOUTH OF KHAR- GOSH RAVINE.	13	323	
22. KHARGOSH PASS...	14	337	The road enters a mountain valley, but, judging from reports, it is suitable for traffic, and the Khargosh pass is not more difficult than the Tuyuk.
<p>The following taken from Ivanoff's reports shows that there is no difficulty in crossing from the valley of Alichur Pamir to that of the Great Pamir:—"From the Alichur the expedition at its full complement again went to the Great Pamir by the most interesting and practicable Khargosh pass, and on the second day to Yol Mazar."</p> <p>Altitude of pass 14,550 feet.</p>			
23. YOL MAZAR ...	15	352	On right bank of the Pamir stream. Grass and boortsee in plenty. Altitude 12,320 feet.
24. YUMKHANA ...	13	365	Road good along right bank of stream. At 9 miles cross Ab-i-Matz, up which a summer road goes to Shignan (see <i>Note E</i> , Route No. 28). Grass and fuel in plenty. Elevation 11,440 feet.
25. LANGAR KISHT ...	18	383	Road follows right bank, above which it rises in many places to a height of 1,000 feet. 6 miles beyond Langar Kisht is Kala Panjah.
26. BABATANGI ...	18	401	} <i>Vide</i> Route No. 64, Eastern Hindu Kush.
27. RACHAU ...	16	417	
28. SABHAD-i-WAKHAN	10 $\frac{3}{4}$	427 $\frac{3}{4}$	

* But see stage 12, Route No. 30.

ROUTE No. 29—*contd.*

From Osh to Chitral viâ the Tuyuk and Khargosh Passes, Kala Panjah, and the Baroghil Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.	
	Inter- mediate.	Total.		
29. DASHT-I-BARO- GHIL.	12 $\frac{1}{2}$	440 $\frac{1}{4}$	} <i>Vide Route No. 56, Eastern Hindu Kush.</i>	
30. DOTZ ...	8	448 $\frac{1}{4}$		
31. SKRUINJ ...	8 $\frac{1}{2}$	456 $\frac{3}{4}$		
32. CAMP ...	10	466 $\frac{3}{4}$		
33. CAMP ...	9	475 $\frac{3}{4}$		
34. JHOPU ...	8 $\frac{1}{2}$	484 $\frac{1}{2}$		
35. MIRAGRAM ...	8 $\frac{1}{2}$	492 $\frac{1}{4}$		
36. BLEP ...	11	503 $\frac{1}{4}$		
37. MASTUJ ...	13	516 $\frac{1}{2}$		
38. PARABEK ...	7 $\frac{1}{2}$	523 $\frac{3}{4}$		} <i>Vide Route No. 12, Eastern Hindu Kush.</i>
39. KALA DRASAN ...	12	535 $\frac{3}{4}$		
40. KUSHT ...	8	543 $\frac{3}{4}$		
41. PARFISH ...	10 $\frac{1}{2}$	554 $\frac{1}{2}$		
42. PRET ...	8	562 $\frac{1}{4}$		
43. KOGAZI ...	8 $\frac{1}{2}$	570 $\frac{3}{4}$		
44. CHITRAL ...	12	583 $\frac{3}{4}$		

Note C.—Alternative Route from Sarhad-i-Wakhan to Kala Drasan viâ the Mulkho valley.

29. SAFRDEG ...	19	446 $\frac{3}{4}$	Cross Baroghil.
30. CHAKERKUCH ...	14	460 $\frac{3}{4}$	From here Yur in Wakhan is reached in one march, or 20 miles by the Khan Khon pass.
31. TOPKHANA ZIA- BEG.	9	469 $\frac{3}{4}$	
32. SHAJANILLI ...	13	482 $\frac{3}{4}$	Cross Shajanilli spur, closed by snow in winter, but easy to horses in summer. Yust in Wakhan reached from here in 24 miles by the Uchli pass, practicable for footmen in summer.

ROUTE No. 29—concl'd.

From Osh to Chitral via the Tuyuk and Khargosh Passes, Kala Panjah, and the Baroghil Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
33. RICH ...	21	503 $\frac{3}{4}$	Large village, 400 houses. Panjah Wakhan (Kala Panjah?) reached on foot in summer in two days by the Kuch pass.
34. UJNU ...	7	510 $\frac{3}{4}$	Large village in Turikho valley.
35. SHAGRAM ...	15	525 $\frac{3}{4}$	Large village in Turikho valley.
36. MADAK ...	15	540 $\frac{3}{4}$	At 3 miles cross Tirich stream, and pass Surwat at junction of Mulkho and Tirich streams.
37. KALA DRASAN ...	18	558 $\frac{3}{4}$	

N. B.—The above route is that generally used between Sarhad and Chitral in summer on account of the road by Mastuj being impassable to horses at that time of year for want of bridges. The Mulkho and Turikho valleys are fertile and thickly populated.

Route No. 30. *Part II*

FROM KASHGAR TO FAIZABAD *via* THE LITTLE KARA KUL, RANG KUL, AND THE ALICHUR VALLEY.

Authorities—KOSTENKO, 1880; NEY ELIAS, 1885.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
1. YAPCHAN ...	14 $\frac{1}{2}$	14 $\frac{1}{2}$	} <i>Vide</i> Route No. 35.
2. YANGI HISAR ...	23 $\frac{1}{2}$	38	
3. IGHIZ YAR ...	19	57	
4. GHIJAK ...	19*	76	
and Kuserab. At 14 $\frac{1}{2}$ miles road branches from main ravine up Ghijak ravine on left bank. Cultivation, wood, good grass, &c.			} At 6 miles enter ravine of Uruk Karawal, a frontier post. Road passes through fortification. At 11 miles Kirghiz Karawal and village; also ravine on right bank leading to Kukeran, Jilga, and Kuserab. At 12 $\frac{1}{2}$ miles road branches from main ravine up Ghijak ravine on left bank. Cultivation, wood, good grass, &c.
5. KARA TASH CHAT	18	94	
descend to valley of Chimgan or Yangi Hisar river. Kirghiz village. Grass and brushwood.			} Leave Ghijak ravine at 7 miles, and turn up a nala towards the Ghijak pass (11,000 feet), crossing it at 12 $\frac{1}{2}$ miles. Very steep on both sides and difficult for baggage animals. Thence descend to valley of Chimgan or Yangi Hisar river. Kirghiz village. Grass and brushwood.

* All distances from this stage are approximate only.

ROUTE No. 30—*contd.*

From Kashgar to Faizabad via the Little Kara Kul, Rang Kul, and the Alichur Valley.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
6. SHARGHUT ...	19	113	Up the Chingan for 4 miles; then up left bank of a ravine. Grass and saxaul; no habitations.
7. GAZ ...	15	128	At 5 miles cross Kara Tash pass, 14,100 feet, to valley of the Gaz. Ascent easy; descent a little steep. At $\frac{1}{2}$ mile from camp very bad descent of about 200 feet, where baggage animals must be unloaded. Grass in small quantities and saxaul. A few Kirghiz here generally.
8. LITTLE KARA KUL (SOUTH END).	12	140	At $2\frac{1}{2}$ miles cross to left bank of the Gaz; then wind through low hills to valley of Kara Kul lake. Grass and saxaul. There is an alternative route from Gaz past Kangshiwär (Kirghiz encampment) at about 6 miles; then up valley of Kara Kul outlet to north end of lake is about 5 or 6 miles.
9. FOOT OF TOKH- TEREK PASS.	$13\frac{1}{2}$	$153\frac{1}{2}$	At $8\frac{1}{2}$ miles Subashi. Track to Sar-i-Kul branches off here; then up ravine to foot of pass. Little grass; fuel <i>nil</i> . Water scarce in autumn; none in winter.
10. KARA SU ...	$13\frac{1}{2}$	167	Cross Tokhterek pass, 14,000 feet; then down an easy valley, gradually widening into open Pamir about Kara Su. Several Kirghiz encampments. Grass, water, and saxaul. There is a track hence to Tagharma and Sar-i-Kul.
11. RANG KUL (EAST END).	20	187	Over open pamir the whole way. Grass, water, and saxaul.
12. MURGHABI ...	31	218	Down south shore of lake for $11\frac{1}{2}$ miles, where the lake ends. At $15\frac{1}{2}$ miles strike Ak Baital river (dry from end of September to end of May) (Route No. 29); then down the Ak Baital valley to within 2 miles of confluence with Murghabi, and camp on the latter about $2\frac{1}{2}$ miles below confluence. Grass, saxaul, water, and fish. Road good all the way. In summer, where the Ak Baital is flowing, this march would be divided by camping on the river.
13. YAMAN TAL ...	8	226	Down the Murghabi valley flat and grassy for 5 miles; then over spur, and strike Kara Su valley about $2\frac{1}{2}$ miles above its mouth. Camp in deep valley sheltered by chiffs. Grass and willow jungle.
14. OROS BULAK ...	26	252	Up Kara Su valley. At 24 miles top of Neza Tash pass, 13,400 feet. Almost imperceptible slopes on both sides. Grass, saxaul, and water. This march can be divided in summer, or stage 12 lengthened at any time to a suitable spot at 4 to 5 miles above Yaman Tal.

AS in the map

Fang Lake

ROUTE No. 30—*contd.*

From Kashgar to Faizabad viâ the Little Kara Kul, Rang Kul, and the Alichur Valley.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
15. ABDULLA KHAN'S ROBAT.	17	269	Down the Alichur valley, passing Chadir Tash. Camp at mouth of Bash Gumbaz ravine. Water, grass, saxaul, and fish. Level road all the way.
16. BURZILLA ...	17	286	Road, &c., as before.
17. BULUN KUL ...	21	307	At 5 miles south end of the Sasik Kul (fresh water), about 12,900 feet; then along spurs above small lakes. At $11\frac{1}{2}$ miles pass Tez Kul (salt water). At 13 miles cross mouth of Khargosh ravine, up which Route No. 29 goes. Water, grass, and a little saxaul.
18. KOH-I-TEZEK PASS	15	322	At 9 miles cross the Koh-i-Tezek, 14,000 feet. Ascent gentle; descent into ravine a little steep. Road good. At 14 miles opening of ravine leading to Kukbai pass and Joshangaz.
Water, grass, and fuel.			
19. CAMP ...	16	338	Down the valley. Jungle all the way, which sometimes makes it difficult for laden animals to pass. At 10 miles deserted Shigni villages. Water, grass, and fuel.
20. SARDIM ...	14	352	Down valley. Jungle troublesome in places. At 12 miles junction of Alichur river. Three houses; supplies scanty. From here a path goes to the Murghabi (see <i>Note C</i> , Route No. 24).

Note A.—Six miles before reaching Sardim, a road goes off to Joshangaz at the mouth of a dara in the Shakh Dara valley. A road leads southwards from Joshangaz to Panjah Fort in Wakhan in two days, and another eastward to Victoria lake in five. This last no doubt is the route by the Joshangaz pass to the Ab-i-Matz tributary of the Panjah. It is a high pass closed by snow, except for three or four months. It is the summer route between Kala Panjah and Bar Panjah. The Russian expedition of 1883 explored it; but see *Note E*, Route No. 28.

21. CHAHARSIM ...	$14\frac{1}{2}$	366 $\frac{1}{2}$	Down the left bank. At $12\frac{1}{2}$ to 13 miles road goes over rock by side of rapids. Ponies mostly require unloading. Seven houses; supplies.
22. DEH BASTA ...	20	386 $\frac{1}{2}$	Down left bank. Pass Wir at 7 miles, seven or eight houses. A bad ascent and descent $1\frac{1}{2}$ miles below Wir. At 19 miles cross to right bank by a ford. Village with supplies. From Wir a path leads over the mountains to Romed in the Bartang valley (see <i>Note C</i> , Route No. 24).
23. SUCHAN ...	15	401 $\frac{1}{2}$	Down left bank for 1 mile; then cross to right by a bad bridge. At 4 miles is Revak or Go-Revak. Here recross to left bank by a bad bridge. Village; supplies.

Fershadan

Bokham

ROUTE No. 30—concl'd.

From Kashgar to Faizabad via the Little Kara Kul, Rang Kul, and the Alichur Valley.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
24. BAR PANJAH ...	16	417 $\frac{1}{2}$	At $\frac{1}{2}$ mile cross to right bank. Road a little difficult for baggage animals. At 8 miles is confluence of Shakh Dara at Kharok village. At 12 miles emerge on Panjah valley; then down Panjah, on right bank, and cross by ford or boat, according to season, to Bar Panjah on left bank. Fort and supplies. Afghan garrison, &c.
25. GARJIWAN ...	6	423 $\frac{1}{2}$	From Bar Panjah the road turns south up a stream flowing into the Ab-i-Panjah.
27. GURIEL PASS ...	39 $\frac{3}{4}$	463 $\frac{1}{4}$	From the village of Garjiwan the route soon enters Badakhshan territory over the elevated table-land or pamir of Shiwa. After crossing Shiwa, the road crosses the Guriel pass, whence it turns south and runs down another stream flowing into the Kokcha on the right. This stream is thickly studded with settlement, especially between the villages Ura-Shar and Gazan.
28. URA SHAR ...	14 $\frac{1}{2}$	477 $\frac{3}{4}$	.....
29. GAZAN ...	16 $\frac{1}{2}$	494 $\frac{1}{4}$	.....
30. FAIZABAD ...	7	501 $\frac{1}{4}$	.....

Route No. 31.

Routes in NE Afghanistan

FROM FAIZABAD (BADAKHSHAN) TO CHITRAL *via* ZEBAK AND THE DORAH AND ADJOINING PASSES.

Authority—ROUTES IN EASTERN HINDU KUSH.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. KHANKAH ...	7	7	} <i>Vide</i> Route No. 88, Eastern Hindu Kush.
2. BOHARAK ...	17	24	
3. CHAKARAN ...	15	39	
4. TIGARAN ...	17	56	
5. ZEBAK ...	17	73	

ROUTE No. 31—*contd.*

From Faizabad (Badakhshan) to Chitral via Zebak and the Dorah and adjoining Passes.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
6. ISKATUL ...	10	83	} <i>Vide Route No. 87, Eastern Hindu Kush.</i>
7. SENGLICH ...	9 $\frac{1}{2}$	92 $\frac{1}{2}$	
8. CAMP ...	11 $\frac{1}{2}$	104	
9. SHAH SALIM ...	12 $\frac{1}{2}$	116 $\frac{1}{2}$	
10. BARZIN ...	10	126 $\frac{1}{2}$	
11. DRUSHP ...	7 $\frac{1}{4}$	133 $\frac{3}{4}$	
12. SHOGOTH ...	10 $\frac{3}{4}$	144 $\frac{1}{2}$	
13. CHITRAL ...	12 $\frac{1}{2}$	157	

Note A.—Alternative Route from Faizabad via Jirm.

1. BAGH MUBARAK	9 $\frac{1}{2}$	9 $\frac{1}{2}$	} <i>Vide Route No. XXV, Turkistan Series, Afghan Boundary Commission routes.</i>
2. KHAIZABAD ...	6 $\frac{1}{2}$	16	
3. JIRM ...	12	28	
4. ASTANAH ...	13	41	
5. MIANDEH ...	16	57	
6. SHAHR ...	11	68	
7. MIAN SHAHR ...	12	80	
8. FOOT OF DORAH PASS.	18	98	
9. BARZIN ...	10	108	
12. CHITRAL ...	30 $\frac{1}{2}$	138 $\frac{1}{2}$	

Note B.—Alternative from Zebak via the Nuksan Pass.

6. DEHGUL ...	9 $\frac{1}{2}$	82 $\frac{1}{2}$ ^A	} <i>Vide Route No. 16, Eastern Hindu Kush.</i>
7. KHANA MA-ABAD	8 $\frac{1}{2}$	91	
8. WANAKACH ...	9 $\frac{3}{4}$	100 $\frac{3}{4}$	
9. RUBAT ...	10 $\frac{3}{4}$	111 $\frac{1}{2}$	
10. SHALI ...	7 $\frac{1}{2}$	119	
11. SHOGOTH ...	11 $\frac{1}{2}$	130 $\frac{1}{2}$	
12. CHITRAL ...	12 $\frac{3}{4}$	143 $\frac{1}{4}$	

ROUTE No. 31—concl'd.

From Faizabad (Badakhshan) to Chitral viâ Zebak and the Dorak and adjoining Passes.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
<i>Note C.—Alternative Route from Dehgul viâ the Agram Pass.</i>			
7. AGRAM ...	16	98½	
8. RUBAT ...	8¼		
11. CHITRAL ...	31½	106¾	
		138¼	

Route No. 32.

FROM YARKAND TO SHAHIDULLA viâ THE SANJU PASS.

Authorities—BELLEW AND TROTTER, 1873.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. POSGAM ...	17	17	
2. KARGHALIK ...	24		
3. BORA ...	25	41	} <i>Vide</i> Route No. 33.
4. OITOGHBAK ...	12	66	
		78	The road crosses an undulating desert of coarse gravel and wind-blown ridges of sand, with very scanty vegetation; 15 or 20 houses in a deep gully; trees few.
5. KUSHTAGH ...	19	97	Still over the desert, crossing a wide boulder strewn hollow and through a belt of tall reeds just before reaching Kushtagh, a settlement on the Kilian river.
6. SANJU ...	25	122	At 9 miles pass Sangar, where there is a rest-house and a tank. Here quit the desert, and passing through a strip of cultivation reach the
Sanju stream. Sanju is a populous settlement. The last Chinese post is here. Cultivation extends for 8 or 10 miles along the river. Elevation 6,070 feet.			
7. KIWAZ ...	13½	135½	First 6 miles through cultivation; thence along the foot of some high banks of red sand and gravel, and up a contracting valley. But before reaching Kiwaz the Sarikyar river is forded
twice. In August 1870 Dr. Henderson found the Sarikyar, or Sanju, unfordable, so made a detour up a valley to the left and over the Chuchu pass (<i>see</i> next stage) to the banks of the Arpalak, which flows to the east of the Sanju stream.			
8. TAM ...	16½	152	Pass the Chuchu glen on the left, a narrow defile which conducts over the Chuchu ridge to Shahidulla, and is taken as an alternative route when the river is unfordable during the summer

ROUTE No. 32—*cont'd.**From Yarkand to Shahidulla via the Sanju Pass.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
floods. The Sarikyar is crossed repeatedly from side to side, and the road goes up the narrow and winding defile. Banks are fringed with bushes and patches of pasture grass. Tam is the last habitation and cultivation passed before reaching Shahidulla, about 6 or 8 houses on a small flat. Elevation 8,790 feet.			
9. GACHGA ...	10	162	Road still up the narrow and winding valley, and the river has to be repeatedly crossed. Elevation about 10,100 feet.
10. KICHIK KARAKO- RUM.	14	176	Through a maze of early mounds, and up the defile to the Sanju pass at about $7\frac{1}{2}$ miles by a steep zigzag very slippery with ice. The pass, also called the Grim pass, is a sharp ridge of mica slate, 16,650 feet high. From the pass descend a narrow, deep, rough gorge to a strip of turf in a trickling stream between lofty vertical cliffs. No fuel or pasture. Elevation 12,050 feet. Dr. Bellew's party were 11 hours on this march, and lost eight cattle on the road.
11. PILA-TA-GHASH ...	$11\frac{1}{2}$	$187\frac{1}{2}$	Down the gorge to the 4th mile path very steep, rough, and difficult of passage owing to repeated crossings of the frozen rivulet. At $4\frac{1}{2}$ miles is Mirza Abakar camping-ground at a cluster of graves on the right bank of the Karakash river. From here the road goes down the Karakash valley by a very rough road, fording the river twice. Valley very narrow; hills high and bare. Camp on a limited flat of brushwood and pasture by the river bank.
12. SHAHIDULLA ...	15	$202\frac{1}{2}$	Follow the Karakash by a rough road in a winding valley with brushwood and forage along river course, their patches interrupted by projecting moraine banks. At 4 miles, at junction of the Kilian with Karakash, stands Sanju Kurghan, a mud castle with loopholed walls. Here cross the Kilian stream, and at 9 miles cross the Togra Lee river. The Karakash is crossed three times before reaching Shahidulla.

Route No. 33. HSIN KIANGFROM KASHGAR TO LEH *via* YARKAND AND THE KILIAN AND KARAKORUM PASSES.

Authorities—SHAW, HAYWARD, TROTTER, AND BELLEW, 1873; COLONEL BELL, 1887.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. YAPCHAN ...	$14\frac{1}{2}$	$14\frac{1}{2}$	This road is regularly traversed by two-wheeled carts and conveyances as far as Yarkand. It passes through cultivated country and crosses several streams and canals, the largest of which are the Tazgun and the Kara Su. Pass the villages of Kasr Robot, Turmalak, and Tazgun. Altitude 4,210 feet.

ROUTE No. 33—*contd.**From Kashgar to Leh viâ Yarkand and the Kilian and Karakorum Passes.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
2. YANGI HISAR ...	23½	38	The road is much cut up by branch canals. Soil generally sandy. Cross by a wooden bridge the Kusan river, and then cross by another wooden bridge a large canal from the Kusan river.
Pass the villages of Tuglok, Sorgoluk, and Kanka, and cross two branches of the Sailik canal from Kusaunk. At 19 miles is the Zaikash stream fed from springs on the west. Yangi Hisar is a large town with fort, and contains about 4,000 houses. The river is crossed by a two-spanned timber bridge about 60 feet long. A low ridge of hills separates it from the town. The fort is about 600 yards to the north of the town. Altitude 4,320 feet.			
3. KIZIL ...	28½	66½	Cross the Yangi Hisar river, and over a flat plain irrigated by small watercourses, passing the scattered villages of Kalpin, Tuglok, Kosh-Gumbaz, Kudok, and Chemalung. Kizil has about
500 houses. Altitude 3,910 feet.			
4. KOK ROBAT ...	26	92½	Pass the dry bed of the Kizil stream, coming from the Kizil Tagh on the west. Thence over flat waste for about 13 miles to Ak Robat, where are two small wells, whence surface is 98 feet
below the ground level. From here the road skirts the Hamed-i-Dasht, a barren desert without habitation or cultivation. At Kok Robat (blue post-house) are about 200 houses. Altitude 3,830 feet.			
5. YARKAND ...	22	114½	Over a desert waste and grassy swamps, occasionally passing small villages. At about 17½ miles is the village of Karakorum. About
here the road crosses the Urpi canal by a wooden bridge, and then goes along the north wall of the fort. Altitude 3,923 feet. The Yangi Shahr of Yarkand is of the same pattern as all the other Chinese forts, with two gates, one on the east and one on the west. It is joined to the old city on the east by a bazar, and in which various kinds of fruit are sold; also beef and mutton.			
6. POSGAM ...	17	131½	The route by the Kilian is practicable in the hot weather from July to October. Road good, except where it may have been accidentally
flooded by leakage from a canal. The direct road cannot be taken as a rule during the flood season.			
At 11 miles cross the Zarafshan or Yarkand river. Ford across a fine pebbly bed between low sandy banks 400 to 500 yards apart. The river flows in two channels, separated by tamarisk jungle, across a cultivated plain covered thickly with farmsteads, and traversed by numerous irrigation cuts. Posgam is a market town of 600 houses. Elevation 4,210 feet.			
7. KARGHALIK ...	24	155½	Road good. Through a cultivated plain, farmsteads and fields, with marshes and jungle patches. At
about 13 miles pass Yakshumba bazar, 300 houses. About half-way cross the Tiznaf river by a firm pebbly ford. Thence over patches of saline incrustation, marsh and waste. Trees in plenty. Karghalik, a market town of 1,000 houses. Rest-houses. Elevation 4,550 feet.			

ROUTE No. 33—*contd.*

From Kashgar to Leh viâ Yarkand and the Kilian and Karakorum Passes.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
8. BORA ...	25	180½	Pass Beshtarik ; thence over a wide waste of coarse gravel. Bora is a settlement of some 40 houses situated on the course of a stream. Elevation 5,400 feet.
9. HASSAN BUGHA...	13	193½	A rest-house and a small village.
10. KILIAN ...	12	205½	Pass Suzam on the border of the Dasht-i-Bora at 8 miles, and immediately afterwards ford the Kilian. The stream, though rapid, is fordable throughout the year. Kilian, a large village with a market and school. Kilian is the last Chinese post. Elevation 7,000 feet.
11. KARCHUNG ...	5	210½	Across the Yarkand plain as before.
12. URPULIK ...	12	222½	Road good in the defile of the Kilian valley. Cross the Kilian by a wooden bridge at 10½ miles.
13. CHIZGANLIK ...	9	231½	The road ascends the narrow valley of the Kilian, crossing the stream several times.
<i>Note A.</i> —From here a road strikes off to Sanju—Route No. 32.			
14. CHADUR TASH ...	22½	254	Up the valley as before, passing Khitai Tam, where there is an old Chinese boundary pillar at 15 miles. Chadur Tash is a halting-place in fine pasture on the north of the Kilian pass.
15. KILIAN PASS ...	15	269	Reach the summit of the pass at 13 miles (12,100 feet). The descent is difficult and stony. This pass is a very difficult one and very steep, and laden ponies can only be taken over it with difficulty. The usual custom of the traders is to hire yaks from a neighbouring camp of Wakhis. Khoten Bhai Kargill is passed at about 6 miles, and Shushkhum at about 8 miles.
16. BOSTAN ...	7½	276½	A halting-place in the Kilian Dara.
17. GRUNJKURLIK ...	9	285½	Descend gradually to an old fort (Sanju Kurghan?) at 4½ miles, and quit the Kilian defile. At 6 miles cross the Togra Su. This river bears an especially bad name, as, owing to the stones of the bottom being very large, it is difficult for horses to keep their legs.
18. SHAHIDULLA ...	9	294½	Road goes along the left bank of the Karakash river, which is crossed twice between Chizganlik (7½ miles) and Shahidulla. This river does not present any great difficulty (August), though earlier in the year ponies are sometimes carried away. Shahidulla is the head-quarters of a small tribe of Kirghiz. Grass plentiful ; tamarisk and scrub for fuel.

ROUTE No. 34—*contd.*

From Maralbashi to Aktagh viâ Yarkand, Kugiar, and the Yangi Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter-mediate.	Total.	
2. AKSAK MARAL ...	22½	36	Fourteen houses at the halting-stage; accommodation in each; supplies, &c.
3. ALAIGUR ...	13½	49½	The road approaches the river once <i>en route</i> ; 23 houses. Supplies and water.
4. MENUT ...	22½	72	The river is encountered twice <i>en route</i> , but is nowhere crossed; 16 houses; supplies, water, &c.
5. LAILIK ...	18	90	Road goes near the left bank of the river; 22 houses; supplies, &c.
6. TEREK LANGAR ...	31½	121½	Through desert and low jungle. At 13½ miles a deserted Langar of the time of the Chinese; 40 houses and 2 musjids.
7. YARKAND ...	31½	153	Pass Charshamba and Ekshamba bazars. Cultivation and gardens from the 1st mile to Yarkand.
8. YANGICHIK ...	12	165	This route avoids the difficult Sanju pass, but is only practicable for caravans in winter, when the upper parts of the Yarkand and Tiznaf are low and frozen. However, it is thought to be the best route from Yarkand to Leb, and has fallen into disuse chiefly owing to the depredations of the Kanjuti robbers. <i>Vide</i> Route No. 33. At 3 miles leave the cultivation and pass over a wide gravelly waste of arid desert stream with boulders and through a gap in a ridge of sand-hills, which is about ½ a mile to a mile broad.
9. YAKSHUMBA ZAR. BA-	18	183	
10. KARGHALIK ...	16	199	
11. BESHTARIK ...	20	219	

At Beshtarik there are some 8 or 10 huts.

Note A.—From Beshtarik to Shahidulla viâ the Kilik Pass.

According to an account given by a native to Captain Trotter in 1873, there are 10 marches, namely, Balerak Turba, Akchik, Takma, Tupa-Dawan, Azghan, Kilik Dawan, Larcha Ya Tuba, Gor Jilga, Mazar Khoja, and Shahidulla. Grass and fuel are to be found at every stage. The distance can be traversed by a horseman in 5 days. This route is not now in use, but can be made practicable for ponies.

12. YOLARIK ...	12	231	Road crosses a wide wind-swept desert, the "Beshtarik Dasht." It consists of coarse sand traversed by gravelly ridges. Yolarik is a long stretch of farmsteads on the course of a small river.
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ROUTE No. 31—*contd.*

From Maralbashi to Aktagh viâ Yarkand, Kugiar, and the Yangi Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks
	Inter- mediate.	Total.	
13. KUGIAR ...	13	244	Cross the wide, shallow, pebbly watercourse and a high ridge of loose sand. From the 6th mile ascend the Kugiar gully.
14. AK MASJID ...	24	268	Cross the stream and through 3 miles of cultivation. At 6 miles the hamlet of Fusañ is reached, and cultivation and habitations end. Thence up a narrow winding gully to the camp-ground on the banks of a stream at the foot of the Tupa Dawan. Hills of shale resting on limestone and sandstone. Vegetation scanty. Elevation 8,870 feet.
15. CHIKLIK ...	11	279	In the first 6 miles ascend with a steep rise between hills of loose dust to the Tupa Dawan pass (about 10,200 feet). Descend as expanding gorge by a steep dusty path to a grassy flat on the edge of the bed of the Tiznaf river.
16. MAZAR KHOJA ...	14	293	Road goes down the bed of the river, which has to be forded (girth deep in June) 24 times, <i>en route</i> on a rough boulder bottom in a deep winding defile. Camp on a turfy slope on the left bank of the river. Brushwood and forage plentiful. Elevation 9,250 feet.
17. DUBA ...	6	299	The road in winter is over the frozen river. In summer through it, and is dangerous from sudden floods. Large boulders also make the fords difficult. Camp at angle of junction of two torrents. Banks fringed with willow and poplar. This is a favourite pasture ground of the Pakhpu tribes.
18. GURUNJ KALDI ...	9	308	Up the stream, crossing two tributaries from the right. Camp on a turfy slope with boggy springs. Elevation about 11,900 feet.
19. CHIRAGH SALDI ...	11	319	Up the Tiznaf as before. At 8 miles cross a projecting spur, round which the river winds. The river here in June is covered by a deep layer of snow, over which the road passes.
20. KULANULDI ...	11	330	Ascend easily to the top of Yangi Dawan, 15,800 feet, at 3 miles. Descent easy for 2 miles. At 5 miles a gully joins from the left. Route No. 40 is probably entered about here. Down a narrow, tortuous, and deep gorge, that is, blocked till June by a glacier, but melts away in the next month.
21. KUGART AGHZI...	15	345	River has to be forded 5 or 6 times; it was girth deep in June 1874.

N.B.—This camp must be the same as stage 2, Route No. 40.

ROUTE No. 34—*conclud.*

From Maralbashi to Aktagh viâ Yarkand, Kugiar, and the Yangi Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
22. KASHMIR JILGA	25	270	Through a long stretch of brushwood called Kirghiz Jangal, and an alternately widening and narrowing valley. At 17 miles pass the ruins of an outpost fort called Nazar Beg Kurghan.
23. KHUFELANG ...	11	281	Road good all the way. The valley gradually expands between two cliffs running from east to west as far as Khufelang. Grass and fuel procurable. A halting-place in the junction of two branches of the river. It is also called Loongpa by the Thibetans and Khupulaghsee by the Turks, all three terms meaning mouth of a pass.
24. AKTAGH ...	20	301	Road leads up the Raskam, the channel of which was found to be filled with hard snow in June 1874 by Dr. Bellew.

Route No. 35.

FROM KASHGAR TO HUNZA *viâ* THE TAGDUMBASH PAMIR AND THE MINTAKA PASS.

Authorities—CAPTAIN BIDDULPH, 1874; LIEUTENANT BOWER, 1889; CAPTAIN YOUNGHUSBAND, 1889; DAUVERGNE, 1889; CAPTAIN PEMBERTON, 1892.

Number and names of stages.	DISTANCE IN MILES.		Remarks.	
	Interme- diate.	Total.		
1. YAPCHAN ...	14½	14½ } <i>Vide</i> Route No. 33.	Large village. Road nearly due south through sand-hills and cultivation, crossing two small streams over soda plain for 5 miles. Cross stream by village and over stony plain for 7 miles practicable for wheeled traffic. Travellers to Sar-i-Kul take from here gram and flour.	
2. YANGI HISAB ...	23½			38
3. IGHIZ YAB ...	19			57
4. AK TALA ...	17	74	Kirghiz camp. South-west 4 miles over plain to Ak Tala valley; then up valley 13 miles. At 6 miles pass through ruined Chinese fort closing the valley. Fuel, grass, and water abundant. Road good.	
5. SASAK TAKA ...	13	87	Out of main valley into side valley to south. First few miles narrow and stony; then opens out and travelling improves. Wood and grass abundant. Kirghiz camp.	

ROUTE No. 35—*contd.*

From Kashgar to Hunza viâ the Tagdumbash Pamir and the Mintaka Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
6. KASKA SU ...	14	101	Kirghiz camp up valley. Travelling good. Grass plentiful, but fuel scarce. Many Kirghiz in this valley in summer, but only a few in winter. Sheep, oil, and carriage can be procured.
7. CHAHIL GUMBAZ...	8½	109½	Kirghiz camp. Half a mile from Kaska Su the road turns up a small valley to south, and at another mile is foot of Kaska Su pass; first 200 yards steep; then for 3 miles winding through undulating grassy hills round head of valley to top of pass, 13,000 feet. In January 1873 snow lay to the depth of 1 foot. Ascent was neither steep nor difficult, but the descent was troublesome to laden animals on account of its steepness. Road good for ½ a mile along narrow ridge; then steep zigzag descent of 1,000 feet into Charlung valley to Chahil Gumbaz at junction of two valleys. Grass and water plentiful; fuel scarce. Route No. 37 comes in here from Yarkand.
8. PAST RABAT ...	9	118½	Road up valley to west for 2½ miles to foot of Torat pass; 1½ miles of ascent; not difficult for laden animals to top of pass, 13,400 feet; long steep descent into narrow valley. Road stony and bad into broad valley to south to Past Rabat. In January 1871 the water was frozen on the skirt of the mountain to a distance of 50 yards, so that laden animals had to be unloaded. Kirghiz camp at junction of two valleys. Grass, fuel, and water abundant.
9. TARBASHI ...	8	126½	The valley on the right leads to Tashkurghan by the Yam Bulak pass only used in summer. Up valley to left for 2 miles along narrow gorge, among rocks and boulders, the stream having to be crossed and recrossed more than a dozen times. Many hot springs in the defile. Steep ascent of 400 feet into upper valley, when road again becomes good. This route can only be used when the stream is low in winter and early spring.
10. SHINDI ...	17	143½	Up the valley for 8 miles of gentle ascent to the Chichiklik plain, about 1½ miles in diameter. To south-west is the Kok Moinak pass used in spring and summer, by which Sar-i-Kul is reached in one and half marches (see <i>Note A</i>). To north is the route by Yam Bulak pass before mentioned. The road over the Chichiklik pass consists of a gradual ascent along level, snowy stretch on the top, and then a rough stony descent on the west side. Bending to south a long descent, steep and stony, brings one to Shindi, where are a few Sarikuli huts.
11. TASHKURGHAN	19	162½	Down the valley for 4 miles to Yarkand river. From here a road up valley to east leads over the Shindi Dawan to Tarbashi. Continues up Yarkand river to foot of Tashkurghan. Road good all the way. Grass and fuel plentiful. Supplies obtainable. 200 to 300 scattered houses.

Tashkurghan, a mud fort, situated on the left bank of the river, which is broken up into several small streams running through a flat plain. The fort is about 120 yards in length by 100 yards in breadth, but of a rather irregular shape; the walls in some places are much higher than in others, the east side on the high bank of the river being the lowest. On that side there is a covered way leading down to the river. On every side, except the east, the

ROUTE NO. 35—*contd.**From Kashgar to Hunza viâ the Tagdumbash Pamir and the Mintaka Pass.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

ground is much broken up, and would afford excellent cover right up to the walls. There is no ditch.

Note A.—From Chichiklik to Tashkurghan by the Kok Mainak pass.

The ascent to the pass begins almost immediately over a long grassy slope. Descent difficult for ponies, and goes through a narrow defile down the bed of the torrent. Tagharma is reached at about 22 miles. No supplies. Grazing good. From here Tashkurghan is 18 miles. This route was taken by Captain Pemberton, R.E., in October 1892.

14. CHADAR TASH ...	60*	222½	The valley of the Tagdumbash river extends from Tashkurghan to the Khunjerab pass, with a branch on the west known as the Kara Chunkar valley and a smaller on the east, down which runs Route No. 38 to Raskam. As far as the old fort of Kurghan-i-Ujadbhai the average breadth is 3 to 4 miles; after that it gradually narrows. The Kara Chunkar branch is much narrower, probably being nowhere more than a mile wide, and generally much less. The aspect of the valley is bleak and dreary in the extreme, grass in patches along the river and boortsa scattered about the hills being almost the only vegetation, though higher up the valleys, near the head of the Kara Chunkar valley, the crisp grass of the pamirs is plentiful. It seems to be an extremely nourishing grass. The only attempt at anything like cultivation above Tashkurghan consists of a few scattered patches of poor looking barley about Dubda and Khushghum. The inhabitants of the upper parts of the valley are Kirghiz, living in yurts and changing their quarters according to the time of year. Their wealth consists of large numbers of sheep, yaks, camels, and horses. In the lower part of the valley the inhabitants are Sarikulis. The Pamir rises from 10,000 feet at Tashkurghan to 14,300 feet at the Khunjerab pass. Captain Younghusband went from Ilisu to Tashkurghan, 70 miles, in two days. Chadar Tash is the head-quarters of the Kara Chunkar Kirghiz.
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The route over the Mintaka pass is practicable for laden animals, but closed by snow from the middle or end of November till the end of April. Sheep and goats obtainable, but no other supplies. Grass plentiful; fuel scarce.

Note B.—From Tashkurghan to Kurghan-i-Ujadbhai by the left bank of the river.

This is but a track, and not to be compared with the road going by the right bank. Kuzghun, 10 mud huts, is reached at 10 miles, and Gelachurti at 28 miles. The track is very bad from here, and one has to scramble along the best way possible over rocks and boulders on the mountain sides. Kurghan-i-Ujadbhai is reached at about 40 miles. Here the river is crossed and the proper route followed.

15. MINTAKA AK SAI	12	234½	Ascend the valley of the Kara Chunkar stream at Mintaka Ak Sai. Fuel is scarce; grass plentiful. Kirghiz encampment with large flocks of sheep and goats.
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Note C.—From Kara Chunkar to Ak Tash.

A short distance from Chadar Tash a road leads off north over the Baiyik pass to Ak Tash. This route is practicable for ponies, and has been traversed by Russian "exploring parties."

Note D.—From Mintaka Ak Sai to Bozai Gumbaz by the Wakhujrui pass.

From Mintaka Ak Sai a route, practicable for ponies, leads over the Wakhujrui pass to Wakhan. It is occasionally used by the traders between Yarkand and Badakhshan.

* This distance is taken from the map. Captain Bower informed the compiler that the route is almost perfectly straight; that there are two halts between Chadar Tash and Tashkurghan; and that the road for the whole distance is fit for wheeled traffic, or with very little labour might be made so.

ROUTE No. 35—concl'd.

From Kashgar to Hunza via the Tagdumbash Pamir and the Mintaka Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	

Lieutenant Bower marched from Chadar Tash to the camping-ground of Kukturuk in 3 days. There is a lake at the top of the pass. Elevation 15,600 feet. The descent to the river is over flat rocks and crosses for 2 or 3 miles; then it becomes easier. Camp on the river bank. Follow the river for 15 or 16 miles, descending some 1,500 feet. Here is found grass. Five miles more north-west, still following the river, Bozai Gumbaz is reached (*see* Route No. 41, Eastern Hindu Kush).

Captain Younghusband found a new pass between the Wakhujrui and Kilik in 1891, and returned from Bozai Gumbaz by it. Altitude 17,000 feet. Practicable in summer for laden animals. The Wakhujrui route is shorter and easier.

There is a pass due north of the Kilik pass, which leads from the Tagdumbash Pamir to the Little Pamir. It is said to be only practicable for men on foot. It must be over 16,000 feet high.

16. FOOT OF MINTAKA PASS.	9	}	243½	} Road ascends the valley of the Mintaka stream, easy and practicable for ponies. The hillsides are often covered with large patches of good grass, and are much frequented by the <i>ovis poli</i> . The camping-ground is about 1½ miles on the north side of the pass, at a spot where grass is plentiful, but fuel somewhat scarce.
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17. MURKUSH	11	}	254½	} Ascend bed of stream for one mile; then zigzag up mountain-side to the Mintaka pass, 14,400 feet. At the summit in the beginning of November there was deep snow, but in the summer the pass is said to be free of snow. The mountains alongside are very high and rugged, and some of the peaks are probably close on 23,000 feet in height. The descent is very steep and difficult, leading over a number of boulders on to a glacier on the southern side. It passes over this for a mile and a half, and then descends the pebbly bed of the Lop Jangal stream to Murkush. The Mintaka pass, although the ascent and descent are steep and difficult, is practicable for ponies, and is the best route, and the one most frequently used between Yarkand and Hunza. Immediately before reaching Murkush the road descends a steep and difficult zigzag. Grass and fuel plentiful, but no houses.
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18. MISGAR	12	}	266½	} <i>Vide</i> Route No. 41, Eastern Hindu Kush.
19. GIRCHA	12		278½	
20. KHAIBAR	8¾		287¼	
21. PASU	10¼		297½	
22. GULMAT	8		305½	
23. ATABAD	9½		315	
24. HUNZA	9		324	

Route No. 36.

FROM TASHKURGHAN TO KALA PANJAH *via* AK TASH AND THE VICTORIA LAKE.*Authorities*—BIDDULPH, TROTTER, AND GORDON, 1874.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. KANSHUBAR ...	17	17	Due west from fort into Shignan valley. The first 3 miles of narrow defile stream with boulders, very difficult travelling, after which valley opens out and road gradually improves.
Fuel and grass plentiful. Elevation 12,980 feet.			
2. AK TASH ...	18	35	Up valley to right, and after a mile fork to left to foot of Neza Tash pass, 15,000 feet; 3 miles of gentle ascent; last 300 yards to top steep. Descend into valley running north-west. Along
this for 8 miles over low spur into broad Ak Tash valley running south. Grass and fuel plentiful. Elevation 12,600 feet.			
4. ISTIK ...	37	72	North up the Ak Su valley to the junction of the Ak Su and Isligh rivers. The latter goes through precipitous mountains. Here may be considered the commencement of the Great
Pamir. Grass and fuel in plenty. Elevation 13,220 feet.			
5. SHASH TAPA ...	18	90	Gentle ascent through open valley. Pass several broad ravines. Roads traverse the pamir here in all directions. Elevation 13,760 feet.
6. SAB-I-KUL ...	20	110	Gentle ascent to a low watershed and on to Victoria lake. Here Route No. 26 from the Bash Gumbaz pass crosses to Langar <i>via</i> the Benderski pass. The lake is 10 miles long and
not more than 2 miles in breadth. Very good pasturage in summer. Camp at east end on lake.			
7. MAZAR TAPA ...	16½	126½	Along the banks of the lake and down a gentle grassy slope. Elevation 13,760 feet. The distance from Mazar Tapa to Yol Mazar is given on the authority of Captain Trotter, but it would
seem to be almost double the actual amount.			
8. BILAOB BAS ...	20	146½	Gentle descent the whole way on the right bank of the Ab-i-Matz. Elevation 13,120 feet. Route No. 29 from the Khargosh pass comes in about here.
9. YOL MAZAR ...	11	157½	Along right bank of the river through a grassy plain.

ROUTE No. 36—*contd.*

From Tashkurghan to Kala Panjah viâ Ak Tash and the Victoria Lake.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
10. YUMKHANA ...	13	170½	} <i>Vide</i> Route No. 29.
11. LANGAR KISHT ...	18		
12. KALA PANJAH ...	6	194½	

Route No. 37.

HSIN KIANG

FROM YARKAND TO HUNZA *viâ* TASHKURGHAN AND THE KHUNJERAB PASS.

Authorities—YARKAND MISSION (NATIVE INFORMATION), 1873; LIEUTENANT BOWER, 1889; CAPTAIN YOUNGHUSBAND, 1889.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. YAKIR-I-KUR- GHAN.	20	20	Road passes over a well cultivated and thickly inhabited plain cut up by innumerable irrigation canals, which are bordered by rows of willow and poplar trees.

The fort of Yakir-i-Kurghan is rectangular. 100 paces by 100 paces, with small bastions at corners, walls 9 feet thick, made of mud, and kept in fair order; the ditch is about 30 feet broad at top, 12 feet deep, and 6 feet broad at bottom; it is commanded by the parapet. On each side of the entrance, which is on the south side, the walls are immensely thickened. On the high ground to the west, about 900 yards off, are situated two look-out towers. There are no troops, but it contains a custom-house.

2. KIZIL TAGH ...	23½	43½	Good road over the "Shaitan Khum" or "Devil's Sand."
3. ARPALIK ...	15½	59	At 7 miles the road passes along a very narrow ravine, very difficult to traverse in the afternoon owing to floods caused by the melting of the snow on the hills above. Along this ravine by

the Kizil river to the 12th mile at Tangitar, through which the road is extremely difficult, the rate of travelling with ponies not exceeding $\frac{1}{4}$ mile an hour. Kugiar, a camping-ground not to be confounded with the town of Kugiar (Route No. 34), is passed at about 30 miles from Yakir-i-Kurghan. Lieutenant Bower had to march from thence to Yakir-i-Kurghan owing to there being no water between these two places.

4. KHAZAIK-VIL ...	21	80	Over the Kizil Dawan at about 10 miles, and the Kara Dawan just beyond; thence from the village of Yamunarik the road passes down a tributary stream to the Charlung river.
5. TASH KERIM ...	14½	94½	Up the Charlung river, passing Yoya (15 houses), Mirgul (25 houses), and Bagh (30 houses). From Tash Kerim a footpath leads across the hills to Kinkol camp. Wood and grass.

ROUTE No. 37—*contd.*

From Yarkand to Hunza viâ Tashkurghan and the Khunjerab Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
6. CHAHIL GUMBAZ	19	113½	Up the river. Pass Alumbiti Kurghan. Route No. 35 is entered at Chahil Gumbaz.
7. PAST RABAT ...	9		
8. TABPASHI ...	8	122½	} <i>Vide</i> Route No. 35.
9. SHINDI ...	17	130½	
10. TASHKURGHAN ...	19	147½	
13. KARA CHUNKAR	53½*	166½	} <i>Vide</i> Route No. 35.
15. KHUNJERAB PASS	?	220	
		?	

As far as the Khunjerab pass the road is easy, leading up the broad pamir. The pass is 14,300 feet high, and is quite easy on the northern side, and is practicable for ponies; but on the southern side the country is said to be difficult, and the route is closed between the end of October and the middle of May. It is possible, however, to take ponies by it in the summer. The route enters the valley of the Hunza river between Misgar and Gircha. From camp to the Khunjerab pass is two marches, and to Gircha three more. No supplies, except sheep and goats, are obtainable. Grass is plentiful; fuel scarce.

18. GIRCHA ...	?	?	} <i>Vide</i> Route No. 41, Eastern Hindu Kush.
19. KHAIBAR ...	8¼	?	
20. PAST ...	10¼	?	
21. GULMAT ...	8	?	
22. ATABAD ...	9½	?	
23. HUNZA ...	9	?	
		?	

Route No. 38.

HSIM-KIANG

FROM TASHKURGHAN TO HUNZA *viâ* THE KURBU AND THE SHIMSHAL PASSES.

Authority—CAPTAIN YOUNGHUSBAND, 1889.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
3. KARA CHUNKAR VALLEY.	53½	53½	This distance was estimated only by Captain Younghusband. It is probably some 8 or 10 miles in excess. <i>Vide</i> Route No. 37.

* Estimated.

ROUTE NO. 38.—*contd.**From Tashkurghan to Hunza via the Kurbu and the Shimshal Passes.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
4. ILISU ...	16½	70	The road leads over the pamir, an open plain partly of stone and partly covered with grass. At 14½ miles a route leads off to the left over the Miriam pass to the lower valley of the Yarkand river.
5. TOLTI JILGA ...	11	81	Up the bed of a stream, and ascend at a steep gradient practicable for laden ponies to the Kurbu pass, 14,700 feet. Summit of the pass is rounded and smooth, and the descent is quite easy down the pebbly bed of a stream in a narrow valley. Tolti Jilga is at the junction of two streams, of which the northern one leads from the Kurbu pass. Grass and fuel obtainable.
6. KHAIAN AK SAI	8	89	Jungle becomes a little dense and at times obstructive. Descend the Ilisu valley. Camping-ground close to a hot spring. Grass and fuel abundant.
7. URUK SAI ...	11	100	The valley of the Ilisu becomes choked up with high jungle and trees which prove very obstructive to baggage animals. The stream itself is small. At the end of October it is about 10 to 15 yards broad and about 1½ feet deep. At 5½ miles leave the Ilisu valley and enter the valley of the Yarkand river.
8. CHONG JANGAL...	13¼	113¼	Ponies follow the bed of the river, crossing and recrossing several times, which, even at the end of October, is nearly up to ponies' backs. A road for men on foot, and which could be easily made practicable for laden ponies, lies along the right bank. The bottom of the valley is about ½ mile broad, covered with pebbles, over which the river flows. The mountain sides are in these parts chiefly shingle slopes, but at the side streams there is often an alluvial fan, on which are seen patches of scrub and grass and also trees. These parts used in former times to be cultivated. Grass and fuel plentiful at camping-ground.

Note A.—From Chong Jangal to Surukwat. 40 miles.

Three marches (Tashnuma, Azgar, Surukwat) up the valley of the Yarkand river. Road said to be difficult, but practicable for ponies. Grass and fuel plentiful. Surukwat is stage 6, Route No. 40.

ROUTE No. 38—*concl'd.*

From Tashkurghan to Hunza via the Kurbu and the Shimshal Passes.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
9. SHOR BULAK ...	16	129 $\frac{1}{4}$	Patches of high jungle and grass are met with. Follow up the valley of the Oprang river from its junction with the Yarkand river, crossing the former eight times, depth 4 feet, and fords very difficult, as the stream can only be crossed where the current is rapid, for where the current is smooth the stream is too deep. Grass and fuel are plentiful near a warm sulphur spring. Shor Bulak is a spot situated near the junction of a stream, 15 yards broad and 1 foot deep, flowing down from the Oprang pass. Up this stream a road used formerly to exist, but it seems now to have fallen into disuse on account of landslips. This track would join Route No. 37 near the Khunjerab pass. No supplies; grass scarce.
10. SHIMSHAL AK SAI	11		
		140 $\frac{1}{4}$	At 4 miles a patch of jungle on the right called Kuram-Jilga, near the junction of a small stream. The track goes up the valley of the Oprang river, crossing the stream 9 times, depth 3 $\frac{1}{2}$ feet, and very difficult to ford on account of its rapidity and strength.
11. AFDIGAR ...	8 $\frac{1}{2}$		
12. SHORSHAMA AGHIL	14 $\frac{1}{2}$	148 $\frac{3}{4}$	} <i>Vide</i> Route No. 40.
13. PASU ...	?	163 $\frac{1}{4}$	
14. GULMAT ...	8	?	} <i>Vide</i> Route No. 41, Eastern Hindu Kush.
15. ATABAD ...	9 $\frac{1}{2}$?	
16. HUNZA ...	9	?	
		?	

Route No. 39.

FROM SHAHIDULLA TO TASHKURGHAN *via* THE KILIAN PASS AND KUGIAR.

Authority—LIEUTENANT BOWER, 1889.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
The distances in this route are only approximate.			
1. GRUNJKURLIK ...	9	9	} <i>Vide</i> Route No. 33.
2. BOSTAN ...	9		
3. KILIAN ...	7 $\frac{1}{2}$	18	
4. KHOTEN BHAI KARGILL ...	9	25 $\frac{1}{2}$	
		34 $\frac{1}{2}$	

ROUTE No. 39—*cont'd.**From Shahidulla to Tashkurghan via the Kilian Pass and Kugiar.*

Number and names of stages	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
5. CAMP ...	18½	53	On descending the pass grass is plentiful and of good quality. Continue along the Yarkand road for 6 hours, and then strike west up a narrow valley, about 2 miles up to camp. Continue up the <i>nala</i> , and passing Namlung Mazar arrive at Kusnech, a Wakhi camp.
6. KUSNECH LOCH ...	15	68	
7. KARATAGH ...	16½	84½	The next camp is Karatagh, about a six-hour march. The Saragat Dawan (14,000 feet aneroid), one of the numerous ridges that intersect this valley, is crossed. Ascent is bad in parts, and the descent is steep. At Karatagh three valleys meet. Here are about 6 huts and some 3 acres of cultivation. It is the winter quarters of the Karatagh Kirghiz; Ghulam Yusuf Beg is the head. Elevation 9,100 feet.
8. SULTAN KALICH MAZAR.	20	104½	The Tonslar Dawan (14,600 feet) is crossed. Halt at Sultan Kalich Mazar. Grass plentiful.
9. IVOULONG ...	22	126½	Pass the Dana Ostang camping-ground at 4 miles from Sultan Kalich Mazar, and after 8 hours reach Ivoulong, crossing the Tupa Dawan (15,400 feet), a stiff pull.
10. SAMICH VALLEY	18	144½	Cross the Samich Dawan (16,000 feet), a long climb, but easy on both sides, and descend to the Samich valley.
11. AK MASJID ...	19	163½	From here the best road to Ak Masjid runs over the Kichik Yul pass (15,500 feet), a stiff ascent and descent for laden ponies. From the summit the road runs down a narrow valley with steep hills each side. After marching 7 hours the water in the <i>nala</i> ceases, and there is no more till Kugiar is reached.
12. KUGIAR ...	24	187½	<i>Vide</i> Route No. 34.
13. OSCHLECH ...	20	207½	From the Kugiar valley the road to the Tiznaf valley runs west over low, barren sand-hills; highest ridge is 10,000 feet. A long tiresome march—11 hours—before the village of Oschlech on the Tiznaf is reached. No water during this march. Apricots, melons, grapes, pumpkins, and walnuts abound in the valley, and Indian-corn is also grown. Elevation of Oschlech 6,450 feet.
14. OYUNG ...	12	219½	Another march over the low sand-hills to Oyung.
15. THANGNEASIE ...	14	233½	A 5 hours' march to Thangneasia, easy going through cultivation.

ROUTE No. 39—concl.

From Shahidulla to Tashkurghan via the Kilian Pass and Kugjar.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
16. MAZAR URZI ... in the Tiznaf valley.	10	243½	From here the road enters a gorge, and oats and peas take the place of Indian-corn. Just before reaching Mazar Urzi, the Askam Salgam <i>nala</i> is passed, up which a road leads to Mamoukh
17. EGHI ZARAK KURGHAN.	20	263½	Road now turns west, passing village of Dongiar. The Takhta Dawan (11,900 feet) is crossed, very easy, and crossed with ease in September, and well wooded. At Egghi Zarak Kurghan is a small fort and custom-house placed at the junction of three valleys. The fort is 49 yards by 49 yards; walls 12 feet high, built of mud and stone; base 6 feet thick, top 1½ feet thick, loopholed for musketry; ditch 5 feet deep, 12 feet wide. There is no garrison, but several officials connected with the copper smelting which is here carried on.
<i>Note A</i> —From here there is a bridle path to Yarkand. The natives call it a 5 days' journey, but laden ponies would probably take considerably longer.			
18. LANGAR ... (12,725 feet). Camp at Langar, a small village, just below the junction of the Tung and Yarkand rivers.	10	273½	The road now goes up a valley between rounded hills with a good deal of grass and some bold cliffs showing here and there. At the head of the valley cross the Arpatalla Dawan
The hills about here are perfectly barren and very precipitous, the Yarkand river flowing in places between cliffs which rise sheer up from the water's edge, thus shutting out all communication along the river banks. The ferry is about a mile above the village. No rafts are kept ready; when wanted they are made by the villagers of a framework of willow or poplar poles on inflated skins. Late in the year the river is fordable.			
19. TUNG ...	11	284½	On the south side of the Tung river. The valley near the village is very fertile.
20. RAHBUT ... is the Kirghiz encampment of Rahbut. Grass plentiful; wood <i>nil</i> . Elevation 12,000 feet.	10	294½	Follow the river by a bad road. There are patches of cultivation here and there, but in most places the valley is little better than a narrow gorge. On the east side of the Kotal-i-Kandhar
21. SH Aidan ... animals. Elevation 17,000 feet. Descent is easy. At Shaidan grass and water are found, but no wood; boortsa plentiful.	15	309½	An easy path runs over the Kotal-i-Kandhar (16,350 feet) till near the top. Ascent gradual, but stony. The top of the pass is very difficult, and may be considered impracticable for laden
22. WACHI VALLEY ...	12	321½	Descend the valley of the Wachi river, a small stream that joins the Yarkand at Baldir. Cultivation is met with, but trees are scarce. There is a flimsy sort of fort in the valley called Sharap Kurghan.
23. TASHKURGHAN ...	20	341½	From this valley the Tashkurghan valley is reached by crossing the Ogriat pass (14,400 feet), very easy, and descending to a place about 6 miles above the Tashkurghan fort.

Route No. 40.

FROM SHAHIDULLA TO HUNZA *via* THE SHIMSHAL PASS.

Authority—CAPTAIN YOUNGHUSBAND, 1887 and 1889.

Routes in
HSIN KIANG
+ GILGIT

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Interme- diate.	Total.	
1. TAR ...	14 $\frac{1}{2}$	14 $\frac{1}{2}$	This route is practicable generally for laden animals, but impassable during the summer months up till the end of August on account of the depth of the Yarkand river. No supplies obtainable. Grass scarce and bad; fuel fairly plentiful.
Road good and practicable even for guns. Grass plentiful and good the whole way; brushwood plentiful in the lower part; scarce higher up. Leaving Shahidulla, ascend open, pebbly valley, 400 to 600 yards wide; stream 2 $\frac{1}{2}$ feet deep, 15 yards wide. Khalchuskun, a plain covered with efflorescence and grass, is passed about half way, and also Karchin Jilga, where there is grass and brushwood. At Tar grass is plentiful and good; fuel scarce, but obtainable. Elevation 13,492 feet.			
2. KIRGHIZ JANGAL	22	36 $\frac{1}{2}$	Road bad for 1 $\frac{1}{2}$ miles; then good up to the Sokh Bulak pass; then bad again to Yarkand river. Grass and fuel very scarce on road, but obtainable in small quantity in ravine leading down to Yarkand river, and in plenty at Kirghiz Jangal.
Leaving Tar the road goes up the valley; here only 300 yards broad, bounded by rocky mountains. At 1 $\frac{1}{2}$ miles leave stony bed of stream, and keep along smooth muddy side of hill (left bank) for 1 mile; then cross Kuksin stream, 5 yards broad, and another. At 4 $\frac{1}{2}$ miles is junction of Sokh Bulak stream, up which is a road to the Raskam (Route No. 34). The Khalchuskun stream here flows over a pebbly bed 250 to 300 yards wide.			
At Sokh Bulak camping-ground grass is plentiful; no fuel; valley $\frac{1}{2}$ mile wide. Road now good over an earth and gravel slope on left bank of stream. Descend gradually into bed of stream again here (about half-way), 120 yards broad. The bed of Khalchuskun stream is left at about 2 miles further on, and the Sokh Bulak pass (17,093 feet) is reached by an ascent up a ravine at $\frac{3}{4}$ mile beyond. Ascent is gradual and easy; descent very steep for 600 yards down side of mountain to bed of a <i>nala</i> , which road now descends for 8 miles to its junction with the Yarkand river. Bed of <i>nala</i> covered with débris and boulders and going difficult. The pebbly bed of the river here is 600 yards wide; river 30 yards wide, 3 feet deep; cross twice. At Kirghiz Jangal the bed of river is $\frac{3}{4}$ mile wide. Elevation 12,286 feet. Captain Younghusband was 10 hours 50 minutes in traversing this stage.			
3. KULANULDI ...	11	47 $\frac{1}{2}$	Road good, following down bed of the Yarkand river, which is crossed at 4 miles, depth 2 $\frac{1}{2}$ feet. Fuel plentiful the whole way; grass at Sasbulak (8 miles) and at Kulanuldi valley generally about $\frac{1}{2}$ mile broad. Lower part of mountain sides shingle slopes; higher up rocky precipices. Elevation 12,637 feet.
4. CHIRAGH SALDI...	18	65 $\frac{1}{2}$	Continue down the pebbly bed of the Yarkand from $\frac{3}{4}$ to 1 mile broad, crossing it ten times; depth 2 $\frac{1}{2}$ feet. At 6 miles camping-ground of Tokanak, to which Route No. 34 comes from Yarkand <i>via</i> the Yangi pass. At 10 $\frac{1}{4}$ miles is a patch of good grass called Bulak Bashi, and a mile beyond this the Kanbaskan stream, 15 yards broad, 1 foot to 1 $\frac{1}{2}$ feet deep, flows in from the south. At Chiragh Saldi fuel and grass plentiful.

Note A.—There is a road hence over the Chiragh Saldi pass joining Route No. 34 at the north foot of the Yangi pass.

ROUTE No. 40—*contd.**From Shahidulla to Hunza viâ the Shimshal Pass*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
5. IGAR SALDI ...	13	78½	Still down the valley. At 2¼ miles stream from north. At 6½ miles another stream from the north, up which a difficult track leads to Pakhapu. Beyond this the road crosses over the end of spur running down from the north, and at 8 miles ascend on to a fine patch of grass and jungle called Urdok Saldi. Pass over this for ¼ of a mile, and over a mass of boulders. At 10½ miles cross a plain with remains of houses on it, formerly occupied by Kirghiz, called Karashtarim, 3¼ miles long by 600 yards broad. At 12½ miles a path leads by steep zigzag over a spur to Igar Saldi. This path is only practicable for footmen, and ponies have to be taken round the spur for a mile, crossing the river twice. Grass and fuel plentiful. The camping-ground is in a gorge, the valley having narrowed to a width of 300 to 400 yards with lofty precipitous sides.
6. SURUKWAT ...	11	89½	Still down the valley. On leaving camp the river has to be crossed four times to round a cliff 3¾ of a mile, a patch of grass and jungle. At 1½ miles the Bazar Dara stream, 20 yards wide by 1½ feet deep, flows in from the north, and at the junction there is a fine patch of grass and jungle known as Ush-dawa.

From Ush-dawa ponies have to follow the Yarkand, crossing and recrossing it several times; but a path practicable for footmen leads over a spur, saving about 2 miles. At 10 miles is the Mohammed Khoja gorge, where the valley contracts and the river flows through precipitous cliff. On September 1889 the river was up to the ponies' backs, and flowing so rapidly that it was impossible for them to cross loaded, and the baggage had to be taken over on camels. On September 21st, 1887, Captain Younghusband crossed with ponies, but with some difficulty, and at one place had to make a path round a cliff. At ½ mile beyond the gorge the Surukwat stream joins in from the south. There is a camping-ground called Kul, where is good grass and high jungle on the Yarkand. A few hundred yards up the Surukwat stream is the Surukwat camping-ground. This march is a trying one owing to the depth of the Yarkand river. By the beginning of October, when the waters have fallen, there is no difficulty in crossing. Elevation 11,316 feet.

Note B.—Up the Bazar Dara a road leads over the pass into the valley of the Kulan-Argu river, and from thence over the Takta Kurum pass into the valley of the Tiznar river.

7. AGHIL BOHOR ...	12¾	102¼	Road good enough for 10½ miles up the pebbly bed of the Surukwat and Aghil pass streams; thence bad. Grass and fuel plentiful for 5 miles; then grass scarce; fuel can be found here and there the whole way.
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Ascend the Surukwat stream for 2½ miles till it bifurcates; then ascend the western branch, still over a pebbly bed, ¼ mile wide. At 4¼ miles a camping-ground with plenty of grass and fuel. At 9 miles a stream, 12 yards wide and 9 inches to a foot deep, joins in from the west, and at 1½ miles beyond this the Aghil pass stream passes through two narrow gorges. It is possible to take both camels and ponies through these gorges, but a rough steep pathway exists up the right bank of the stream. The first gorge is 150 yards long, and the second 250 yards. Both are narrow, in places only 5 yards wide; bottom rocky and covered with boulders, and the stream, about 2 feet deep, flows with a very rapid current through them. Beyond the gorges the road is very bad, leading up the bed of the stream, which is here covered with big boulders for 1¼ miles, and then ascending the right bank. The camping-ground is in a small plain on the right bank of the Aghil pass stream. Grass and fuel fairly plentiful.

ROUTE No. 40—*contd.**From Shahidulla to Hunza via the Shimshal Pass.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
8. SHAKSGAM ...	11½	113¾	Road fairly good. Leave Aghil Bohor, ascending the Aghil pass stream, and passing for 1 mile over a plain 400 yards wide. At 1¼ miles a stream comes down from the west through a valley ½ mile wide, and about 6 to 8 miles long. At 3½ miles pass ruins of a hut near a patch of very good grass. The ascent is now easy and gradual over the long slopes leading from the eastern range. Grass plentiful; fuel scarce. At 6½ miles reach the summit of the pass, where there is a small lake ¼ mile in length (15,266 feet). Descent down a ravine, covered with boulders, rather bad. At Shaksgam a small patch of good grass; fuel scarce. Camp on right bank of the Oprang river.
<i>Note C.—From Shaksgam to the Saltoro Pass, 33 miles.</i>			
This route is impracticable for military purposes on account of glaciers. Ascend pebbly bed of Oprang river from ½ to ¾ mile broad. At 2 miles small patch of grass, a mile to the left, called Kulan Jilga. At 7 miles fine patch of grass and jungle, Darbin Jangal. Beyond here no brushwood is obtainable. At ¾ mile further on a stream, 15 to 20 yards wide, depth 1 foot, flows in on the right bank. Cross the Oprang three times, 2 feet deep, and divided into many channels. At 15 miles is Gusherbrum Jilga camping-ground on the right bank. Small amount of low scrub about, which serves for grass and fuel. Leaving this camp the first 4 miles of road is good; then the Oprang has to be crossed several times. Being a glacier river it varies in depth with the time of day. At 10 A.M. it was 3½ feet deep with a strong current. Ascend the moraine of the Urdok glacier, going fair for 2 miles; then very bad. Scrub is found at the end of the glacier. The breadth of the glacier at the end is 1,000 yards. Camp at 24 miles from Shaksgam. Still ascend the glacier; going very bad, and ponies not able to keep their footing on the thin layer of gravel which covers the ice. No grass or fuel. Camp at 27½ miles from Shaksgam. Ascend the glacier, up a medial moraine, near foot of Saltoro pass. No grass or fuel. The pass is so steep and difficult as to be impracticable for any except practised mountaineers. Camp at 33 miles from Shaksgam. Time taken by Captain Younghusband in traversing the last three marches was 8½ hours, 8½ hours, and 7¾ hours respectively.			
9. SARPOLAGGO ...	18	131¾	Descend the valley of the Oprang river; bed ½ to ¾ of a miles broad, crossing it six times; width of river 20 to 30 yards, depth 2½ to 3 feet; mountain sides rocky and precipitous.
Camp on the left bank of the Sarpolaggo stream, up which lies the route by Suget Jangal to the Mustagh pass (<i>see</i> Route No. 40-A). Fuel and grass scarce.			
10. KARATAGH BULAK	12½	144¼	Follow down the valley of the Oprang, crossing the river six times; width 30 to 40 yards, depth 2½ feet to 3 feet; valley ¾ mile wide; hillsides steep. At 6 miles on the left bank are some remarkable waterfalls, and near them are patches of good grass. At camping-ground there is grass and plenty of jungle. This is the best camp on the route, and is much frequented by the Kanjutis. Elevation 11,208 feet.
11. YALPAK TASH ...	13½	157¾	Cross river nine times; depth as before. Fuel plentiful; no grass. Bhusa plentiful, but no grass. Elevation 10,523 feet.

ROUTE No. 40—*concl'd.**From Shahidulla to Hunza via the Shimshal Pass.*

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
12. AFDIGAR ...	12	169 $\frac{3}{8}$	Road good. Cross river seven times; depth 3 feet to 3 $\frac{1}{2}$ feet; current rapid. At 3 $\frac{1}{2}$ miles pass Shimshal Ak Sai. Here Route No. 38 from the Tagdumbash comes in. Grass and fuel plentiful.
Road then leaves the Oprang valley and ascends the right bank of the Afdigar stream for 5 miles, when it descends by a zigzag to the bottom of a ravine, on the opposite of which is a Kanjuti outpost, consisting of two towers connected by a wall, which completely blocks the way; this is usually known to the Kirghiz as the Darwaza. Beyond this cross several small <i>nalas</i> , at which there are small walls of defence. Several stretches of good grass too are crossed. Grass and fuel plentiful.			
13. SHORSHAMA AGHIL.	14 $\frac{1}{2}$	183 $\frac{7}{8}$	Ascend the Afdigar valley for 1 $\frac{1}{2}$ miles, and then turn off westward up a steep zigzag, in the left bank of the small stream running down from the pass. Ascent for 1 $\frac{1}{2}$ miles is steep, but not difficult. The summit is a pamir, and presents no difficulty. A mile from the top is a small village inhabited in the summer time by the Kanjutis. There are two lakes on the summit. Elevation 14,719 feet. Descent is equally easy till within $\frac{3}{4}$ mile of camp, where there is a steep zigzag to the bed of a stream which flows down from a glacier. Grass obtainable, but no fuel, except dry dung.
16. PASU ...	P	P	From here a road leads to the Hunza valley, descending the Shimshal river to Pasu, but from all accounts it is very difficult, crossing three passes over subsidiary ranges, and leading by planks laid along the cliff sides. Ponies cannot be taken by this route, but a Kirghiz captive informed Captain Younghusband that they are taken by the Murkhun pass (also a very difficult route) to Murkhun, a place three marches higher up the Hunza river than the junction of the Shimshal stream.
17. GULMAT ...	8	P	} <i>Vide</i> Route No. 41, Eastern Hindu Kush.
18. ATABAD ...	9 $\frac{1}{2}$	P	
19. HUNZA ...	9	P	

Route No. 40-A.

FROM SUGET JANGAL TO SKARDU *via* THE MUSTAGH PASS.*Authority*—CAPTAIN YOUNGHUSBAND, 1898.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	

This route is now disused and quite impracticable for military purposes. For three marches the path ascends the glacier; at the upper end there are two passes leading over the Mustagh range. The eastern one is just barely practicable, though with extreme difficulty, for foot passengers; the western one, which the natives call the Yangi Dawan, is

ROUTE NO. 40-A—concl'd.

From Suget Jangal to Skardu viâ the Mustagh Pass.

Number and names of stages.	DISTANCE IN MILES.		Remarks.
	Inter- mediate.	Total.	
1. PARONG ...	8	8	For Suget Jangal, see stage 9, Route No. 40. There are no supplies till Askole is reached.
2. CAMP ...	6	14	Continue up the glacier, occasionally getting a footing on the mountain side. From here there are two routes—one to the new and one to the old Mustagh pass. The former is now entirely closed.
3. TSOKAR ...	7	21	
4. ZOBSANG BRANGSA ...	13	34	
At 8 miles a large glacier is met ; no fuel ; a few weeds for animals to eat. Ascends the glacier ; very difficult.			
atmosphere, however, makes it impossible to advance for more than a dozen or twenty paces at a time. Descent is so extremely difficult that no one would attempt to cross except as a matter of absolute necessity. At the bottom of the pass is a glacier broken up into many dangerous crevasses. A little fuel, but no grass. Estimated altitude of pass 19,000 to 20,000 feet.			
5. BALTORO ...	18	52	Continue down the Spang-la glacier to its junction with the Baltoro glacier ; thence along the right bank of the latter. Wood and grass plentiful.
6. GOLEP ...	20	72	Descend the glacier for 6 miles further, when it ends abruptly ; thence down the Braldu river three huts at Golep.
7. ASKOLE ...	18	90	
15. SKARDU ...	60	150	} <i>Vide</i> Route No. 65, Gazetteer of Kashmir and Ladakh.

[G. C. F.]



INDEX MAP
TO
ROUTES FROM RUSSIAN TERRITORY
IN CENTRAL ASIA
TOWARDS
AFGHANISTAN AND INDIA,
Part II.
Compiled in the Intelligence Branch by Lieutenant W. R. Robertson.
1893.



MAP OF THE PAMIRS AND SURROUNDING COUNTRIES.

Compiled in the Intelligence Branch, Qr. Mr. Genl's Dept., Simla, 1892-93.

Scale 1 Inch = 16 Miles.

Miles 0 10 20 30 40 50 60 70 Miles

LIST OF AUTHORITIES CONSULTED IN THE COMPILED THIS MAP.

Mr. Hayward	1868	Colonel M. S. Bell	1868	M. Potchamko	1868
Shaw	1869	B. G. Woodthorpe	1866	M. Sveretsov	1877
Captain Wood	1872	Lieutenant Bower	1890	M. V. Milderoff	1879
The Harrier	1872	Captain Tyler	1891	Dr. Siegel	1880
Lieut-Colonel Gordon	1872	Lieutenant Davison	1891	Captain Kosenko	1882
Sir D. Forryth	1872	Mr. Littlehale	1891	Lieutenant Bouderski	1885
Captain Trotter	1872	Major Howars	1891	M. Kozakoff	1886
The Mulan	1872	Major Cumberland	1891	M. Capra	1887
Colonel Thomsen	1881	Captain Youngshand	1887-91	N. Kozakoff	1887
M. R.	1881			Lieut-Col. Grombchevski	1889-91
Mr. McNair	1885			M. Ivanovna	1891
Mr. Key Elias	1886			Lieutenant Cockhill	1892-98

