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 GRAMMES BY THE ROUTES IN PATE II.

PART IT.



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## this Book.

## NOTE.

THE want of complete route books leading from the Russian possessions in Asia towards Afghamistan and Indi.. ${ }^{*}$ ing 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 Dorih and the Karakorum passes.

Scction II.-The Kabul line of adrance 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.
$\left.\begin{array}{c}\text { Simla; } \\ \text { The 20th February 1893. }\end{array}\right\} \begin{gathered}\text { E. R. ELLES, Colonel, } \\ \text { Assistant Quarter Master General, }\end{gathered}$

Intelligence Branch Diary No. 41 of $1892-\frac{\text { Russia in Asia }}{\text { Afghanistan }} . "$

## PREFACE.

IN compiling the routes given in Part II, the Chimkend-Kulajn postal road has been taken for the base. From this base Roules 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 Oxas Provinces, 1989.
Gazetteer of the Eastern Hinda Kush, 1888.
Report of a Mission to the Northern Frontier of Kashmir.-C(in)tain Younghusbunl, 10S.9.

Various Reports by Captain Younghusband, 1891.
Report of a Journey in Chinese Turkistan.-Lieutenant Biwer, 1859-90.

## The Regions of the Upyer Oxus by Robert Michell.—Proceedings of the Royal Geograplical Society, 1884. <br> The Russian Pamir Expedition of 1883.-Proceedings of the Roynal 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, 1576.
Description of the Hill Route from Kashograr to Russian Turkistau, 1877.

The Turkistan Regina by Colnul Kotenta, 1550.

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

Through the Heart of Asia.—Bonvalot, 1889.
Route from Ighiz Yar to Bar Panjalı.-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 via the Pamirs.-Belcy.
Gilgit to Taskkurghan.-Lientenant Stewart, 1591.
Pamirs to Marglilan.-Lieutenant Davison, 1891.
Gilgıt to Ak Tash via the Khora Bohrt Pass.—Raja Khushwakht Khan, 1890.

Captaiu 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.
$\left.\begin{array}{c}\text { Simla, } \\ \text { 24th November 1892. }\end{array}\right\}$

W. R. R.



## Section I.-The pamir line of advance.

## PART I.

sHORT MILITARY REPORT ON THE FERGHANA PROFINCE, KASHGAR, THE PAMIRS, AND UPPER OXUS AFGHAN PROVINCES.

## PART II.

ROUTES LEADING FROM THE CHIMKEND.IULDJA YOSTAI ROAD TO
THE HINDU KUSH BETWEEN IHE DORAII AND KARAKORUM PASSES.

## MAPS (in POCRET.)

1. Index Map of Routes.
2. Map of Pamirs : 1 inch $=1 \dot{u}$ miles.


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## Maln LINES Of advance.

## From Osh to Hunza and Lei viá Kashgar.

This route was followed by the mission under Kurnatkin in 1876. The From Osh to Kashgar, strength of the party was 64 persous and 104 saddle Route No. 21. and pack horses. The mission left Osh on the 20th October, and, proceeding by easy marches riai the Terek Dawan pass, arrived at Kashgar on the 6th November. It is the caravan road from Ferghada to Kasbgar, 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 Osll, was to le extended to Sufi Kurghan, and Mr. Macartney added that the Russian consul at Kasbgar thought it was possible that before long it might Le extended to Kasligar. Later on Mr. Macartney heard that several huadreds 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 add Irlieshtam.

From Kashgar the Tagdumbash Pamir may be reached in ten marches by the somerwhat difficult route of the Gaz defile; it

From Kashyar and Yarkant towards Humza and Leh. is generally practicalle 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 Tagdambash 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 Shalidulla, the route now in use ly 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

> Supplics on the route to Leb. 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 foree 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 Chitrati, Gitcit, and Hunza viá the Pamirg.
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, Houte 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 groes over a cornice which overhangs a precipice, now over steep declivities (called by the Kirghiz filya), now amidst heaps of stones that cut the borses' feet, now over so-called balconies. These balconies consist of cross-beams thrown from one corvice 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 importauce.

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

Cultivater patches are only met with at Daraut Kuruban at an altitude of 8,000 feet. Here are sown in the smallest quantities wheat, barley, and lucerne grass (jenushika). 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 thas 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 bigh, and consequently present no difficulties in the way of progress.
"The current of the Kizil Su is swift, buteasy, because of the even and gradual fall of the valley. The waters of this river do not whin or foam, as do those of many of the mountain rivers of Central Asia. Its bottom is firm and strewn witt pebbles. The water of the Kizil Su is in the bighest 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 till up supplies and forage for their passage along the next section of the route. 'Ihe Alai valley seems suitable for such a depôt, especially as carts can le used for transport of supplies to it."

The second section of the route has been traversed in different parts by

From the Alai valiey to the Ak Hatul. Whs ghabi juncioul.

Spertsoff, Kortenkn, Ney Elias, (irombeheffshy, Yonoff, and others. The result of therr discoveries is as lollow: :-
"The lofty basin of the Alai is covered with excellent grass and wril watered. From the entrance to the Kizil Art dufile 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. Grase thronghout the whole route from Kizil Art to the 'luyuk pass is only met with in places, sometimes more than 10 rers/s apart. Moreover, thrie spots are not large, so that moving with horses here it is absolutely necessary to cary barley. 'The Kizil Art pass (l 1,0 ono feet) is suitable for passage. Bryoud the pass the road offers no obstacles, except the want of forage and fucl (dungr).
"The defile of the Little Chon Su is broad, and lhe road might easily be mate for wheels. At the junction of the Chon Su amd the Uzbel 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 verste ( 5 miles $2 \frac{1}{2}$ furlongs), but only tho first $\frac{1}{2}$ verst ( $\frac{1}{3}$ mile) is steep.
" The soil of the ascent is, however, soft, and it would be easy to make a road with gentle zirzags ; beyond, up to the summit of the pass, the ascent is extremely gentle. The descent to the Ak Batal 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 Tuynk prese is at a height of about 14,000 feet, the summit of the ascent being ahout $1+4,4)^{\prime}$ feet Tae summit of the pass before the descent is little under la, $0 C 0$ feet. 'ihe foot of the pass in the Ak Baital valley is about 14,600 feet. One may presume that the pass is open for about balf the year, from June to December. On descending from the pass, the ruad 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 $\underset{\sim}{0}$ furlongs) stony, passing over fine pebbles. Then for another 25 versts ( 16 miles $4 \frac{1}{2}$ furlongs) small, gentle, and soft hillocks follow, with cobble stones scattered over them ; beyond, as far as the Ak Su, the rod is quite even, and only in places covered with fine pebbles; it is rravelly 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 $7 \frac{1}{2}$ 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 reachies $2 \frac{1}{2}$ feet. In the end of the month, at all hours of the day and night, it is not more 1 han $1 \frac{1}{2}$ 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 fect.

[^0]In the vicinity of Bulun Kul would be the thind supply depot.

Severtsoff's description of part of this section is as fullows :-
"The road, which had a south-east direction throughout along the Als 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 $A k S u$ and Alichur.
"Only in the first 12 versts ( 7 miles $5 \frac{3}{3}$ furlongs) at the Yaman Tal strcam 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 siles of the pass to Kara Su aud 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 repurt says:-
"From the Alichur the expedition at its full complement again went to the Great Pamir by the most iuteresting and practicable Khargosh pass, and on the second day descended to Yolmazar."

Besides the above there is a route (No. 26) leading to Sarhad ly the Bashgumbaz pass. It appears to present difficu!ties which prevent the possilility of its use.
A. practicable route (No. 2b) for animals leads up the Ak Su valley to

From the Ak Baital. Murghabi junction towards Huna and Gil. git viâ Ak Tash. Ak Tash; thence to Sarhad-i-Wakhan ly the Litrle Pamir ; and to the Tagdumbash Pamir and Hunza by the Baiyik or Kukturruk passes, or ly the Khora Bohtt pass and Karambar valley to Gilgit.
There are also routes (No. 2b) by the Year Meuse, Kizil Robat, 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, $109 \frac{1}{2}$ miles from Osh, the cart rond to the former entirely simplifying the first portion, and enalling the troops to go forward thence fresh and well-stocked with supplies:
(4) the Russians themselves attach great importance to the Osh-AlaiAlichur 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 unprocurable, yet large flocks of sheep, goats, and yuks are kept Supplies on the Pamirs. by the Kirghiz, and fur 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 supportitself in a march across the Pamirs. Fuel is somewhat scarce, but sufficient quantities of scrub and dried dung for cooking

[^1]purpises could always be obtained. But fow complaiuts have been made by even Russian exploring parties of any lack of grass at their encamping grounds, thongh they have almost invariably travelled in considerable numbers. 'Ihus Yonoff in $1 \mathrm{S92}$ had two sotnias of Cossacks under him. Ivanoff and Benderski in 1884 had a large retinue. Even Grombeheffsky lost only one horse. All these and other parties have scoured every nook and corner of the Pamirs, crossing nearly every pass. They bave naturally taken barley for their cattle and food for themselves they have brought from Ferghana. 1vanoff, 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 folder and brushwood for fuel. * * * I have no occasion to describe this (Alichur) valley, becanse it has been explored and depicted before by M. Severtsoff. I will only say in a comple of words that the advantages of this valley consist mainly in its exteusive irrigation, and consequently in its rich pasturage."

## Fhom Marghilan to the Alichur Pamir viá Daratt Kurghan.

This route was taken by the detachment of infantry which escorted

Prom Marghilan to Soma lash (uchr liulun Kul vini Daraut KurElam, lioute No. 27.

Lientellant Davison from the Pamirs to Marghilan in 1891, and also by Yonoff in 1892. A bout one march from Soma Tash the Khargosi pass road is struck. The road between Alai and Soma Tash is described by Lieutenant Davison as "something fearful." The country seems quite nuinhabited 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, 广onoff with his force of 700* men and 2 guns in Jyye 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 via Karatigin.

Tl is is the main road connecting the Zarafshan with Karatigin. It leads From Khojent to from Ura Tapa to the Zarafshan village of Pakshif; Glarm $w, a$ the l'akslif pass, Route No. 20. of the Zarafshau to the valley of the Surkhab."

From Gharm a practicable road for animals goes via Kila Khum to Bar
From Gharm to Bar Panjal, Route No. 28. Panjah. Mulammad Shah states that since Darwaz las 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
From Bar Panjah to the Doralı pass and Chitral. Chitral by the Dorah pass is 84 miles; or a route (No. 30) can be taken to Faizabad, $83 \frac{3}{4}$ miles, and from thence the Dorab 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.

[^2]
## DESCRIPTION OF THE COUNTRIES THROUGH WHICH TIIE roUtes Pass.

## THE FERGHANA PROVINCE.

The cuuntry included in the Ferghana province as now constituted represented formerly the tertitory of the Khanate of Khokand, and came into the possession of the Russians with the taking of the city of the K hokand in March 1876. The provioce is now one of three into which the Turkistan mililary 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
Boundaries. the north-western boundary of the Ferghana province as far as the Alexandrofsk mountains, which thea bound it on the north as far as their highest point opposite to Pishpek. From here the boundary turns south along the bills on the rioht bank of the Jumgal river to the Urum-beli pass, and thence by the derghana mountains to the Suek pass. From this puint it follows the frontier with Chioa duwn to the Uzbel 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 (Karatigin and Darwaz) to the Takhta Kuram pass. The frontier between the Takita Kuram and Uzbel passes is not now defined by the Russians, though it is sometimes spoken of vaguely as croxsing the Pamir platean, as, for instance, by M. Ostroumoff in his "Geography of the Turkestan Conntry," which is apparently the official geography now used in all the Government schools in Turkestan.

Note. In the Russian Staff map of 1977 this boundary was distinctly laid down as passing west to the Tuynk pass, and following the monntans Mustagh on the south of lake Karakial to tho Takita Kuran pass, and it is only since the recent explorations of the Russians on the Y'ami's 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 adrance 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 Ku-h mom. tains, and direct continuity of her boundaries with the frontiers of our own northern protectorates of Clitral and Hunza.

The importance of the consileration 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 proviuce is sub-divided into five districts, each under a nachalnik or superintendent of the district, and are named after the principal Administrative division. towns in them as follows: Osh, Marghilan, Andijan, Khokand, and Namangan.

The total extent of the province is about 36,014 square
$\Delta$ rea. miles.

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

Alai valley, the valley of the Kizil Su , called lower down in its course the Surkli-ab or Waksh river. The remainder of the province is nocupical 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 ly almost
The Ferghana valley. impassable mountain country, and it is ouly on the west that a narrow strip of land, about six or seven miles in width, unites it with the Khojend valley aud general steppes of the Samarkand and Syr Daria proviaces.

It is amygdaloid in form, about 160 miles in length and 66 is breadth.

All the life and wealth of the province is concentrated on the southern hank of the Syr Daria; the country on the north, being more ol' 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 aud Marghilan), and the rest fertile " loan"" 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. Fou this reason the general impression conveyed is that of an endless sea of gardens intersected by numerous canals.

The chicf occupation of the settled inhalitants 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 seatered along the southern shore of the Syr Daria, but not generally on the river bank itseli, 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, Audijan, and others.

There are about one million inhabitants in the Fergbana valley, or alont

Population of the valley. $2 s$ 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 Kashoar in Felruary 1891 , gives the population of the whole province as only 690,000 .

The Alai valley or platean is about 93 miles in length by 7 to 10 in
The Alai valley. 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 liasten 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,

[^3] parts of the Alexandrofsk and Susamir, the Ferghana, the Alai, and Irans-Alai, and part of the Hissar mountains.

The Chatkal mountaios form the northern boundary of the Ferghana valley, and are not very high, though separate peaks rise
Chalkal montains. 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 Kazfliusk. In the valleys and ravines is good pasture, and also wild fruit trees.

The chief passes are Chanash, Afiatun, and Chapchama, through which
Passes. in summer a brisk stream of commerce passes from Siberia riat Aulia-ata. They are also important as the avenues by which the Kirghiz from the steppes in the north and northwest drive their flocks into the Ferghana valloy.

The average beight of the Alexandrofsk mountains is 10,000 feet; opAlexanlrofsk moun- posite to Pishpek, 15,000 . The northero slopes are tailıs. lut in the valleys and jut en ther, juniper, and mountain-ash. There is also grood pasture for the Kirghiz flocks.

The chief are the Ut-mok leadingr into the Ferghana valley, and Raratiul Passes. leading from Pishpek.
The Fergbana or Uch-Sait mountains protect the Ferghana valley on the north-east and separate the province from that of
Ferghana mountains. Semirechia. There are forests and coal in the outlying branches. These mountains give rise to numbers of small rivers Howing intu 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
Alai mountains. all along the south of the Ferghana valley up to the Zarafshan glacier, where they reach their greatest elevation; their average height is 12,0 ( 0 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
Passes. 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 The Trans-Alai moun- are still higher than the Alai, and in the eastern portains.
tion 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 Pre some very high peaks, e.g., Kaufman, Gurundi, and Kizil Agi, all about 23,000 feet bigh.

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

The Hissa: mountains are a further continuation of the Thian-Shan beyond
The Hissar moun- the Alai. Height $](6,000$ to 18,000$)$ feet. This range tains.
forms the water-parting hetween the Zarafshan and Kizil Su rivers, and separates the Rokharan Khanate from the Russian dominione. The northern slopes are eacy and covered with vegetation, the southern being precipitous and bare. In the valleys are the uanal juniper and a few other trees.

The passes in the part of the Hissar mountains in the Ferglama province are Passes. $\quad$ very important, as by them lie the main roarls leading the Pakshif, through which the main road leads to Gharm (the capital of Karatigin), Kila Klum, and Faizabad The Yarlihich and "'crok pases are both very difficult, the latter especially so.

For further description of these passes, see Routes Nos. 19 and $\geq 0$.
The Ferghana province is watered ly the sources of two great rivers of
Watering of the pro- Central Asia, the Syr and Kizil Su, a tributary of the vince rivers. Amu-Daria. The Syr Daria, thus mamed after the junction of the Narin and Kara-Daria near the hown of Namangan, flows through the Ferghana valley. The Kizil Su does not juin the Amu-Daria at all in the province. All the other rivers and streans in Ferghana are trimtaries and feeders of these two.

The length of the Syr in the Ferghama province is alinat 200 miles ; it is very swift and not mavigable (nwing to the rapils near
The Syr Daria.
Khooljend) exsept for ralts and boats. There are momerous ferries over it (the Russian (overnment keeps up $n$.) less than fifteen of these, at a yearly cost of 7,0 , 0 roubles, in the Ferghana provine 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 ferrizs and boats, sce Routes.

The Kizil Su is fordable almost anpwhere in its course in ihe Ferginana
Kizil-Su. pronince. 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 Lakes. south of the 'I'rans-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 Namangran district is a very deep fresh-water lake called Sarichilek, and two salt lakes called Ah-siken and Balikchi.

In comparison to its size, the Ferghana province contains more ground under cultivation than any other part of Russian
Resources.
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, ricc, and jugara.

Large quantities of lucerne are also grown, this grass giving 4 or 5 yields a year; as fudder, it is best for animals when dried to form hay. Most ordinary vegetables flourisb, but pctatoes are not grown. Vines and fruit of most Luropean kiuds grow in abundance.

No grain being exported from Ferghana, it would appear that, notwiths!anding 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 concs from Ferghana. Attention is now being paid by the Russiaus to tree-growing, and large nurseries are being planted.

Coal and petrolenin 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. Sheen rasing, on the contrary, forms the chief ocenpation 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.
Gold is found in the upper courses of some of the mountain streams,
Minerals. and there is also said to be lead, copper, and in some parts irom in the mountains.
The Russians have now 47 colonies scattered along the Syr Daria, and there is not apparently room for any more immigration at present.
lexcept 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 wiater. 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 litile used in Ferghana.

Telegraphs.
Marghilan is in telegraphic enmmunication with Tashkend $\dot{i} \mathfrak{a}$ Khokand and Khojend, and directly with Osh.*
The chimate of lerghana is more temperate than the rest of Russian 'Jurkistan, and but little soow falls in winter. In
Climate. su:umer it is very hot in the valleys. 'Ihe tuwn of Osh enjus peculiar adrantages as to situation and climate.

The total population is divided pretty evenly between those leading a sedentary and those leading a nomadic existence. To the
Ethography. fooner belong (1) the Uabegs; (2) the Tajiks (of Iranian pxtraction, the original imhabitants 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 Uzbegs, and the Kipchaks are a mixed race, apparently of 'lurkish origin, thung they greatly resemble the Mongols in appearance. $\dagger$ 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 oulcha district are also Dunganis and Taranchis of Chinese extraction.

[^4]The fort and town are on the Gulcha river, and the situation commands the road up the valley, and also the Chichborchik gorge.
Gulelin. The raison d'étre of the fort is primarily the control of the neighbowing Kirghiz. It is described by Kuropatkin as a redouht with round bastions suitable for a garrison of about 2 companies of infantry, J00 Cossacks, and $\notin$ guns.

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

In writing the above article the following works have heen consulted: "The Turkestan Region," Kostenkn; "Western Turk-
Bibliagraphy. estan," 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 Tuikestan," Elint; and the "Geography of the Turkestan Country,' Ustroumoff.

KASHGAR.
The country now most cominonly called Kashgar or Kashgaria has at different periods of its history been known under differ- generally spoken of either simply as Turkistan or, to distinguish it from the Turkistan proper, as Bilad-ns-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 Charhtai Khans. In the time of the later princes of that dynasty, however, the name of Kashyrar, their capital, came into use to designate the plain country south of the Ala Targh in contradistinction to Mogholistan proper. And this oame of Kashgar has ever since been the one must commuly used to represent the great basin of the Tarim river, though other names have been applied to it in whole or in part ly foreigners. Thus by the Chinese conquerors it is now called the New Dominion, aud by modern European authors Chinese, or Castern, Turkistan.

The northern boundary runs obliquely bet ween $39^{\circ}$ and $43^{\circ}$ north latitude Boundaries. from the Terek Dawan in $7: \rho^{\circ}$ to Pichan in $9:{ }^{\circ}$ east longitude, and is formed by the southern watershed of the Ala Tagh mountains. The southern boundary has never been delimitated. The eastern boundary cuts the parallels of $92^{\circ}$ and $85^{\circ}$ of east longitude from Pichan in north to Chachan on the south between parallels $43^{\circ}$ and $36^{\circ}$ north latitude, and presents an undefined border formed by the shifting sand of the Gobi desert. The western boundary runs from the Terek Dawau to the Uzbel pass. Beyond this point it has never been defined.

Kashgar may be said to have an approximate area of $2 \downarrow 3,750$ square miles. But it must be borne in mind that by very much the greatest part of it is an uninhabited waste. Tu 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 Russiau advance across the Hindu Kush and Mustagh mountains between the Dorah and Karakorum passes,

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

[^5]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 characterizel as much by the rigour of its climate as by the aakedness of its hills. Glaciers are found on its more elevated ranges, and there is everywhere an absence of forest trees. Nevertheldss, 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 ofif the steppes which buttross the main range.

The lowland division comprises the lelt of hill slirt at the base of the boundiner ranges. It is the most populous part, and is the only portion which is permanently setted 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 sulficient moisture to form mud bogs and marshes, on whieb 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 dramage channel for the whole country. 'Iher are the Khotan, Yarkand, Kashgar, and Ak Su rivers. These streams mostly flow in wide channels. Their volume varies accordiog to season; thus in wiuter even the largest of them is fordable, whilst the smaller ones are generally frozen over. In summer they are so swollen by the melting suows that they fill the whole of their wide channels, and form in some cases a stram 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 inbabitants.

The desert division oceupies 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 $N_{0 r}$ to 4,000 feet on the Yarkand border. It is traversed by the four rivers which go to form the Tarim, and by that strean itself. On the banks of these rivers grow narrow belts of poplar, willow, tamarisk, and tall reds. The greatest portion of this division is an umitigated waste; horses cannot traverse it owing to their sinking knee-deep in the soft soil; whilst to man the dust proves sulfocating, and the glare from the snow white salts is blisding.

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 descrived here.

The inlabitants consist of a mixture of tribes or races which belong to one Inhalisitants. or other of those two great Central Asian familiesnamely, the Turk and the Tartar. For the sake of descriptiou, they may be clussed under the heads of urban and rural. The urhan 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 rumal 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 Flun 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 Hesh is also eaten. They do nut cat the ch"ppati, but make leavened rolls of fiue white four.

They are excellent agriculturists of a timid and vacillating nature, and were they otherwise than the guietest and most sulmissive people in the world, the Chinese would be incapalle of kepang order in the country, while in any case they are quite unabla to recist an invasion.

For deseription of the nomad p pulation, see article on Kirghiz, page 37. The Yarkand Mission Report, $1874-75$, gives the population of the Kashar state as 1,015000 souls, but Colonel Bell thinks 2, (000),(1)0 to be nearer. The bulk of the population profess the Muhammadan religion.

The principal crops are Indian-eorn, harley, wheat, rice, and lucerne
productions. grass; the latter crop on good ground yields five cuttiogs a year. The Turkis own a large number of horses, small sturdy animals, well alile to do long journeys. They are well fed on dry lucerne grass-a most nourishing food,-mai\%e, 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 derrees below zero. The Chinese own the best borses however, their cavalry being mounted on most serviceable animals; a little sinall ald slow compured with our ideas of troopers, and more the styla of the Cossacks' horses, Lut they are well able to perform long jourueys. The average height is $1: 3-14$ hands, and price Rs. t; 0 to Rs. 70. The Chinese also own many excellent mules which are raised in the east about Turfan and in that neighbourbood; they sell for much bigher prices than the horses, and some are of a class well suitel for mountain batteries. Good serviceable denkeys are numerous, abl are much used for light caravan work, \&e. 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 K ishgar, aind 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 Climate and seasons. times, the trilling 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 seasous in the plain country are distinguishatle 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
Language.
$\begin{aligned} & \text { or less difference of idiom and patois in the several } \\ & \text { divisions of the country, and that of Ak Su is said to be }\end{aligned}$
the purest.
The chief towns in the western division are Khotan, Yarkand, Yangi CLief towns. Hisar, Kashgar, Ushturfian, 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 Conquest of Kashgar an unbroken record of civil war between two religious by the Chinese. parties-of a struggle of which now the Chinese and now the neighhouring 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 Chivese with unchanging patience gut the best of it. Eventually, alter a very bloody war, the sovereigaty of the Chinese was established in 1757. Nevertheless, the Chinese authorities by not maintaining a proper army in the country held very iosecure tenure for a considerable timc.

In 1856 , in Yunnan, the south-west province of China, there broke out the most formidable of all the Massalman 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
Yakub Beg. in Eastern Tlurkistan, 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 Kasligar 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 18i7) on the plea of performing a pilgrimage to Mecca, Yakub Beg remained the sole and absolute ruler of Kashgar, and, through his own eneroy 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 Turkistnn suggesting free trade within Kaslgarian 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 seut his nephew to the Viceroy of India to negociate 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 negociations with Yakub Beg relative to the free movements of: Russian merchants within the limits of Kishgaria, the Governor-General of Turkistan engaged his attention with the repair and rec onstruction 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 mercbants 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 bad 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 ararchy which prevailed to again take possession of the country. But there appears to have been little real fighting. As the Chinese advanced, the Andijanis retired into their own country again, while the Turkis went on ploughing their fields, troubling themselves very little as to who should rule them for the fature.

In 1879 Mr. Ney Elias, Officiating British Joint Commissioner at Ladak, received an unlooked-for invitation from the

Our dealings with Kashgar since the death of lakub Beg. Goveruor 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 vii 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 1580 Mr. Lilias was sent by the Government of India for the purpose of eoquiring 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 haviug come fully into force, he had no opportunity of ascertaining its influence on the trade of the comatry, 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 18833 the full eifects of the Russo-Chinese treaty of 1881 began to be felt. This treaty provided for the complete freedum of commerce between the two territories. From 188:3 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 lodian trade.

In 1855 Mr . Ney Elias was again sent on a mission to Kashgar with a view to imprcve our political relations with the Chinese Provincial Government
in Turkistan, and to remnve, as $f_{a r}$ as possible, the restrictions then placed upon Indian trade in that country. With regard to the first of these oljeets, the chiel nim of the Government was to establish a permanent political agency in Chinese Turkistan. The second olject 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 oljeects could be accomplished withont the consont of the Chinuese Government, a letter was sent to the Chargé d'Affaires at Pekin requesting his assistance in obtaining the necessary co-operation of the Chinese. It was shown that Indian trade was unrecogrized, and that British suljects 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 slown 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 fillow the correspondence which ensued with the Pekin Legation. The Chargé d'Alf:ires apparen!ly only brought before the Chinese Government a part of the proposcd measures, the estahlishment of an agency was not even mentioned by him, and the reply he elicited from the Tsungi Yamen regarding the trade was a curt refusal to take the proposals of the Government of Iudia into ennsideration.

The province of the New Domininn forms a separate local Government

## Adininistration.

 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 Tautai or Commissioner, who is also superintendent of trade, \&c., and has ubder his jurisdiction the four districts of Kashgar, Yangi Iisar, Yarkand, and Khotan. These are usually administered by a Che-li-chon ur 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 laving been abolished in 1883.Captain Younghusband says:-"'I he 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 bave a reputation for taxing heavily, and they do not seem to command the same respect as the Chinese. The liussians are feared, and their power is certainly respected ; but this so far from making them popular spenis to have an opposite effect, and their advent would certainly not be weleomed. As regards the feeling towards ourselves, I am enovinced that it is distinctly favouralile. The Chinese officials, too, are favcurably disposed to us, though, when Russian and English interests clash, to prevent annoyance from the linssians, who have a consul at Kashgar, while we are uncepresented,* they are inclined to side with the Russians rather than with us; and, though they lowk upon both ourselves and the Russians as barbarians, I think they look upon usas the less barbaric of the two, and respect us as the conquerors of India."

[^6]The following estimate of the number of Chinese tronps in Kashgaria was furnished by Mr. Macartofy in August 1891 :-
Aring.

| Place. |  |  |  |  | Cavalry. | Infantry. |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Khotan | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 150 | 400 |
| Yarkand | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 200 | 800 |
| Yangi Hisar | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 220 | 400 |
| Maralbashi | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 400 |
| Kashgar | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 200 | 400 |
| Yangi Shahr | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 300 | 2,800 |
| Ushturfan | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 200 | 400 |
| AkSu | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 400 | 2,500 |
|  |  |  | Total | $\ldots$ | 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 disurganisation 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 Clinese 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. Karawals or frontier Captain Younghusband visited several of these posts in posts. 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 Afgban 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.

## 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 Mus-
Mustagh range. tagh, and the Karakorum mountains. The eastern pertion, 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 ( $\mathrm{K}-2$ ) 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. Perbaps the largest glacier on the northern side is that
running down in an easterly direction near Suget Jangal. This is some 2b miles long and about 2 miles broad, but it is surpassed ly the Baltoro elacier on the soutbern side of the Mustagh pass, which is 38 miies 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 sonthern sile reach considerably lower Thirty or forty years ago men used frequently to eross the Mustagh and Saltoro passes, whereas now such a thing is pever heard of.

Across this range there are the following passes :-
(1) Kara korum ( 18,550 ). - Easy and practicable all the gear round for ponies and cam.ls (houte No. 33).
(2) Saltoro.-Now disused and quite impracticable (Route No. fo, Note C).
(3) Mustagh (about 19,000'). -Now di used and quite inpracticable (Route No. 40-A).
(4) Shimshal $\left(14,700^{\prime}\right)$.- Easy and practicable for ponies (Route No. 40).
(5) Khunjerab (14,300').—Eass and practicable for ponies (Route No. 37).
(6) Mintaka (14,400).-Practicable for ponics (Route No. 35).

Betreen 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, aud Mintaka. But the value of the varions routes leadius 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, althongh the Mustarh mountains may be crossed comparatively easy, an invading army would find it well nigh impossible to force its way through the IIunza gorges, or the deep valleys leading into Ladak, if resolutely opposed by even a few troups.

To the north of the Mustagh mountains is the Kuenlun range. It is characterised by the bold and rugged appearance of the
Kuenlun range pealks. The mountain-sides are perfectly bare, but along the bed of the streams in the nothern side good stretches of jungle are often met with. The principal passes across this range are the Sanju (16,650'), the Killian ( $17,800^{\prime}$ ), the Kilik* ( $17,000^{\prime}$ ?), the Yangi ( 16,000 ), the Chiraghsaldi ( $16,000^{\prime}$ ?), Tashkurghan, Isak, and the Kukliang. The first three of these are all steep and difficult passes. The Yangi and Chiraghsaldi are fairly casy. 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 nther two named nothing is known except that it is said that ponies may be taken across them. The sonthern 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.
'Ihis range runs in a general north-west direction between the Mustagh
Aghil range. 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 ( $15,300^{\circ}$ ), a remarkably easy one, being a Pamir-like depression between lofty rocky mountains. Grombcheffsky crossed it on 31st OctoLer 1859 , and found it " smooth, grassy, and casy."

[^7]This range runs out from the Mustagh mountains in a northerly direction
The Kurku range. from a point near the Khunjerab pass. T'he 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,
The Yurkand river. 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 timough 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 Septemier 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 sca-level, the thermometer, cven in the midule of October, falls to $4^{\circ}$ Fahrenbeit. Captain Bower crossed the Killian pass en roule from Leh

> Climate and productions. , in August, and writes:-" Here (half way up the pass) we had our first taste of cold. Although the thermometer only went down to $2: 3^{\circ}$, there was a biting wind, and I have often felt the cold less trying when the thermometer was helow 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 deseription are almost $n i l$, a small amonnt of timber being the only thing obtainable, besides jungle, scrub, and corrse grass. The Kirohiz keep large flocks of sheep and goats, and also a fair number of camels, yoks, and ponies. In the neighbourbood of Shahidulla there may be between 30 to 10 camels and 50 to 60 ponies, and perhaps the same number of yales. The inhabitants round about the sources of the 'lizmaf in Pakhpu have nothing in common with the Kirghiz. They are a distinct population. They rear large flocks of sheep, but keep few horses, yalis, camels, or mules. The grain produced is insufficient for their requirements

## THE PAMIRS.

The derivation and meaning of the word "Pamir" has nover 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 depp, 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 EasternTurkistan 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 ty, 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 Kirgbiz 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, excepl 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 montlis 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 bot, but the nights always cold. Captain Younghusband says :-"I have seen the thermometer at zero (Fahrenheit) at the end of September, and $18^{\circ}$ 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 yakis are driven up to graze by the Kirghiz, Wakhis, and Shignis. The Kirgliz, 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
thes generally migrate to Kashgaria, to the upper part of the Shakhdara in Shignan, and to Alai.

The name is applied to one of the northern Pamirs lying south of the
Khargoshi Pamir. Alai valley, with which it is connected by the Kizil Art pass leading across the Trans-Alai range.
This Pamir may be said to extend from the Tokhterek pass to the Ak
Rang Kul Pamir. Baital river. It is described by Severtsoff as a wide, 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 onis pelii 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 hang 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 Surez Pamir. the valley of the Ak Su in the vicinity of Sarez has 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 Alichur Panir. pass and lake Yeshil Kul. It is drained by a river 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 suow in summer, hut 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 approacbed. In consequence travellers to Shignan generally leave the Alichur valley at Burzilla and travel to Sardim viá 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 watershyd saparating it from

> Tinglumbash Pamir. the Little Pamir; on the soutla 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 moantain ranges rising to 2,000 feet or 3,000 feet above it. It may be said to commence, one branch at the Klunjerab pass and another at the Wakhujrui pass, and to extend down to 'Tashkhurgan, where the district of Surikul begins. It is inhabited chicely 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 alout 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 Tashkurghan to 14,300 at the Khunjerab pass. It is mostly eovered with coarse scrub and gravel, but there are also some fine stretehes of good grass. Fuel is very scarce, and the inhalitants genemally 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 probally about 20 camels, 30 to 40 yaks , and 60 ponies.

The Great Panir is a grussy valle $y$, about 90 miles in length. It is said Great Pamir. to begin at Buharak, 2 miles beyond the junction of the Ab -i-Matz with the Pamir :iver, 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 ly low spurs from ranges that rise about 5,000 feep above the plain on the south and 2,500 feet on the north side, giving absolute heights of 18,000 feet and 15,500 fiet respectively, the Pamir itself being from 12,000 feet to 11,000 feet above the sea. The summer route from Wakhan to Yarband lies through the Pamir, as also a route to Shigoan by the Joshangaz pass. Roads lead to the Little Pamir over the Year Meuse, Kizil Robat, Uita Bel, Benderski, and Waeram passes.

The Little Pamir resembles in all respects the other Pamirs, except that

> Little Pamir. 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 cwo heads of the Panjah braoch. 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 wiater 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 hranch of the Wakhan river, which rises near the Wakhujria as far as the junction of the Litile Walihan Pamir. Pamir stream at Bozai Gumbaz, is known as the Pamir-iWakhan. During the winter it is frequented by Wakhis on account of its right bank facing soulh, and consequently receiving the largest amount of sunshine.

## THE AFGHAN PROVINCES.

A province of Afghanistan which is immediately under the governorwakhan. ship of Badakhshan. Abrlul Rahim says:-
"From aocient times the Mir of Wakhan used to send to whoever was the ruler of Yarkand, on lehalf of China, the following presents: two greyhounds, two skins of siuhposh (foxes ?), and two skins of sulisu (?). If the A mban was satisfied, he presented two pieces of silk, two pieces $k / 4,4 m p u$ (?), 24 bricks of tea, 10 China cups, gold embroiderell (loth (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 indenendent, although the Mir occasionally sent some inconsideralle tribute to Murad Beg, a chief of the Kataghan Uzbaks, who had asserted his power over Badakhshan and the neighbouring teritory. 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 bis derth in 1875 . He is said to have won the attachment and respect of his prople. Fateh Ali Shah was a younger brother of Muhammad Rahin 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 Badaklishan, Fateh Ali Shal 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, $1^{2}$ cows, and 12 blankets, which had been fised as the yearly due from Wakhan, the Mir remarking to Colonel Gordun-" No money is asked, for the country has none." l'ateh Ali Shah spoke bitterly of the crucl exactions which had been made from him by the rulers of Badakhshan, and stated that he greatly preferred the Afghans as masters. Fateh Ali Slab 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 proviuce 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 aksakial, namely-(1) Sad-i-Sarbad; (2) Sad-i-Sipanj ; (3) Sad-iKbandut; and (4) Sad-Ishtragh.

The last named was once an independent principality. Its Alksakal is the bereditary Naib of Wakhan.

The population before Ali Mardan fled was about 6,000-i.e., 300 houser. 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:-

$$
\begin{array}{lcc|lll}
\text { Sad-i.Sarhad } & \ldots & 122 \text { houscs. } & \begin{array}{l}
\text { Sad-i-Panja, or Sipanj } \\
\text { Sad-i-Khandut } \\
\text { Sad-Istragh }
\end{array} & 87 \text { houses. } & \text {... } \\
\text { Sat houses. } \\
\text { So houses. }
\end{array}
$$

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

They wear chapkians or chogas of wool, with postias 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 bis 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 grood qualities, is yielded by the goat of Wakhan.
'They are all Shiahs, 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 putaside one-tenth of their goods and their alins 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 louked 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 barl-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 liussian 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
the winter abd spring down the valley of the $\mathrm{O}_{\mathrm{x}}$ us is unfavonratle to vegrtation. Fruit-trees do not grow, except at Ishtragh. Above Kala Panjah the only trees are willow and virch, while above Sarhad junper is the most common tree. From Khandut downwards thick groves of poplars are common iu the villagres.

Yale, cattle, ponies, goats, and sheep are largely reared; in fact, thanks to the excellent pastures of Wakhan, the chief wealth of the penple lies in their llocks and herds. A considerable amnunt of wool is exported. 'Traders from Yarkand bring cotton and silk, and take back ponies, sheep, and warm choyas. Rice, salt, aud cotton cloth are imported from Badalihshan.

## Shignan.

Formerly an independent Tajik state, now an Afghan province.
The frontier of Shignan with reference to Koshan is at the darband on the Panjah about 5 miles above the mouth of the Murghali, and from the darband eastwards it is the watershed hetveen the Ghund and Bariang valleys; but this boundary after all is only now a district one, and has ma further interest. 'The interuational boundary betwern the dforan and Bokharan dominions is the important one, and in considering this we must include Roshan. I'he boundary between Roshan and Darwaz on the Oxis is on the left bank the Tanershab nala and on the right bank the Shipid rafah, while from the Oxus inland towards the north-east the boundary is formed by the watershed between the Bartang and Yaz Ghalam valleys. For further datals conceruing this boundary, virle article Rushan, page 32.

To the west the boundary of Shignan may be talien 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 Diurnaralsht 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 liue is considered to cut the hills opposite the Sanc-i-Surakh.

Eastward of the valley of the Oxus the southern boundary of Shignan may be taken as the watershed dividine the Shakb Dara from Wakhan, and afterwards the Alichur from the Great l'amir. Captain Younghustand visited the P'amirs in 1890, and reported: "I have made careful enquiries in the matter, and $I$ am unable to see that the Afrhans 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 imporance; and, on the other hand, I find that the Chinese have occupied the conntry in former times, and have now again established their authority ever it."

As regards the north-eastern boundaries of the A fghan 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 territury, though they are marked within the green line on our maps.* All the Kirghiz assert positively that their people in the Kizil Jik valicy are Chinese subjects, and are under a Beg who carries tribute to Kashgar. I'hey had never heard of tho: regions being elamed by Russia till I mentioned it. Round the Kul itself there appear to be no resident Kirahiz, and those of the Alai are
said never to visit Kara Kul or Kizil Jik for pasture, \&e. All my inform. ants agreed that the Kizil Art pass over the range running east and wrest between the Kul (lake) and the Alai Pamir is the Rassian boundary, and that a Russian pillar has been built on the top of the pass to mark the frobtier between Russian and Chinese territory in this direction, while no pillar or mark of any kind exist on the sonth of the range. I was also informen that the Russians hat never levied any taxes south of the Kizil Art, thongh they take taxes regularly from the Kirghiz of the Alai on the northern side. The Brg of Rang Kul and his penple were very accurate in most of the information they gave me, and I should have been inclined to trust them on this peint withont confirmation; but, while travelling afterwarls up the Murghatif 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 grean line in question, they probally have some knowledge of the sulject. They had no jdea of Great Kara Kul and Kizil Jik leing Russian territory, and said that the Russians bad never claimed jurisdiction over those parts, nor had they ever levied taxes from the imhatants as they do from the Kirghiz beyond the Kizil Art pass. As for themselves, they eonsidered that they were subjeets of the rulers of Shiguan for the time being, whoever these might be, and their count:y a portion of the Roshan provinces. In this they are borne ont by all the shignis and Roshanis who have any knowledge of the suliject, and I think it maly safely be assumed that all the Kudara sources, as marked in our latest maps from Russian surveys, are according to ancient usige 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 Eul water-parting about nine or ten yeurs ago by Prince Witgrustein's expedition, and it is just possible that the Ruscian Government may have recognized the acguisition by marking it on their maps, but may never have assumed jurisdiction over it. 'Ithus the Kirghiz inhabitants may still consider themselves with good reason to he 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 Hakin of Shignán with nuzar or tribute! it appears that nazar is sent every year by the Rang Kul Kirghiz to the Shionnan anthorities, hat the matter is kept secret from the Chinese; and thugh the Afrhans are well aware that the same people also carry tribute to Kashgar, yet, strangely enough, they make no olijection to being the inheritors of a divided allegiance. For people like the Kirghiz to pay tribute to two or none 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 berder lands, how dangerously ill-defined the frontiers must be where such thinoss 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 reengnized boundary is the great watershed between the basins of the Alai and the Murgbabi.

## With refereuce to the Afghan-Chinese boundary, Elias says:-

"I had heard reports of the Kirghiz of the Alichur and other transMurghabi valleys having been summoned by order of the Chinese to withia
the right bank of the Murghahi, and on arriviner at that river I found that these ruports were perfectly corvert. In the time of the Shiguan Mirs, the Kirghz, who lived beyond the left lank of the Murghabi, paid tribute to Shignan; when the Afghans took the country from Yusuf Ali in $188: 3$, they sent out and demanded the customary tribute, which was paid as usual. But $\boldsymbol{y}$ t this time the Chinese, fearing a general Afghan advance, and bolieviner the Kirghiz would be used against thom, despatebed a Bug from Kashghar with intructions 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 'lash downwards is considered by all the people in this regrion, including the Alghans, to be the frontier between Chinese territory atod the provinces of Shignan and Wakhan. The act of the Chinese in thus praclically pointingreut what they hold to be their frontipr must be considered an importantone in a region where all frontiers are so lonsely defind as on the Pamirs. It is, moreover, an undisputed fiontier from the prosent, for the Afyhans recognize it, and, as far as one can judge from their actions, seem willing to accent it as the line which ancient usage has laid down as the limit of their 'Tajik provinces. Still they have never taken formal possese sion of any point on the left bank of the Murghab, nor performed any act that can lie held to show that they do more than tacilly accept it as their trontier. Indeed, no Afghan official, as far as 1 am aware, has ever shown himself above the settled villiges of Roshan, Ghumd, Shakh Dura, or Wakhan during the two years that these provinces have been in the Amir's possession. 'The Murghabi line makes a orod frontier, or, at all events, 1 can see nothing in it to object to ; nor do I know oí any lime in the neighbourhood that might be considered a better one. It would probably never be attacked, and in time of peace wudad not withdraw from the Amors amy more than half a dozen sepogs for the purpose of guarding it. In settled countries ivers that are easily crossed form bad boundaries, but in nomadic countries one line is neally as good as another; and, in the abseoce of an iamcessible range of hills, even a small stream like the $U_{\text {pper }}$ Murghati would serve as an indication as well anthing else either natural or artificial. Abrut eight or nine years aro a liussian officer, who knew these parts (Colonel Kostenko), wrote: "The extent of cuntry Letween the most southern portion of the province of Ferghanand the pass melitioned above (the Baroghil; lies in the Pamirs, and belongs to no one.
This belt of no-man's land must prolialsy, sooner or later, be incladed in Russian dominions, which will then be in immediate contact with the range forming the water-partiog from the Indus." It is precisely this fulfilment of a Kussian desire that I believe can be frustrated ly closing up Afghan and Chinese territory to a common frontier line across the belt in question, and leaving to Russia only the pussivility of violating it by an open act of aggression or war."

The main geographical features of Sighnan are:-(l) the Oxus river with its great tributaries on the right bank of the Murghabi or Ak Su and the c mbined stream of the Gluand and Shakh Dara ; (2) the Pamirs to the east, with the great mountain ranges with spring from them. ln fact the while country is a mass of stupendous mountains seamed by deup valleys. The only iahabited tracts are the valley of the Oxus, that of the Murghali, and those of the Shath Dara and Ghund. The northern poition of Shiguan is
letter 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.

Shighom is said to be richer than Wakhan. Villiges and cultivation abound on buth bavks of the ()xus, especially near Bar Panjah.

The best accuunts 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 ferw miles below the fort, and camped the first evening at Sacharv on the right bank. Down to this point the Panjab valley is wide and comparatively populous. The villages in their erchards sland usially on the open spurs of the hills, at some height above the river, and in summer wouk 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 inhalistants live on it to the exclusion of almost every other kind of food in the sama way as iu some parts of Kashmir and Baltistan. Mulberries form a regular food-crop. In addition to these, apples, pears, apricots, and waluuts are the most common fruits, and there are also grapes and melons of different linds, and some sorts of plums. Inmediately 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 ont from the right bank and forms a cliff overlooking the river. Ibis spot is called the 'Darband.'

[^8]Muhammad Shah's totals considerably exceed the above; and, thoumh there is modoubt that they are excessive, they are given them for what they are worth. 'They probabliy give a fairly correct idea of the proportionate population of difiterent districts.

| Slieplnan. |  | Villigres. | flatige. | Porulatinn, |
| :---: | :---: | :---: | :---: | :---: |
| Wiamud to las Baju ... ... | ... | 32 | 1,23) | (6.15) |
| Khof |  | 5 | 119 | 539 |
| Laju |  | 3 | (i) | 300 |
| Prarshineo (up to Baju) | ... | 18 | 413 | 2.1169 |
| Warshinco (shadul to Washnima) ... | $\ldots$ | 30 | 510 | 2.701 |
| Washarwa, Glar Zahin, and Viar or Vir | *- | 28 | 419 | 2.45 |
| Da:marokh, Avaring Samarh |  | 15 | 210 | 1,314 |
| Total | ... | 131 | 3,127 | 15,1:45 |
| Barta ${ }^{\text {a }}$ |  | 14 | 3010 | 1,500) |
| (ilund ${ }^{\text {a }}$ |  | 35 | $401)$ | 2.010 |
| Suclian |  | 26 | 3110 | 1,50 |
| Shakh Dama |  | 28 | 4:0 | 20.201 |
| Total | ... | 1113 | 1.45) | 7,2,0 |
| Gband Total | ... | 2:34 | 4,477 | 22.345 |

There are no towns in Shignan, but Bar Panjah has an approach io a lazur, and it and Wamar are places of comparative importance. 'I be climate varios greatly with altitude. While in Pasar it is extremely rigornas, in the Roshan part of the Oxus valley it is comparatively mild, the alitude there being only a littie above 6,010 feet.

The whole of the inhabitants of Shignan, Roshan, and Gharan are Shigni-speaking* Tajiks, and mostly unclerstand Persian. The whole of the inhabitants of these provinces, as well as a large prepretion of the Darwazis, my be reckoned as shiahs of the Ismaili sect, or followers of the late $\mathrm{A}_{\mathrm{g}} \mathrm{ha}$ Klian of Bombay.

The Kirghiz of Pasar and the Panirs of course speak their own tongue.
The history of Shignan is an important sul,ject, 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 Bukhara, who appears to have first converted the peoply to Sunni Muhammadanism in his capacity of Pir, and then to have become liar over them. Long afterwards the people become Shiahs, though the family of the Mirs remaned Sunnis till the last. When Shah-i-Khamosh lived I have not becn able to ascertain, and there are no wriften historits in the country. l'robably it was about the same time as the ennversion of the Badakhelis, or early in the 7th century. Ihis, at all events, is what the Khan Mullian of Badakhshan thinks probable. $\dagger$ The Pir's shriue exists to the present day iu a vil' age close to the Bar Panjah fort, but it contains, I believe, no record from which a dite can be ascertained. The earliest Mir of whom the people of the present day seem to have any distinct knowledge was one shab Mir, whose death is estimated to have taken place about 120 years ago. He was the father of Shab 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 reiga.

[^9]On one of the stone inscriptinns at the buzar it is recorded that Shah Wanji built the eanal mentioned above in the year of the Hijra 1201, or 1786, but it is not known how many years he lived after that date. Shato Wanji is credited with bring the founder of the slave-trade, the first Mir of Shignan whon sold his subjects into foreign countries; and his three lineal descendants have shom themselves to be worthy successors by keeping up the practice for nearly a hundred years. His character, as far as one san glean it, seems to have been that of a typical Central Asian khan, who by means of persomal energy and some warlike instincts* succeeds in makiog a mark in the obseure 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 sul,ject to Murad Beg, the Mir of Kunduz, the Shah of Shignan paying tribute to that ruler to the extent of 10 slaves every year, and receiving from him the errresponding value in preseuts."
"A‘ter Murad Beg's denth, Muhammad Khan, who ruled the country when Pandit Manphal 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 leen the leading power amone the smail principalities on the Uppor Oxns, and there is reason to believe that Wakhan, Darwaz, and others were at one time among its tributaries. It also appears to have bean with great dilliculty reduced to a state of dependency by Kunduz, and is said to have been subsequently at open war with Badakhshan in 18i1."

Russia is said by Venyukoff to have hat no dealings with Slignan or Darwaz ; * * * But writing in 1877, he says "that the fact of the Karit 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 Rushim abuint 1858 or 18.59. Abdur Rahim had married one of his sons (named Shah Mir) to the dangbter of Ismail, Mir of Darwaz, who considered that his son in-law should have brugght w.th hien the province of Roshan. Abdur Rahim, however, declined to part with Roshan, inet 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 alter this event Abdur Rahim died, and was succeeded by his son Yusuf ali, who culed the country till 1853, when he was carried a prisoner to Kabul by the present Amir.

There seems little doult that for very many years Shignan, like Wakhan, has been tributary to the de facto rulers of Badakhsian, and that hoough the Shignan rulers may also have paid tribute to buth China and Bukhara, yet the ruler of Budukishan 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 Shiguan 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

[^10]it Roshan, is now just as much an Afohan district as K host or Kumar, while any attempt hy Ruscia to seize it under the pretence of supportins sone mythical claims of Bokhara would lie a flagrant vinlatiou of Afghan rights.

Shignan is now administered by an Afghan hation who has his headquarters at Bar Panjah. The Shignis have a fairly good reputation as fighting men, and at all events have always heaten the Darwazis. Load, iron, and the elements of gunpowder are fornd in the country. The manner: and customs of the people are similar to those of the Wakhis and Badakhshis. There is no fanatic: sm, and none of the lawlessors 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.

Glaran.
A district on the upper Oxas or Panjah extendingr for some 24 miles along buth bauks of the river between Shignan and Ishlashim.

The Ishkashim boutary is thus described by Mr. Elias :-
"About $2 \frac{1}{2}$ 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 ia called "Abrang-i-Salfed," and there is no artilicial 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 iodicate 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 Shirnan, page 2.).
Trotter in his Gazetteer gives the following account of Gharan :-
"This dicirict, 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 ben saliject to Badakhshan In addition to rubies, the small state of Gharan produces a certain amount of gold which is watched for in the sand of a large stream of warm water, known as the Garm Chashma, which joins the Panjah below Shaikh Brg. 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 Oxns, but its discovery in Gharan is said to le of recent date The only other village in Gharan mentioned by Abrul Subhan is called Gharan-bala, and is situated $t$ miles up a smill stream that joins the Panjah on the left bank at Shaikh Beg.

Oharan, like all the other Upper Oxus provinces, is under the Governor of Badabhshan, but its direct administration is entrusted to a nail, who has also charge of 1 shliashim and Zehak. No troops are nor maintained in the district, and, according to lilias, not more than 200 people now live in it. The road (Route No. 2 S ) duwn the left bank of the river is in very good order for pack animals.

A district of Shigran comprising the valley of the Ghund river. It Gliund. 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)
nre not only better off as to clothing and honses, but look less cowed and miser. ahbe, 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 haree or four lowar villages of tha Rartang 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 hear the brand that might be expected. There is no populous village, however, in the whole Ghund valley, and none of the side nalas are inliabited."

The total length of the valley may be estimated at about 60 miles. As regards papulation, Muhamen 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 hation of Shigoan, and gives 100 houses as the total for the valley, which would only give a pepulation of about 500 ; but if we take "honses" in the Wakhi sense (rille page 24), the population may be estimated at 2,000 .

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

The Russian Pamir expedition of 1853 has been errdited with having explored the Ghund valley, but it never got below Sardin. The villages in the Ghund valley are :-

| Sardin. <br> Chalirsim. <br> Wir. | Shetam. <br> Deh Basta. <br> Revak. |
| :--- | :--- |

Roshan was classed by Wood as a separate principality, but even at the Roshan. 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 tirce districts-(1) Roshan proper, which is the main valley between Shimnan and Darwaz; (2) Bartang, the valley of the Murgbabi 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 15 th of November I found myself again at Wamar, and the next day continued my journey towards Wazoaud, which I had alivays 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 riglat bank to be some 8 miles further on below the village of Rakharv. 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 benadary line until a rafak called Shipid is reached on the right bank. This rafal is the recognized bomdary point on the right of the river, and the line then extends along the main rilge dividing the Yaz Ghulam valley from the Bartang. The last village of Roshan on the left bank is Chasnad, and the langshab nala is considered the limit of the district of that village; in the same way, the Shipid rafaci is considered the limit of the district of Wazuand, and hence forms the boundary point on the right bank. Ralkharv, a small kishlak of about six loouses, is within the village district of Wazuaud, and is distant from that place about, 6 miles along the river, or rather less over the epars. 'ithe Shipid rufak may be reckoned at abont 2 miles from Kakharv. On neither side is there anytbing to mark the boundiary, nor is there any karabal or frontier guard of any lind either at the boundary points or at Chasnud or Wazaaud. The line, as I have described it, is held to be the frontier by acknowledred castom, and this is considered suffient even by the Afghans, who, it appears, bave accepted all the frontiers of these provinces as they found them. The Shipid rafah is reckoned at ahout or 9 miles above the mouth of the Yaz Ghulam stram, but the fort of Yaz Ghulam is said to be half a day's journey lack from the Oxus up the stream. Below Waznand, along the right bank of the Oxus, there is only a foot-path; the bridle-path crosses to the left bank at Wazoaud, but is said to become very difincult below the Tangshab nala. Personally I sav nothing helow the 'langshab nala. After frequentienquiries 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 suljeret to Butshara or to Darwaz. Neither bad anybody, of whom I enquired on this subject, ever heard that Bokhara bad put forward claims to Roshan. Gulzar Khan, however, informed me that when he took Shab 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 Kholkancl, 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 siguificance, or at most to be expressions of good-will or flattery of the extravagant kind that such people often use. He could not bave offered subjection to all of them, thongb he might have paid tribute to all, as is frequently the custom with petty Asiatic rulers who wish to propitiate ueighbours 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 allegiancc to the Russians, though he might have been on the point of doing so (as the Afgbans allege) when the Amir seized him.
"The Oxus valley from Wamar down to Wama, thougb only some S 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 culturablo 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 latger 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 enourh. 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 Kasbmir, except rice, are found there. 'Ithe chinar troe is also found from Wamar downotards."

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

Ney Elias says:-

"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 $3,000 .{ }^{\prime \prime}$ *

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 Shiguis.

## 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 Amit 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 grovernment is at Wanj.

It is not very clear what area may be included in Darwaz, lut, roughly speaking, it extends along both lanks 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. Carwaz also includes the district of Wikhia. 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 Shalı:-
"The groorraphy of Darwaz is little known to us, and owing to the sus. picious watchfulness of the Bokhariau officials, hy whom it is administered, is likely to remain so for many years to come. The 'Havildar' explored a part of it some years agro, and Muhammad Shah has since added something to our scanty stock of knowledge of this land-locked region of defiles and narrow valleys. $H_{\theta}$ continued the explorations of the Oxus from the point where the havildar relinquished his survey, through the districts of Nasai and Khof to Zaghar, 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 Zaghar 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 bundreds of feet above the rough waters of
the Oxns, and it requires a practised mountaineer to effect the journey in safety. Since Darwaz has hecome a dependency of Bokhara, the couls aul commanications have been much improverl. 'I'he high road between Saghir Dasht and Kila Khum has been mate passable for laden boaste of buriden, and the anarings or roads, which are cartied along the faces of the cliffs above the banlss of the Panjah, have been put into repair."

Though Darwaz is the porest of all the Oxus states, yet several accounts agree in stating that the people, both upper and lower classes, are more civilized than their neigbbours 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 Khwalian. 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 L'ersian language. On the verge of the country towards Darwaz, in the Wadj-Ab valley, there are some 20 villares of Shiahs."*

This authority gives the jopulation as $+3,500$ souls; but this a gross exaggeration, for Mr. Ney Jlias made enguiries on this subject, and he says:-
"For Darwaz I was only able to obtain an estimate for that section which lies on the lelit bank of the Oxus. It appears that there are about 24 villages on that side, and though musily exceedingly cramped for space-so rugred is the country-yet they are merepulous than a similar number of villages io Roshan would be. The chmate is warm ou account of the lower altitude and sheltered pusition of the malas, and therefore the villages are said to be productive and populous. On the whole the population of these 24 villages may, prhaps, l,e assumed at about 2,500 or $3,(100 . "$

Muhammad Shah deserihes the main valley as very narrow, the mountains on cither 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 inhatitants. 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 llour, of which the people make a kind of gruel.

## the mutgaifabi or ak su.

An atluent of the $O x u s, \dagger$ 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 Painirs, 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 tron 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 importauce in this portion of its course is the Isligh or lstirh. Below the Kara Su junction the Murghabi valley continues open and well grassed for some 2 or 3 miles ; then

[^11]the hills close in, and the gorge becomes narrow and rugged and quite impracticable for baggage animals. The AkSu near the Kara Su confluence is quite an insignificant stream, at all events in the autumn-some 20 yards broad and barely knec-deep, even where it flows in a single channel-though in summer it would, of course, swell to many times its autumn volume. After louring the Pamir nad ontering the iuhabited limits of Shiguan, the river takes its Persian designation of Murghabi. From Sonab downwards the river is locally know 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 Panjuh was of opinion that the former was the bigger stream. The riverbed was about $1 \frac{1}{2}$ miles wide, and at least a mile of this was covered with water, which was runuing 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 Murgbabi valley were (1) whether its stream might prove to be of greater volume than the Panjal, 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 Ghulan might be considered practicable roads into Rushan. 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 horseloack; 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 Yablu) are mucb nearer to the conflumnce than those of the Panjal are to the same point. It is also a more confined stream tban the Panjah, and has a steeper Led-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 vulume 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. $\dagger$ If the native explozer, who first put forth the theory that the Murghali was the main stream, happened to have seen the junction in July or August, his mistake may be partly accounted for."

[^12]Muhammad Shah, who was here in September, says that at 300 paces ubove the junction the chanuel was 2,100 pares 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 Kolal, and according to some authorities to the place where it leaves the hills above Kilif. From about Khuldask, down to Khawaj، 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 Drawaz.

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 spannerl by a rickety ladal bridge. At Warg there is an ther defile, and here the river commences to take its great northerly bead. From Ishkashim downwards the valley is a mile or tivo wide. On its right baik 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 peint of junction opens ont to a midth of about 4 miles, and is nell cullivated. Just below Kila Wanar the river is joined by the Murghabi (Bartang), The whole subjeet is more fully treated under the heading "O xus " in the Giazetteer of the Upper Oxus provinces.

## THE KIRGHIZ.

The penple 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 juined by two other branches of the race, viz.:-

## I.-Some of the Kipchats, Naimans, and Kitais.

II.-The Chiliks, who claim to have a common ancestor in a son of Kirghiz Beg; but this is not adnitted to lie authentic.
Their language is the Uigar dialect of Turkish, nearly resemlling that spoken in Kashgar. It enntains 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 Adjin mountains, or from a country to the westward inhahited by Turks. There ere many contradictory theories as to their origin. According to the Chineses 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 begiuning 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 popolation, 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.

Valikhanoff mentions the tribes of the Sol division in the Aulia-Ata country; but this does not agree with the evidence of sulsequent writers, and it is probable that they are the Kirghiz of the Oishand 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:-

$$
\begin{aligned}
& \text { The Mongush, comprising } 1,225 \text { tents. } \\
& \text { "Adugin " } \quad 8,145 \mathrm{\#} \\
& \text { ", Ichkili } \\
& \hline
\end{aligned}
$$

The latter tribe include, according to the writer of an account of the Alai expedition which appared in the Russische Remue of 1876 , the T aiti and Nai man, who are classed as separate tribes by Kostenko. All of these, according to the last mentioned anthor, 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 Kurehau and the Karatigin frontireat Fort Karamokh. The Karatigin Kirghiz occupy the eastern part of that Begship, their summer quarters extending up to the border of the perpetual soow, and their winter quarters being found on the upper Kizil Su and in the valleys of nost of its affluents. Oshanin divides them into the following tribes : the Kara-taiti, the Tupchak, and the Gidirslia, 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 tbey are found. Oshanin mentions the Sahih. 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 Krrghiz is generally said to be essentially more democratic than that of the Kazzalis; 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 Mamajan 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 ly 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 conrtesy by General Skobeleff on the occasion of his visit to the Alai in 1866. Her snn Abdul Beg was a great leader of the anti-Russian party during the campaign which euded 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 Osbanin's travels in Karatigin regarding their system of land tenure also throws some doult upon the accuracy of this assertion regarding their politics, and serms to show that class distinctions are not altogether unk nown 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 beiug classed as bukhara or kinl, 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 maraps had no aristocratic position. The mauap himself had considerable influeuce, 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 tbeir 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 altugether illiterate, the bias and manaps being as ignorant of letters as the cominon 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 SariBagush. They are supplied by Tartar and Russian merchants with cotton goods, metal wares, and leather of such inferior quality as to be hardly salealle 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 proverlially 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 Cbinese bistorians 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 cendurst lis 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 moss of the hard work, now witbstanding the curious fact abovementioned of a female chicf in the Alai, besides making felt and a coarse yarn used for sacking ; they buve few slaves, aud the system of the harem is uolinown among them. They are said to be addicted to drunkenness whenever they have the opportunity, no shame or religions oljection attaching to this vice. They are also unusually dirty in their persons and babits; they think it wrong to elean any vessel as likely to seare away abundance, and as a sign of mourning abstain from ablutions or change of rament 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 aro about 80 tents, while on the Alichur Pamir and the valleys leading into it there are not more than 30 tents in all. They pessess 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 Pamire, belang to no one tribe exclusively, but, are conposed of representatives of all the tribes that occur in these regions. The fur chiff divisions are the Naiman, the Tait, the Kara 'lait, and the Kasik, and there are also many sul)divisions. At Kara Kul, Kirghiz of all four main divisions are found tiving together promiscuously, and having in many eases interinaried.* The most numerous of the tribes is perhaps the Tait, which is said to number some 6:00 tents or families; but this is probably too high an estimate. The Naimans, though perhaps less numerous, claim to be of the best Kirghiz hood, or of the highest caste on account of their kinship with the Kipechaks, whom all Kirghiz seem to regard as a superior people to themselves. The eommon 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 1 have come in conlact 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 tn work for him for wages, or indeed to earn a livelihood in any may whatever, poor as they are in everything but the barest neces. saries 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. Uuder the rule of Yakub Beg a certain proportion had to serve in bis army, and Russian rule is dreaded by them onaccounl of the tax-gatherer. Farther west-at Rang Kul and onwards-I found a distinct leaning towards the Afglans.

[^13]"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 enmmunication with Shignan. It appeared that not only are the Kirghiz reguired to live within the line of the Murghahi, but they are also forbidden to have any communication with Afghan territory. The Clinese fear and jealonsy 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 probibition they were under against resorting to the Shignan villages for their requirements of grain, clothing, \&c. This latter circumstance weigbed 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 r, ue 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, Murghaibi, \&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 poliny of fear and suspicinn, 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 Badakhsban, 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 sweil 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-tent 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 Kirgliz 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 chapane, or forays, to the Alichur or the Rang

[^14]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, Shab 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, eutailed 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 1940

 that the Kirghiz "inhabited the country between Andijan and Kashgar, or betreen the actual Khanate of Khokand and little Bolshara * * * It results from all that we have said above that the great horde no longer forms an entity : oue part obeys China, a second the Kban of Khokand, and a third is regarded as independent." Further on be writes:"According to these principles, the submission of the Kirghiz $\mathbf{t}$ ) 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 be gives himself out as a Tashkendian or Khokandian." The above extracts prove (1) that in 1840 the Kara Kirghiz or Burnts 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 suljects 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 Tashisend 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 belouging 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 Yarland 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 hy a branch of the Alai Kirgbiz. On te Great and Little Pamirs there were at the date of the explorations of the Yarkand expedition
no Kirghiz; those who had been in the babit of visiting these districts as sommer pastures, and who were formerly suljects of Whahon, having loft, it in consequence of the constant slave-making raids nil the Wilihis, Kanjutis, and others, and had taken up new winter gnarters in the Whakh Dara distriet of Shignan, whence they move with their flect:s in summer to the Alichur plateau, also in Shignan territory. The tonts of their old winter quarters at the western end of the fireat lamir were seen by Colonel Gurdon. This fficer also meations the Kirohiz in the Tagdumbash Pamir and at olher places in Kashgar. Cordom also montions the promptness with which the Atalik Ghazi restrained and punished the Kirghiz of the I'amirs 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 dk Tash valley tu the west (left bank of the river as far as its junction with the Murghab). The Alichur belongs virtually to Waklan, lut it appors that the Kirghiz from Shignan are in the habit of occupying it at will withont question. The Liastern 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 Kliokand, and at another to Kashgar." Captain Biddulph, in his work called the Atalik Ghazi, says:-"Ilhe 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 amoner the Kirghiz of the Pamir in 1885, when $\mathrm{Mr}^{\prime}$. N $\mathrm{N}_{\mathrm{r}} \mathrm{y}$ Elias visited that region, is fully described under "Shignan," pare 2\%. There appears then to have been no question of Russian pretensions to these regions. When Captain Younghusband visited the Tagdumbash Pamir in 1889, he foma 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 durection. He, bowever, is also in the pay of the Raja of Hunza, and seems to have a grool deal more respect for him than for the Chinese." Since the visit of Mr. Blias 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 Murghali; and when this region was visited by Captain Younghusband in 1890 , he found that the Chinese had again asserted their autnority 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 Chincse pretended to know nothing about it; just in the same way
in fact, ns the inhabitants of Palkhpu, 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 hava little tronite in proving that she has infinitely stronger claims than Khokand to the Pamirs (anl 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 slow that the Pamirs helonged 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 Younghusland 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 Crombtchevsky, 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 enguiring from him to whom the Alichur Pamir belonged, and he informed mo that the Kirghiz inhabitants consilered themselves to be Chinese."

From Yarkand Captain Yonnghushand proceeded to the Pamirs, visited Ak lash on the Little Pamir, the pastern portion of the (ireat Pamir, and travelled down the Alichur Pamir to Soma Tash. The results of his enguirias on this spot were brietly as follows:-
"The extreme limits over which the Chinese were fourd to claim jurisdiction wert on the Little and cireat Pamirs up to the watersheds between the Panjah and Ak Su branches of the Oxus, and on the Alichur Pamir up to Soma 'lash, at the eastern extremity of like Yeslil Kul. He found the remains of a fort at Soma Tash and part of an old Chinese inscription apparently deseribing the events of 1759, and setting f(rrth that a Chinese force had pursued their enemies up to the borders of Badakhshan. This inseription 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 inhalitants 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 Youngbusband, in conclusion, says that " whatever doubt may have existed as to how much of the Pamirs was Afghan and how much Chinese, oone 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 noterworthy 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; kut in a map of the "Upper sources of the Oxus" compiled in the Military Topog raphical Section of the General Staff, 30 versts $=1$ inch, in 1855, the houndary 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 Kulut 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 Semiratech district and at another into Kashgar. In a more recently published historical work on the Khanate of Khokand caller "A Short History of Kholand, 1886," the writer, M. W. Nolivkia, a Central Asian by extraction, does not menticn 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 geooraplically undefined and unknown region, and he ridicules the idea that this region could ever have élicited such an amount of attention and importance among the inhabitants of Khokand as assumed by the Russian clain. He says that he himself was travelling with Khokandians for months, and never lieard the name Pamir.

The Khokand envoy who visited India in 185 t gave the districts of Khokand, but made no mention of the Pamirs. $\ddagger$

Everything goes to slonw that Khokand never had any real authority over country south of the Alai valley, and, as far as can be ascertgined, no mention is made in any of the numerous authorities on the sulject 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, "liat certain portions of the Pamirs are frequented by Kirghiz coming from the Alai, i.e., Russian subjects; but, on the other laand, it is patent that some of the Kirghiz sulject 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 tapin, the Russians are inclined to claim authority over all Kara Kirghz; but a ferv years ago this was wot the case, for Russian authorities like Yagiashski,§ 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-otticial I'urkistan Gazette of the 21 th September, to the effect that " the possessions of the Khan of Khokand

[^15]altogether embraced all the Pamirs and parts of Kas'gar" is therefore devoid of foundation.

In conclusion, it may be observed that the subject is one about which pronf is difficult, and is chiefly of a negrative character. Most important, evidence, however, as $t o$ 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 "uminterruptedly administered by special Khokandian officials," as stated by the Twrkestan Gazelte, the existence of such officials was not discovered by the party which traversed this region in $187 \%$, 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 evideuce of the 1877 map of the Turkistan Military Inistrict is also very important as showing what the Russians shortly after the annexation of $K$ hokand 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 3lst July 18!0, and the work was published at S:markand in 1891. In this second edition (see page l), in describing the boundaries of Turkistan, it is stated: "The sunthern boundary, which is also the southem boundary of the Empire, separating the country from Bokbara, stretches from the Uzbel pass on the east over the Pamir plateau, $\dagger$ and, curving round the Fedchenkn glacier, $\ddagger$ cuts the Trans-Alai mountains, the Kizil Su river, and thence following che Alai and Hissar ranges takes a direction towards the mountain Aktagh. From here it continues in a north-western direction across the Kizil-Kım 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 pleateau 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 $1 i, 000$ 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.

[^16]
## PARI' II.

ROUTES LEADING FROM THE CHIMKEND-KULDJA POSTAL ROAD TO THE HINIU KUSH BETWEEN THE DORAH AND KARAKORUM PaSSES.

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| $\underset{\text { ('Ihe Great) }}{\substack{\text { Kara }}}$ | Bar Panjah... | The Murghabi ... | 13 | 189 | 24 | 46 |
| Karamol ... | Andijan ... | The Bars-kaun defile and Nariu. | 20 | 378 | 9 | 16 |
| $\begin{aligned} & \text { Karakol (Issyy } \\ & \text { Sol) } \end{aligned}$ | Vermi ... | Tine Santish Pass and Chilik | 12 | 200) ${ }^{1}$ | 4 | 6 |
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| Kashgar | ... | Leh | ... | Yarkand and the Kilian and Karakorum Passes. | 34 | 585 $\frac{1}{2}$ | 33 | 72 |
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| Kashaar | ... | Rana Kul | ... | The Akberdi Pass ... | 10 | 151 $\frac{1}{3}$ | 23 | 44 |
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| Kaster | ... | Pishpeik | ... | The Kastek Pass and Tokmak. | 5 | 921 | 1-A | 5 |
| Khojend | ... | Chust | ... | Pungan ... ... | 8 | 106 ${ }^{3}$ | 15 | 24 |
| Khojend | .. | Gharm | ... | Ura Tapa and the Pakshif and adjoining Passes. | 15 | 211 | 20 | 29 |
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| Khozand | ... | adolia-ata | $\ldots$ | Namangan and the Bish Tash Pass. | 20 | $301 \frac{18}{3}$ | 12 | 21 |
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| Koldja | - ... | As St | $\ldots$ | The Chalkodu Su Pass, Karakol, and the Bedal Pass. | 23 | 4478 | 3 | 8 |
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| Tommak ... | Kashaar ... | Narin and the Turgat Pass (Verni-Kashgar Caravan Route). | 25 | $374 \frac{1}{2}$ | 6 | 12 |
| Tokmak ... | Kashaar ... | The Son Kul, Kurtka, and Chadir Kul. | 21 | $300 \frac{3}{4}$ | 8 | 14 |
| Tormak ... | Mdzart ... | The Postal Road and the Issyk Kul. | 20 | $343 \frac{1}{2}$ | 5 | 10 |
| Uziend ... | Andijan ... | .... | 4 | 504 | 10 | 20 |
| Verni ... | $\begin{aligned} & \text { Karakol (Is- } \\ & \text { SYK KOL.) } \end{aligned}$ | Chilik and the Santish Pass. | 12 | 2091 | 4. | 9 |
| Yarkand ... | Hunza ... | Tashkurghan and the Khunjerab Pass. | 23 | ? | 37 | 8 |
| Yarkand | Shamimutal... | The Saniu Piass ... | 12 | 2002 | 32 | 71 |
| Yasin ... | $\underset{\text { Pass. }}{\text { Neza }} \text { TASH }$ | The Darkot, Benderski, and Bush Gumbaz Passos. | 14 |  | 26 | U |

Route No. 1.
From Chimkend to Kuldja by the Postal road.
Aufhorities-Kostenko, 1880 ; Venukoff; Turkistan Gazette, 1875.

| Number and uames of stages. | Distamce in milmbe. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Inter- } \\ & \text { mediate. } \end{aligned}$ | Total. |  |
| 1. Mankend (AbSu) | 133 | 131 ${ }^{\frac{1}{2}}$ | N. B.-The stages and distances are taken from Kostenko. |
|  |  |  |  |
| 2. Masiat ... | 10눈 | $23 \frac{3}{4}$ | "This road was made when the Russians occu" pied the country. The whole of it is very well |
| 3. Yas Kuchu ... | $12 \frac{3}{4}$ |  |  |
| 4. Tolku Basi ... | 151 | 361 | "adapted for wheeled traffic, and is practicable <br> "at almost all seasons of the jear. The passes |
| 5. Chatpak | $15 \frac{3}{3}$ | 52 | "over some second-rate and third-rate groups <br> "and the fords over some mountain streams |
| 5. Champak ... |  | $67 \frac{3}{4}$ | " only impede progress for a comparatively short <br> "time during winter and spring."-Kostenko. |
| 6. Trbs (Tebsk) ... | 16 |  |  |
| 7. Kuius | 12 | $83 \frac{3}{4}$ |  |
|  |  | $95 \frac{3}{4}$ |  |
| 8. Golovacheveki ... | $11{ }^{\frac{3}{4}}$ |  |  |
| 9. Aulia-Ata | 91 |  |  |
|  |  | 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. Uci Bolak ... | 142 | 1312 ${ }^{\frac{1}{2}}$ | The ground is at first flat; afterwards it is intersected by small ravines with rivulets, and approuching Kumarik it becomes undulating. |
| 11. Archulan (Ak- | 111 $\frac{1}{4}$ | 1423 |  |
| 12. Akgr Tapa ... | 14 |  |  |
| 13. Maliabar (Mad. | 10 | $156 \frac{3}{4}$ |  |
| dabafff). <br> 14. Komarik | 14 | $166 \frac{3}{4}$ |  |
| 15. Tabti | $15 \frac{3}{4}$ | 180 ${ }^{\frac{3}{4}}$ |  |
|  |  | 196⿺𠃊 ${ }^{\frac{1}{2}}$ |  |
| 16. Maniminsea ... | $12 \frac{3}{2}$ | $209 \frac{1}{4}$ |  |
| 17. Merie e ... | 103 ${ }^{\frac{3}{4}}$ | 220 | Here is a fort, a post office, and telegraph station. |
|  |  |  |  |
| 18. Chaldayar $\cdots$ | 19 | 239 | Many ravines are crossed. This is the boundary between Syr Daria and Se nirechia. |
| 19. Kababalti | $19 \frac{1}{4}$ | $258 \frac{1}{4}$ |  |
|  | 1 |  | A small Russian fort. |
| 20. akSo $\underset{\text { MENT). }}{ }$ | 12, $\frac{1}{2}$ | $270 \frac{3}{4}$ |  |

Route No. l-contd.
From Chimkend to Kuldja ly the Postal roat.


## Route No. 1-conid.

From Chimkend to Kuldja by the Portal rond.

| Number and names of stager. | Digtance in milers. |  | Remaris. |
| :---: | :---: | :---: | :---: |
|  | Iuter. mediate. | Totul. |  |
| 32. Kamasu (Kurasdi Picket). | $\xrightarrow{16}$ | 480) | To Ilisk the country is partly flat and partly undulating. |
| 33. Ketenta | 15 |  |  |
| 34. I |  | 495 |  |
| ment). | $\xrightarrow{15}$ | 51112 | Heve is a small fort commanding the ferry. Ilisk is on the left bank of the Ili, exactly opposite the ferry. It is a de priver here, and nomly 7 (0) feet wide, and has a very stroig current, which at times of strong winds frequently carries aray the ferry buat. On such wceasions the tratfic is sometimes interrupted for digs. |
| 35. Chingildi picket | $15 \frac{1}{2}$ | $5 \because 6$ | From this stage to Alimotu, there are small piokets of Conssacks posted. <br> The roid fiom hore to Altin Imel learls 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 'Iagh range One of the spurs of the last namod mange, nearly opposite the station of Karachedenslr, yields the famons stone "Koliptash." |
| 36. Karachekin picKET. | $2 \cdot \frac{1}{4}$ | 5481 |  |
| 37. Kuankez | 181 |  |  |
| 39. Altin Imel ... <br> 33. Bashchi (Babhi) | 182 |  |  |
|  | 171 | $585 \frac{1}{4}$ | At Altin Ime the Siberian trunk roarl leading |
|  |  | $602 \frac{1}{2}$ |  |
| range ; this is the pass of Altin Imel, so called atter the station, and the ascent to it is the |  |  |  |
| most difficult part of the journay from Verni to Kuldja. It is called Yakshi (good) Altin Imel to distinguish it from Yamnn (bad) Altin Imel. The pass has been urlopted for carringes, but it is sometimes blocked during the winter for three months at a time. From the pass to Kovar Olen the combly is m high fable land and the road quite level. |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |


| 40. atna Bulaif picкет. |  | $620 \frac{1}{2}$ |
| :---: | :---: | :---: |
| 41. Konab Olen ... | $13 \frac{1}{2}$ |  |
| 42. Koi-bin | 161 | 634 |
|  |  | $650 \frac{1}{13}$ |

From Konar Olen to the fortlet of Inrohudzir the road is at first extremely winding, and passes therongh many ravines and narrow defiles; afterarards the ground gradually ehanges into a momotonous steppe, which, although the soil consists of a mixture of clas and gravel, produces a fair growth of grass. Kui-bin is a natural cheft in the low hills, which serves as the bed of a small stream, anil in most parts forms the onls road. The ruad is rough at all times, lint is almont dangerons in heavy rains.

Route No. l-concld.
From Chimkend to Kuldja by the Postal road.

| Number and names of stages. | Distance in milbs. |  | Remarts. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 43. Borohuditir ... | 16 $\frac{1}{2}$ | 667 | Ttie small fort of Borohudzir stands on tle right bank of the river Borobudzir, about 20 miles south of the former Chinese post of the same name. It was one of the first points the | Russians ncompied when they entered the region; it has now a garrison of one sotnia of Cossacks. The furtification consists of four long buildings, which form a quadrangle. Russian colonists from the (iovernorship of Tomsk have established a settlement, which now comprises 55 farm-yardv, and is steadily growing (1875). The Government have established a monel garden at Borohudzir. The vicinity of the furtlet is cupered with brushwood, which abounds in pheasants, partridges, and bares.


 Burohudzir begins a dwarfish jungle, which chicf$l_{5}$ consists of elme, 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 internupted by the onurse of the Usek, which is crossed by a ferry. On the further side is a stecp cliff. In the dry seanon the Usel is fordable.
45. Кновaов


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 straks with many ruins. 'l'he station of Khorgos stands on the river of the same name. The latter resembles the Usek, but its bed is wuch wider, and at times it floods great tracts of country.
46. Alimto
$\cdots|-210|$

710
For several miles the ground is stong, and bears traces of the action of water. About $4 \frac{1}{2}$ miles are the ruins of the former Chincse 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 abont 6 miles, the character of the st ppe dues not change. Alimtu, once a prpulous Solon village, hes now empty a:mong gardens which are going to ruin.

47. Chinchahodzi . $|$| $13 \frac{1}{4}$ |
| :--- |
| $723 \frac{1}{4}$ |

spmi-circular oatworks, also of inud.

The road leads through undulating grass land. The town is a regular square, which is surroundad by a mud wall wide enongh for a road, with a gate on each side; the gates are protected by

Suidun is an exact copy of Chinchahodzi. From here it is $\mathbf{1 0}$ miles to New Kuldja.

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 barbuttes, and has a gate ou each side. Its circumference is nearly 4 miles. In 1873 the number of stoue or brick luildings was 49 mosques and 2.1 b7 houses, shops, \&e. The tutal population in 1873 was 11.114 , of which 1,30 were Russians, the remainder being Taranchis, Chincs., sarts. and Dungatis About lomiles north-west of the town are coal-mines; the c:allins exu fore betore the surface of the ground.

Route No. 1-A.
From Pishper to Kastek viá Tokmak and the Kaster Pass.
Authurity-Kostenko, 1890.

| Number and names of stages. | Distancrin mileg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Inter. mediale. | Total. |  |
| 1. Isigati ... | 1512 |  | Posial ruad. |
| 2. Tokmat | $22 \frac{1}{2}$ | 38 | Here the Chin has a velority of 6 miles per l:nur. 1 ts ralley is 37 miles wide, and noted |
| 3. Kara Bulat | $21 \frac{1}{2}$ | $59 \frac{1}{2}$ | The river is forded $2_{2}^{2}$ miles above fort Tokmak. 10) miles below here it is navigable. |
| 4. Sabijas | 15 | 75 |  |
| 5. Kastek ... | 174 |  |  |
|  |  |  | J |

## Route No. 2.

Fiom Kulda to Ak Su via the Chanchal and Muzart Passes.
Authorities-Kostenko, 1872; Captain Pemberton, 1892.

the Muzart.
" This is the shortest road from Kuldja to $A k \mathrm{~S}_{\mathrm{u}}$, and as far as Muzart, with the exception of a few plac's in the Chapchal defile, is fit for whecled vehicles. The preparation of the defile for wheel traffic is also possible without great expense. There is water, fuel, and forage everywhere."-Kostenko. This ronte 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 $5 \frac{1}{3}$ miles. On the way back from $A k$ Su the Bedal pass route is usually taken.

The Il 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-conld.
From Kiulija to Ak Su viâ the Chanchal and Muzarl Passes.

| Number and names of stages. | Distanct in milis. |  |
| :---: | :---: | :---: |
|  | Intermediate. | Total. |
| 2. KAN | 131 |  |
| 3. Foot of the Chapceal Pass. | $5 \frac{1}{4}$ | 29 |

From the point of passage to the entrance to the drfile is smonth and suitable, being occasionally crossed by ravines.

From the entrance to the defile for about 15 versts (about 10 miles) the route rises gently, and the road is excellent ; then after that ascents and descents commence, in addition to which boulters and large pebbles form obstacles of no little importance for wheel traffic.
4. Boubra


44
As the road approaches the summit of the pass, the defile becomes covered with vegretation (fir), which ceases at the summit of the pass itself. Eievation 900'. The descent from the pass is more convenient than the ascent; the ground falls gentlr, and there are no large stomes on the road. At Bourra are 25 Yurts on the bank of the river.
5. Khanakai


From the southern font of the pass the rond C4 turns west, and at first runs along the Uzin Tagh hollow, and then alorg the valley of the Trekes river. The bollow and valley abound with excellent pasturing grounds. Water in abundance.

At Khanakai are some 20 Yurts. Grass good and very plentiful.
6. Geelan $\quad . \quad|\quad 15|$ Track leads up the lift bank of the Tekes 79 throngh a level, monotonons country, and crosses several streams.

The chief channel of the Tekes at the point of passage is 100 yards in midth. The banks are low and firm; the buttom is also firm and covernd with fine shingle. The depth of water is 5 or 6 feet; the current is swift. A good sized ferry boat here.

The Uzun Tan, or Uzen Tagh, range abounds in fir forests. The valleys are clothed with splendid grass that is preserved from Leing parched by the sun in summer, and therefore the Kirghiz find abundant pasturage for their flocks and herds. The settle.l inhalitants who dwell in the country north of the range send their horses to the mountains during the summer to regain condition.

| 7. Shatto | $\cdots$ | 20 | 99 |
| :--- | :--- | :--- | :--- |
| 8. Udungei | $\cdots$ | 18 |  |

Track continues to ascend the Trekes valler, and leads across the great grass plain separating the river from the bills.

The gorge and pass along which this road goes are called after the range the Muzart. In the first half uo sermous obstacles bar progress either in summer or winter. It might even be adapted for wheeled traffic. In winter and antumn caravans of horses pass throngh 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 $40^{\prime}$ or $50^{\prime}$ 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-concld.
From Kuldja to Alk Su vît the Chunchal and Muzart Passes.

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

The track from Shatto ascends the left bank. The river is forded at Udungei.
 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 gricier which takes two hours to eross. From surmit to Tamga Cash picket house the traveller descends 2,740 feet. No supplies of any kinl.

11. Kallez $\quad \cdots|\xlongequal{18}| \quad 162 |$| Ford the river opposite the picket house, and |
| :--- |
| follow along the left bank, recrossing 2 miles |
| before reaching camp. Without a guide it is |
| diffult to find these fords. Picket house. |

No supplies. Descent 985 feet.

12. Kohna Sfaht ... $20 |$|  | 182 |
| :--- | :--- |
|  |  | Fards wide, and bocked by a furt, throuch whiolt the road passes. Fort rainpart is 80 yards jons, 20 feet high, 10 feet thick, with a ditch 10 fect deep and 15 feet wide. Supplies obtaiuabie.


 Stream 100 feet wide ; current very swift ; fordable. No supplies. Grass scarce.


Shlenchi is passed at 15 miles.




Track gees down right bank of Mazart river, here 51 yards broad and unfordable. At 10 miles pass Tuprak picket house. Descent to Kuhna shahr 1,350 feet. The valley here is 2,0
$\qquad$

Route No. 3.
From Kuldja to Ak Su via the Chalkodu Su Pass, Karakol, and tife Bedal Pass.
Authorities-Venukoff; Sonargulof, 1887.
 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 snowstorms rage here. The descent is insiguificant. Away to the right are seen the Barskaun and Zauka passes.
 serves as a place of emigration for the Kirgbiz 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 fucl.
17. agacha Kol Rabat.

$341 \frac{3}{4}$
The whole of this stage is difficult even for paok 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 carly

Route No. 3-contd.
From Kuldja to Ak Sn viâ the Chalkorlu Pass, Rarakol, and the Bedal Pass.

| Number aud names of stages. | Distance in milem. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Cotal. |  |

in July. Descend by stcep and frequent zigzags to the Chinese fort of Urta Kurghan, garrison 310 men. Still descending, reag gacha-Kul-Rabat, where there are roums for travellers and stables for horses. There is little grazing, but fuel can be oltained.

| 18. UI TAL |  | $19 \frac{1}{4}$ | 361 | Cross the Ui Thal river several times. Gond water and fuel. This is a caravan halling place. |
| :---: | :---: | :---: | :---: | :---: |
| 19. Basti Aama |  | 142 ${ }^{\frac{2}{2}}$ | $375{ }^{1}$ | The road is a pask one. Here there man a Kashgar post. Two roads ofo bence to Kasilyar. |
| 20. Ushturfan |  | 18 | 3931 | Road hood and fit for wheels. Cultivation begins just before reaching Ushturfan. |

About 50 honses surround the citalel of Ushtnifan, which is necopied by a garrison of about 1.700 Jigrits (mostly armed with smooth-bore muskets) and 30\%) Sarbazes (armed with matchlocks). Of these troops, 1,000 men always remain in the walls of the fortress. Of the rest, 510 men form a guard at Kara Bulak, loo are stationed about Ak Su. 100 at Bedal, and 1(0) at Kukrum; some smiller pickets guarding the country between these points. The ammant of the citadel consists of 4 field guns of bad quality, which are no longer fit for the open country. The strong-hoid proper forms a quadrangic, each frontage measuring about $\mathbf{i}, \mathbf{4 0}$ ) feet. The walls are constructed after the usual strle of Chinese fortification, and the western wall adjoins a rock. Plenty of water and fucl. There is no grazing, but clover can be obtained.

| 21. Achtion (Aciatag). |  |  | 409 $\frac{1}{2}$ |
| :---: | :---: | :---: | :---: |
| 22. Babin | ... | 171 $\frac{1}{4}$ |  |
| 23. Ar Su | ... | 21 |  |
|  |  |  | 447 $\frac{5}{4}$ |

A wheel roid all the way to Ak Su running through a well-populated district.

Water in abundance. No grazing, but clover procurable, also fuel.

Both sides of the road are lined liy almost continnons rows of farmyards standing amidst their fields. The country people do not live in villages, but the farm-huses stand at a certain distance from one another, being scparated by the fields appertaining to them.

For Ak Su, see Ronte No. 21.

## Route No. 4.

## From Verni to Karakol (Issyk Kul) miä Chilik and the Santish Pass.

Autlorily-Kostenko, 1880.

| Number and names of atages | Dibtance in milbs. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 1. Sofei Station ... <br> 2. Nadajainsiet ... | $\begin{aligned} & 16 \\ & \hline 15 \frac{1}{4} \end{aligned}$ | $\begin{aligned} & 16 \\ & 31 \frac{1}{4} \end{aligned}$ | A good wheel road to Chilik. <br> Level country intersected by ravines. Brilge over the Talgrar. Forage, water, and fuel. |

## Route No. 4-contd.

From Verni to Karakol (Issylk Kul, viâ Chilika and the Santish Pass.


Route No. 5.
From Tokmak to Muzart by the Postal road and the Issye Kul. Authority-Kostenko, 1882.

| Number and names of stages. | Distance in miles. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Interme- diate. | Total. |  |
| 1. Kara Bolak ... | 212 |  | Pioket. |
| 2. Jilarific | 152 |  |  |
| 3. Kormainat ... | 16 | $53$ | 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 tages. | Dietance in miles. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Inter. } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 4. Kotemaldi .. | 16 | 69 |  |
|  |  |  |  |
|  |  |  | is very considerable, 1,000 feet in places. Its |
| ro |  |  | shores are desolate and barren, and are generation |

> Nute A.-From Kutemaldi to Narin.

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


Picket.

Village.

Settlement.
Here Route No. 9 comes in from Narin.

Village, A wheel road.
Cross the Ats Su river by a good wooden bridge.
The road runs at the foot of a snowy range over level country, passing hill streams. Wheel road.

Cross the Santish pass (6,650 feet). Abnut here Route No. 4 comes in from Verni and Route No. 3 takes off for Kuldja.

Village.
Here Route No. 2 comes in from Kuldja.

Route No. 6.
From Tokmak to Kashgal ritu Narty and the 'Turgat Pass (Verni-Kashgar Carayan routes).

Au/horifies-Yamkand Mission, 1573 ; Kostenko, 1880.

| Number and names of stages. | Distance in mileg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Interme. diate. | Total. |  |



Route No. 6-conht.
From Tokmalk to Kashgar viâanarin and the Turgat Pass (Verni-Kashgar Carayan Route).

| Number and names of stages. | Distancelin midiea. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Inter- mediate. | Total. |  |
| 21. Аксдt | $20$ | $340 \frac{1}{2}$ | Still down the Toyanda valleg, and through precipitons hills some 3,000 feet above the stream. |
| 22. Tesitik Tash ... | 131 | $353 \frac{3}{1}$ | An oll Chinese outpost. |
| 23. River Artisic ... | $6{ }^{\frac{7}{4}}$ | 3512 | Over lovel plain in the broal 'Artish valley. Road good, but stons. |
| 24. Mazar .. | 10 | $370 \frac{1}{9}$ | Throurh numerous gardens, and cross the Tuman by a bridge. |
| 25. Kashaar | $4$ | 374 | For details of Kashgar,"see*Route No. 21. |

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

| 16. Tokgat Bela .. | 20 | 274, $\frac{1}{1}$ |
| :---: | :---: | :---: |
| 17. Golja Bashi ... | 10 | 2891 |
| 18. Charmak | 10 | $299 \pm$ |
| 19. Chang Terek | 20 | 31914 |
| 20. Besak ... | 20 | 339 ${ }^{\frac{1}{4}}$ |
| 21. Kashgar ... | 26 | 365 ${ }^{\frac{1}{2}}$ |

Or about 9 miles less than the above.

Route ${ }_{\mathbf{*}}^{\mathbf{0}} \mathrm{No} 7$.
From.Narin to Kashgar via the Bogaseta and Terekti Passes.
Authorities-Kostenko, from Kaulbans and Reintal, 1868.

Number and dames of stages. $\left\lvert\,$\begin{tabular}{c|c|}
\hline Distance in milbs. <br>

\hline | Inter. |
| :---: |
| mediate. | \& Total.

\end{tabular}$\quad\right.$ Remarls.

The following is taken from Captain Reintal's acoount of his mission. He left Narin on the 23 rd October 1868 accompanicd 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 logashta 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. Kash. ghr was reached on the 31st October.

Route No. 7-ctutd.
From Narin to Kitshgar viâ the Bogashta and Tererti.

| Number and names of atages. | Distance in mileg. |  | Ifemarks. |
| :---: | :---: | :---: | :---: |
|  | Inlermediate. | Total. |  |
| 1. River Burundu | 1419 | 1412 | The road runs at first in the narrow defile of the Char-Karitma; them passes over steep hills, and only becomes grod on redescending to the Char-Karitma valler. Camping-ground good. |


| 2. Itivetion of the Tuz-Asllu and Kinds. | $19 \frac{1}{4}$ | $33 \frac{3}{4}$ | Road intersected throughont by deep ravines, and goes over a difficult ford below the conHluence of the Atbash and Tuz-Ashu. Dung and bushes for fuel. |
| :---: | :---: | :---: | :---: |
| 3. Jonction of the Toz Asho and Kashea So. | 142 ${ }^{1}$ | 481 | Through a difficult ravine, and ford the Tuz Ashu, and then over the flat Kinda (Bogashta i) pass. For fuel there is dung. |
| 4. JUnction of the Terekti and AKgai. | $28 \frac{1}{2}$ | $76 \frac{3}{4}$ | Road grod. |
| 5. Tereiti Pass ... | 28 | $104 \frac{3}{4}$ | Gnod wheel road. Camping good near the Kash. gar picket on north side of pass. |
| 6. Jalantash | $26 \frac{1}{2}$ | 1311 | Camp on the Jalantash river near its issue by the Kashgar picket. <br> Ascent to the pass gentle; descent ste $\in \mathrm{P}$ and | stony. Dung for fuel. Pasturage plentiful.



Route No. 8.
From Tormak to Kashgar viä the Son Kul, Kurtia, and Chadir Kul.
Authorities-Kostenko, from Reintal, 1868, and Kaulbars.

| Number and names of stages. | Digtance in milbs. |  | Remarls. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | 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 campingground. |

Route No. 8-could.
From Tokmak to Kashar viâ the Son Kul, Kurlka, and Chadir Kul.

| Number and names of stages. | Ditancein miles. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermodiate. | Total. |  |
| 2. Shamsi deflle... | $\underline{103}$ | 24 | Good road for pack aniwals. l'ine wood at camping-riound. |
| 3. Defile of the Southern Shamsi. | 111 | $35 \frac{1}{1}$ | Road generally indifferent, as it runs over dehris, slopes, \&c. The ascent to the pass begins at about 2 miles $5^{\frac{1}{4}}$ furlongs from the $c r$ est, and is yery steep and stony. The des |

4. Valley of the Kizart.

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.
Gond camping-ground.

| 6. Northern Kizabt |
| :---: |
| 6. River Jomgal ... |
| 7. River Kaba |
| Kichi. |
| 121 |

The road runs up the even valley of the Kizart to the pass of the same name. Refore reaching it there is a good camping-ground at the foot of the Chahar Archa pass.
The road runs over the Kizart pass, almost the best in the whole district of the Narin; it is almost imperceptible. Road very good.

The road runs over the Shil Bili pass, which $99 \frac{1}{2}$ does not present great difficulties. Road cenerally 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-Aigir, over the Nariu; (3) a whole group of streams, along the sides of which lead nomad tracks to Jumgal; (4) Tuz Ashu (a road across the pass of the same name and leading to the Taluk pass). The strams Koijerti issues from the lake, and along the gorye which it cuts for itself there is a road to Narin; (5) Sari Bulak ; (6) Sari lash (a road to Kilamehek). 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 $3 t$ mile: and skirts its western shore. On the eastern and western Lalves of the sonthern shore there are also stretches of level ground, which likewise have a width of about $3 \frac{1}{2}$ miles. Spurs of the monntains 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 wholo of its basm is covered with thick grass. Its shores are marshr 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 | $11 \frac{1}{4}$ | $110 \frac{9}{4}$ |
| :--- | :---: | :---: |
| 9. Junction of the |  |  |
| Molda-Asho and |  |  |
| Kabakain. | $11 \frac{1}{4}$ |  |
|  |  |  |

The road runs in the broad valley of the Son Kul. Wheel road.

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, how.
ever, enters a flat broad valley. Wheel road.
10. Kurtia


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 campingground is a foliaceous wood.

Route No. 8-concld.
From Tokmale to Kashgar viâ the Son Kul, Kurtka, and Chadir Kul.

| Number and names of stnges | Diatancrin milen. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Inter- } \\ & \text { mediate. } \end{aligned}$ | Total. |  |
| 11. River Baibicie | 171 | 1481 $\frac{1}{2}$ | The roal is good. Forage is not altogether plentiful at the camping-ground. |
| 12. Junction of tife CHalkodo and a second river withoot name. | $14 \frac{1}{4}$ | 163 | After passing the sources of the river Baibiche |
|  |  |  | the road leads to the pass of the same nawe (the |
| 13. River Tash Rabat | 131 | 1764 | The road runs to the second Baibiche pass in |
|  |  |  | the Kalkagar-Targ momntains, from which it | intersects this, and rises by the defile of the Tash Rabat on its right bank to the campinggrourd. The position of camping-rround 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 Kol. $13 \frac{1}{2}\left|189 \frac{3}{4}\right|$ 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 stcep, as is also the descent, but only for a distance of $\frac{2}{3}$ mile. The oad thear runs in the smooth ravine of the Tash Rahat 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.


## Route No. 9.

From Andijan to Karakol viá Narin and the Bars-kaun defile.
Authority-Kostenko, 1580.

| Number and names of stages. | Distance in mites. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 1 to 4. Foot of Jasi Pass. | 664 ${ }^{\frac{1}{4}}$ | 661 | As a rule caravans from ${ }^{-1}$ 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.

$$
\begin{aligned}
& \text { 5. River Manaikel- } \\
& \text { DA. }
\end{aligned}|-\quad 8| \begin{array}{l|l|l} 
& & \\
\hline
\end{array}
$$

## 17

Route No. 9-contd.
Fron Andijan to Karakol viâ Narin and the Bars-kicun defile.

| Number aud names of stages. | Dibtince in milib. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Intri- } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 6. River Alabuga | 21年 | 951 $\frac{1}{2}$ | 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 ravine* |
|  |  |  |  |
|  |  |  |  | are afterwards crossed. Trees and bushes in abundance.



Road generally good. Firewood at camp.
Road intersected by canals, forming the ouly difficulty for wheeled traffic. Firewood.

Through the wide and stecile valley of the left bank of the Narin far from the course of the stream. Wheel road. Fuel.

Road good along the Narin, and crossing the Ar Bash by a suspension bridge.

Road good for wheels.
The remainder of the rond 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 muoh hemmed in by mountains, and consequently the road in places runs along their slopes, and is besides intersected by the mountain streans in very deep ravines. 'I'he gorge of the Terek.Telies and Nura streams are particularly deep.
13. Lutile Nabin $|\quad 20| \begin{gathered}\text { From the point of janction of the Great and }\end{gathered}$

Valef.
 mak-Tash pass ( 12,000 feet). The pass is steep. Northern slopes covered with regetation (fir), but not thickly. Descent is by a very narrow defile covered with pebbles. Beyond the road is good.

| 14. River |  |  |
| ---: | ---: | ---: |
| tasif. | Kerege- | $26 \frac{1}{2}$ |
|  | $258 \frac{3}{4}$ |  | 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, Uruktns, and Janbulat intrrsect the road. They are all practicable and not deep. Their banks are scantily covered with bushes.

15. Keregetash Pass $\left|\xlongequal{26 \frac{1}{2}}\right|$| 2 |
| :--- |
| $\frac{1}{4}$ |

eternal snow and ice-tields. Its height broad plateau is formed, on which are marshy places.
i6. Junction of Kerbaetase and Babs-kaun bif. ers.

From the point where the Keregetash fluws into the Little Narin the road rises up the former. The road is good, and leads to the Keregctash pass. The summit. of the pass is covered with
is about 13,000 feet. On the summit a tolerably

The descent from the pass is very gradual, but the road is not a good one, as it is obstructed with large stcmes, and incossimently crosses from one side of a stram to the other. The stram tlows aricty, and the bottom is covered with

Route No. 9—contd.
From Andijan to Karakol viâ Nurin and the Bars-kaun defile.

| Number and names of stages. | Distance im milig. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intor- | Total. |  |

round pebbles. This stream, the north Keregatish, runs into the Bars-kaun. From here a road goes vid the Bedal Pass to Ak Su (see Note A).

| 17. Northern modth of Bars.kaun defile. | $26 \frac{1}{3}$ | 325 | The road leads by the very narrow, but pic turesque, defile of the Bars-kaun. The width i about low sajens ( 350 yards); the sides ar |
| :---: | :---: | :---: | :---: | 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 fullongs before reaching lake Isayk Kul the road crosses to the left bank by a ford; the width of the stream is here about 15 sajens ( 35 yards), and tla 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. Rifer Zatea ... | 131 ${ }^{\frac{1}{4}}$ | 338 $\frac{1}{4}$ |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |

After its exit from the defile the rond takes an easterly direction, and runs along the southern shore of lake Issylk 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. Slitifino | $\cdots$ | $15 \frac{1}{4}$ |
| :--- | :--- | :--- |
| 20. Kabaiol | $\cdots$ | $24 \frac{1}{2}$ |

Here Route No. 3 goes south to $A k S u$ viá the Bedal pass.

The road runs at 7 to 10 miles from the 378 lake.

Note A.-From Bars-Kiaun Defile to the Bedal Pass and Ak Su.
 pack animals.
2. Sinta biver $\quad \cdots$ - 8 From the campingg-round the road turns


8 sharply to the wost 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 $1 \frac{1}{3}$ miles. llaving ayain descended to the berl 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 $3 \frac{1}{4}$ miles from the summit of the pass there is a dry spot to encamp on. There is water and dung for fuel.


The ascent to the Jitim Bel pass, abont 31 miles, is a very suitable one. The descent is worse, but it could be easily turned into a wheeled route. Fuel dung.

Route $9 —$ concld.
From Andijan to Karakiol viâ Narin and the Bars-kaun defile.

Number and names of atages. $|$\begin{tabular}{c|c|}

\hline | Dinter- |
| :---: |
| mediate. | \& Total. <br>

\hline
\end{tabular}


dung. From it the road goes to the Bedal pass.
Note B.-From the junction of $\mathbf{Y}^{\prime a k t a s h}$ and Bars-kaun rivers to the Ak Sai Falley.

| 1. Junction of the Yaktasi and Karagai rivers. | 20 | 20 | The road runs in a broad valley on the right bank of the Yaktash. No fuel. |
| :---: | :---: | :---: | :---: |
| 2. River Bel Bolaik | 12 | 32 | A very good wheel road, running for the most part in the mide ralley of the Cbakir Korum. |
| 3. Junction of SariT'ob and Kara-Cherur-St. | 10 | 42 | The road is good up to the Chakir Korum pass, $7 \frac{1}{\frac{1}{x}}$ miles; but the descent is so steep that a horse can with difficulty kecp himself up on the crumbling débris with which it is obstructed. | The road here winds through huge stony elumps.* 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- |  |  |
| :---: | :---: | :---: |
| $\begin{array}{c}\text { arlyachap and } \\ \text { TuYamainak. }\end{array}$ | $-19 \frac{1}{4}$ |  |

The road rises on the right bank of the KaraChukursu 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 loft bank of the Kogelyachap near its junction with the Tuyamainak is somewhat difficult. The camping-ground is good.
 From the camping-ground the road again crosses to the riglit lank of the Kogelgachap, and runs over very stony soil along a steep cliff, and afterwards in a broad valley. Finalls, 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.


The road runs in the broad valley of the Mu93 durun. At 13 miles 2 furlongs from the oamp-ing-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 camp-ing-ground.

| 7. Near tae Ar Sar | $15 \frac{1}{4}$ | $108 \frac{1}{4}$ |
| :--- | :--- | :--- |

The road is a very good one (wheel). The ford over the Ak Sai is not difficult. The campingground is good.

[^17]
## Route No. 10.

Fron Andijav to Uzkend.
Aulhority-Kostenko, 1580.


Route No. 11.
From Andijai to Khokand via Namangan and Chust.
Authority-Kostenкo, 1880.

| Number and names of stages. | Distance in milis. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Interacediate. | Total. |  |
| 1. $A_{E} T_{A P A}$ <br> 2. Khakikhotat ... <br> 3. Balibchi <br> 4. Namangan <br> 5. Tapa Kudghan ... <br> 6. Chest | $7{ }^{1}$ | $7 \frac{1}{4}$ | $\left\{^{\text {By the postal road. }}\right.$ |
|  | $8 \frac{1}{2}$ |  |  |
|  | 1314 | $\begin{aligned} & 15 \frac{9}{4} \\ & 29 \end{aligned}$ |  |
|  | $11 \frac{1}{2}$ |  |  |
|  | 83 | $400^{\frac{2}{2}}$ |  |
|  | $17 \frac{3}{4}$ | $49 \frac{1}{4}$$67$ |  |
|  |  |  |  |

Ruute No. 1l-contd.
From Andijan to Khokand viâ Namangan and Chusl.

| Number and namce of stages. | Digtafte in mileg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 7. Sank ... | 101 ${ }^{1}$ |  |  |
| 8. Sulian Beai | 182 |  | Wheel road. |
| 9. Kbokand ... | 134 |  |  |
|  |  | 109 ${ }^{1}$ |  |

Route No. 12.
From Aulia-ata to Khokand via the Bisi Tash Pass and Namagcan.
Authority-Kostenko (accordina to M. Kaulbars), 1880.
Number and names of stages. $\left\{\left.\begin{array}{c|c}\text { Distancein miles. } \\ \begin{array}{c}\text { Interme- } \\ \text { diate. }\end{array} & \text { Total. }\end{array} \right\rvert\,\right.$ Remarke.

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 'lapa, nod the Tobei Bel to Uzun Al mad; (2) the Bish Tash, along which there is a road to Uzan-Ahmad; (3) the Uyul Mcral. a road to the Tabulguta pass, and thence to the Chatial defile and to Uzun Ahmad ; (4) the Kara Su, with a road to Namangan through the Kara Tapa gorge. On the right bambs of the Karakol and Taldi Bulak there are roads to the steppe and the Susamir, and brlocy it. Along the Kenkol a road passes to the Chu. Finally, in the valley of the Talas itscle, there is a cart-road from Aulia-ata to the mouth of the Utmak.

To Bish Tash by a very good wheel road. For$76 \frac{1}{4}$ age, water, and fuel (dung) in abundance.

The road crosses the Bish Tash by a deep ford,
224 and enters a rocky and narrow defile. On lenving the defile, it follows a broad salley intersected by some ravines not deep, but with steep, stony sides, and finally again, crossing the river by a moderate ford, follows it on the left bank to the camping-ground. Near the camping-ground there are saviu bushes.
6. Sodtif of Tiraf 8 | The road bifurcates at the north mouth of the Bel pass.


100 $\frac{1}{4}$ Tirak Su ; the first branch runs up the Bish Tash to the pass of the same name on Katman Tapn; 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 verst ( $0 \frac{1}{4}$ furlongs) is very steep. Further on the road enters a fir wood. The camping-ground is gond.

Routr No. 12-conld.
From Aulia-ala to Khokand viâ the Bish Tash Pass and Namangan.

| Namber and names of atages. | Dibtance in milbs. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |


| 7. Junction of Kor- |  |
| ---: | ---: | :--- |
| GHAN | SO AND |
| UZUN | ABMAD |
| RIVEBS. |  | cornice to the camping-ground.



1103
The road runs through moods, 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

124 $\frac{3}{4}$
The road runs along the left bank of the Uzun Ahnad by dangerous cornices. From the point where the Kara Kungez falls into the Uzun Alimad, the road soon enters a broad valley grown over with reeds and bushes.
9. Katman Tapa

$143 \frac{1}{\frac{1}{2}}$
10. Nabin biver $\quad \cdots \left\lvert\, \begin{aligned} & 10 \\ & \\ & \\ & \\ & \end{aligned}\right.$ The road runs down the broad valley of the Uzun Ahmad, and after 8 miles comes ont in the broad valley of Katman Tapa, where it crosses the Chitchkan Su by a stony, but not deep, ford.

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.


The road for the first 8 versts ( $5 \frac{1}{4}$ 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 oamping-ground is a luxurious one, with wood and bushes.

Further on the route was only followed in the reconnaissance of M. Kaulbars for 12 versts ( 8 miles) up the defile of the Karakol. The gorge is sloping, bat excessively narrow, rocky, and in places obstructed by landslips. From the small lake Karakiol the ascent to the pass into the Ferghana valley commences.


Route No. 13.
From Aulia-ata to Khiokand viá the Kara Bura Pass and Namangan. Authority-Kostenko, 1880.

| Nurabcr and uames of stagos. | Distanca in milits. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Interme- } \\ & \text { diate. } \end{aligned}$ | Total. |  |
| 1. Boundary on the Gieat Kapea river. <br> 2. Kara Bura defile, (commencement or). | 13 $3_{\frac{1}{4}}$ | 139 ${ }^{\frac{1}{4}}$ | Caravans travel on this road in preference with horses, and complete the journey to Naman. gan in eight days. <br> Along the Talas to the Great Kapka. |
|  | 131 ${ }_{4}^{1}$ | $26 \frac{1}{3}$ | Along the Kara Bura river. |
| 3. Tas Muinak bodndary. | 12 | 381 | Halt in the Kara Bura defile. |
| 4. Mayatase boundary. | $10 \frac{1}{2}$ | 49 | Halt in the Kara Bura defile. |
| 5. Kara $\underset{\text { Defile. }}{\text { Mispak }}$ | 1114 | 60는 | Cross the Kara Bura pass and descend the Kara Kispak defile. |
| 6. Chitee Tebek | 131 ${ }^{\frac{1}{4}}$ | $73^{\frac{1}{3}}$ | On the Chatkal river. |
| 7. Archall Mazar boundary. | 1613 | 90 | On the Chatkal river. |
| 8. Tokai Bashi bound. ABy. | $15 \frac{1}{4}$ | 105 $\frac{1}{4}$ | Cross the Chanash pass and halt in the Chanash defile. |
| 9. Kashika So botnd- ary. | 18 | 1231 | In the Chanash defile. |
| 10. Ak-tash bound. ARy. | 20 | 143年 |  |
| 11. Safid Bclan | 142 | 1573 |  |
| 12. Kara Pulfan ... | 171 ${ }_{4}^{1}$ | 175 |  |
| 13. Namangan ... | 1 $\frac{1}{4}$ | 1901 $\frac{1}{2}$ |  |
| 14. Shagand ... | 131 | 203 $\frac{1}{2}$ | A wheel road the whole way from Namangan to Khokand. Near Shagand are two ferry boats. |
| 15. Mazail | 97 | 2129 |  |
| 16. Botaidi | 1912 | 2321 |  |
| 17. Khorand | 12 |  |  |
|  |  | 244 $\frac{1}{4}$ |  |

Route No. 14.

## From Aktam to Marghllan via Namangan.

Authority-Kostenko, 1880.

| Number and names of stagees. | Distance in milisg. |  | Renarks. |
| :---: | :---: | :---: | :---: |
|  | Inter- | Total. |  |
| 1. Iskovat ( $\mathrm{Canal}_{\text {a }}$... | 131 ${ }^{\frac{1}{4}}$ | 131 ${ }^{\frac{1}{4}}$ | Alstam is $34 \frac{1}{2}$ miles north of Namangan. A wheel road all the way. |
| 2. Yani Kurgitan ... | 8 |  |  |
| 3. Namangan | 13 $\frac{1}{4}$ | $21 \frac{1}{4}$ | A wheel road comes in here from Kasan vid |
|  |  | 34민 | Kokan Bai, distance 20 miles. |
| 4. Min Bulak | 1012 | 45 |  |
| 5. Yazafat | 14 $\frac{1}{2}$ |  | At 8 miles the Syr Daria is crossed by ferry at Kara Kul. Here there are four boals. |
|  |  | 591 |  |
| 6. Ara Mazar | 8 |  |  |
| 7. Mabghilan | 12 | 67⿺ $\frac{1}{2}$ |  |
|  |  | 7912 | For Marghilan, see Route No. 16. |

Route No. 15.
From Chust to Khojend via Pungan.
Authorily-Kostenko, 1880.

| Nunber and uames of atages. | Distancr in miligs. |  | Renarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Inter- } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 1. Pap ... | 11 |  | A wheel road all the way. |
| 2. Burim Sabai ... | 10 |  |  |
| 3. Pongan ... | 81 |  |  |
| 4. Amlif | $7 \frac{1}{4}$ |  |  |
| 5. Ax Kuduk | $10 \frac{3}{4}$ | ${ }^{4}$ |  |
| 6. Kamish Korghan <br> (Canal). | 102 |  |  |
| 7. Sangar | 342 $\frac{1}{2}$ |  |  |
| 8. Khojend ... | $14 \frac{1}{4}$ |  |  |
|  |  |  |  |

Route No. 16.

## From Tasheend to Marghilan viá Taliau and Khokand.

Authority-Козтикко, 1880.

| Number aud names of stages. | Distanction milmg. | Remarka. |
| :---: | :---: | :---: |
|  | $\substack{\text { Inter- } \\ \text { mediate. }}$ |  |
| 1. Chidchik Station | $\underline{8}$ | A wheel road all the war to Taliau. Route No. 17 gose from here to Khojend. <br> At the village of Kuiluli, which lies at 5 miles from Tasbliend, a vore practicable ford used to |
| pxist. Opposite this village the chirchik flows in siveral channels of various depths over a |  |  |
| wide bed, with rolling stones and boulders. The swiftness of the torrent is here vers consideralle, especially when the flood season has set in, when it reaclies 1 e fect per seconil. At |  |  |
|  |  |  |  |
| other times the crossing at the Kuiluk ford presents no special dificulties. As erossing 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 conmecting dams they measured 17 l miles. The ford |  |  |
|  |  | Seg is perfectly impracticable at high water. |


A fortified post.
Hence to Khokand a caravan road practicable for baggage animals.

Ferry boats (2).
Alternative Route from Taliau.


A caravan route practicable for baggage animals.

Pass Bahadar Khan at $4 \frac{3}{4}$ miles. There is a wheel road from Shaidan to Chust; thence to Marghilan (see Note A).

By the postal road to Marghilan.
"Marghilan is a very large military cantonment. It is something like Sealkote. The cantouments extend over miles of country, with good broad avenues at right angles, and planted with aspen, mulbervies, and other trees. The soldiers have good barracks, seen to be of grod material, and are well disciplined. The native city is 12 versts from the cantonments."-Dauvergne.

Roure No. 16-contd.
From Tashkend to Marghilan vî̂ Taliau anı Khokand.


Note A.-From Shailan to Marghilan viâ Chust.

| 8. Asbaba | $6{ }_{4}^{3}$ |  | A wheel road the whole way. |
| :---: | :---: | :---: | :---: |
| 9. Asr ${ }^{\text {a }}$ | 13눈 |  |  |
|  |  | 103 $\frac{3}{2}$ |  |
| 10. Chadar | $14 \frac{1}{4}$ |  |  |
| 11. Chatrasar ... | 82 |  |  |
|  |  | 126 ${ }^{\frac{1}{2}}$ |  |
| 12. Almaz | $9 \frac{1}{1}$ | 135 ${ }^{\frac{3}{3}}$ |  |
| 13. Chust ... | 8 |  |  |
| 14. Kash Kaibagachi | $11^{\frac{3}{3}}$ | $1433^{\frac{3}{4}}$ |  |
|  |  | 150 ${ }^{\frac{1}{3}}$ |  |
| 15. Tokali ... | 24는 |  |  |
| 16. Shamurga Tapa | 12 |  |  |
| 17.0 |  | 192 |  |
| 17. Margitilan ... | $13 \frac{1}{4}$ | 205 $\frac{1}{4}$ |  |
|  |  |  |  |

Route No. 17.
Fhom Chimeend to Khokand by the Postal road viá Tasheend and Khojend.

Authority-Kostenko, 1880.


Route No. 17-conld.
From Chimkend to Khokand by the Postal roal viâ Mushkend and Khojend.
Number and names of stages. $\left(\begin{array}{c|c}\hline \text { Listance in miles. } \\ \hline \begin{array}{c}\text { Inter- } \\ \text { mectiate. }\end{array} & \text { Total. }\end{array} \quad\right.$ Remarks.

Asia. Population (1868) 76,000 in Asiatic Tushkend and 5,000, exclusive of troops, in Russian Tashkend (1875).
 a double wall, and on the side of the Syr a single wall. Popalation 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 cather deep, and very rapid. A great many pine logs are floated here from Namangan.

| 15. Kostahoz | 131 | 183 ${ }^{\frac{1}{4}}$ |
| :---: | :---: | :---: |
| 16. Karachi Kum ... | $14 \frac{1}{3}$ |  |
| 17. Patab | 182 $\frac{1}{2}$ |  |
| 18. Brsu-a | 16 | $216 \frac{1}{4}$ |
| 18. BISH-a ${ }^{\text {a }}$ |  | $232 \frac{1}{1}$ |
| 19. Chiki (Chdorai) | 133 |  |
|  |  | 246 |
| 20. Khokand ... |  | $253 \frac{1}{4}$ |

Route No. 18.
From Khokand to Osh via Wadil and Naukat.
Authori/y-Kostenko, 1890.

| Number and names of stages. | Distance in milibs. |  | Remarls. |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Inter. } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 1. Ultarma <br> 2. Risitan | $-\frac{11}{13 \frac{1}{3}}$ | $\begin{aligned} & 11 \\ & 24 \frac{1}{4} \end{aligned}$ | A wheel road the whole way. <br> From here a wheel road goes to Marghilan, distance 31 miles. |

Route No. 18-contd.
From Khukand to Osh viâ Wadil and Naukat.


Route No. 19.

## From Khokand to Ghara vid the Tarak Pass.

Authorily-Kostenko, 1980.


## Route No. 19-contid.

From Khokand to Gharm viâ the Tarak Pass.
Number and names of stages. $\left|\begin{array}{c|c}\text { Distance in mides. } \\ \hdashline \begin{array}{c}\text { Inter. } \\ \text { nicdiate. }\end{array} & \text { Total. }\end{array}\right| \quad$ Remarke.
one side in order to avoid a gorge. The circuitons roud 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 boundaby... |  | 82 | From Zardol the road enntinues to go along the Sokin gorge by difficult and dangerous cornices as far as the bonndary of Itek. |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| 6. Taram Pabs | 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 thry fall into a crerasse their comp:nions are able to pull themout. 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 thes engage themselves for daily hire and work as agriculturists, or cen lease lands for cultivation. These Karatigins or, as the Snrts and Kirghiz call them, Gulchas extend as far as Tashkend, where they are renowned as beiner indefatigable workmen.


| 7. Yarlueshi | $\cdots$ | $p$ | $?$ |
| :--- | :--- | :--- | :--- |
| 8. Gharir | $\ldots$ | 27 | $P$ |

Sonth of the Tarak pass the road is much tetter. In one day Yarkushi, a Karatigin settloment, can be reached, whence, according to native statement, there are but 27 miles to
Gharm, the chipf town of Karatigin.
Note $A$. - From Zardol there branches off to the right along the Ak Terek another road learling over a pass of the same name to the valley of Macha, an aftuent of the Zarafshan. This is a much more practicable road, but even along it horsemen can only pass with difficulty.

Frou 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 Kavhemish winter quarters on the Varukh-Isfairam roal. From Urmazan to Kara Kul is $9 \frac{1}{3}$ miles, and the road is quite practicable for packanimals. At Kara Kul a low range has to be crossed, but the crossing presents no sort of difficulty. From this pass to Kashemish is 1 j miles, and thence to the village of Varukh 16 miles.

Route No. 20.
From Khojend to Gharm viá Ura Tapa, tee Pakshif and adjoining Passes. Authority-Kostrnko, 1880.


Route No. 20-conld.
From Ehojend to Gharm viâ Ura Tapa, the Pakshif, and adjoining Passes.

| Number and names of stages. | Distance in milibe. |  | Eemarks. |
| :---: | :---: | :---: | :---: |
|  | Inter. mediate. | Total. |  |

double wall, which is pierced by seven gates. Population about $\mathbf{5 , 0 0 0}$ souls. Ura Tapa lies in the mountains of the Turkistan ranges, to the north of which extends a mountainous platean. The town is at an elevation of 2,700 feet above the sea level. The breadth of this plateau is about 16 miles.

6. Pastigan $\quad . \cdot |$|  | $5 \cap$ | Poad passes Mugin, and presents no difficulties |
| :--- | :--- | :--- | 115 to the village of Dohket, where a short-cut comes, in from Nar. 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 nia the Anchi pass and Oburdan. By the latter Yangi Arik is reached by a level road at 18 miles. Here commences the Bismandidefile. This stream crosses from the valles which connects Metke with Auchi. Length of defile 8 miles. The defile leading to the pass commences at Auchi; the road is nurrow 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 iniles. Total by this rente 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 teet. The troops had to uee 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 ZarafshanSamarkand 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. Rifamit
8. Langaidz
9. Tabishin
10. Pakehif


121 $\frac{1}{2}$
131 $\frac{1}{a}$
1411 $\frac{1}{2}$
150
The rond seems to be difficult, frequently crossing and recrossing the river, but it was followed by the Russian expledition of $\mathbf{1 8 7 0}$. Clover for aboul 2 sotnins of Cossacks was procurable and fuel. Barley had to be carried, and provisions conld not be obtained. There is no grazing in this valley.
11. Pakshiff Pass... $\quad 7 \mid 157$ pass. The pass is double. Descent good. This pass is considered the best from the valley of the Zarafshan to the valles of the Surkhab. The ascent of the pass and the pass itself are comparatively easy.

| 12. Gobiff (Village) | 8 |
| :---: | :---: |
| 13. Khoja-Chauk ... | 182 |
| 14. Beni Sofian | 17 |

The road then runs down the Goriff, which on uniting with the Didikbi is called the Sor-Bokh.
$183 \frac{1}{2}$
$200 \frac{1}{2}$
The village of Beni-Sofian is situated above the junction of the Sor Bokh and the Surkbab.

Routn No. 20-concld
From Khojend to Gharm viâ Ura Tapa, the Pakshiff, and adjoining Passes.

| Number and names of stages. | Digtamer in milra, |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { luter- } \\ & \text { mediate. } \end{aligned}$ | Total. |  |
| 15. Gharm | $10 \frac{1}{2}$ | 211 | From Beni-sofirn the roarl turns westward |
|  |  |  | down the Surkh ab via the villages of Karai- |
|  |  |  | man, Kocha Maldi, Kasnek, Shul, and Sarimi |
|  |  |  | to Gharm. This road is practicable for pack |

Nole A.-From Pakshif viâ the Walif pass (Footpall).

198 $\frac{1}{2}$ Here join the Pakshif pass route.

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


Up the Zarafshan viâ Wadif and Mazar.

The road up to the pass and the pass itself are very difficult, and accessible onls 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 Jeh-i-Mil.i-TUdal. The right road runs down the river Deh- $\mathfrak{i}$-Mil-iUdal, and at the village of Sokan leads into the valley of the Surkbab (Kizil Su or Red river). lirom the village of Hisarak (23 miles from Sokau) a road branches off to the ripht, 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).

Route No. 21.
From Marghlan to Ak Su viáandian, Osh, the Taldik, and Kasifar.
Authoritic:-Schuyler, 1873; Kuropatin's Missinv, 18ib; Kostenko, 1850 ; Dauvergne, 1*89; Lieutenant Bower, 1889-90; Litiledale, 1890 ; Datison, 1591.

| Number and names of stages. | Distance in mileg. |  | Temarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Inter- } \\ & \text { mocliate. } \end{aligned}$ | Total, |  |

N.B.-All distances in this route as far as Kashrar are taken from Kostenko.

| 1. Kara Tapa | 17 |  | A cart road to Gulchn ; thence to AkSu by the |
| :---: | :---: | :---: | :---: |
| 2. Sharikhana | 131 | 17 | emavan roard. It in, believed, howe |
|  |  | $30 \frac{1}{4}$ | ticalle for wheels the whale way. In summer, |
| 3. Andijan | 16\% |  | when the snow is melting, the trade sonte from |
| 4. Jtila-Kodue sta- | 11 | 463 | Irkeshtam to Osb goes via the Alai valley (sce below). |
| TION. |  | $623^{3}$ |  |
| 5. Osi ... | 17 |  |  |

Note A.-Alternative Route from Marghilan.

1. Kuta
2. Min Tapa
3. Arayan
4. Osu ...



Captain Kuropatkin's mission left Madi (see next stage) on the 20th October 1876 and reached Kashyar on the 6th Norember. halting for two days at Sufi Kurghan. The following is taken from Kostenko's acconnt:-"The whole distance from Osh to Kashgar amounts "to 249 miles according to Kuropatkin's surver. The most serious obstacle on this line is "the pass over the Terek Daran ( 12,700 feet in height). Prowress over this is not porsible "thrrughout the year, but only from the beginning of October to the end of April, i.c., "during the seven winter months. From the end of April till the beginning of October "caravan communication acioss this pass is brouglit to an end because of the melting "of the snows. Caravaus are then sevt from Osh by a somewhat more circnitous "route over the Alai, either by one which crosses the main rance 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 easy "Tayh Murun pass, separating the basins of the Amu Daria, Alai Tau, and Kizil Su from
"the basin of the Kasligarian Kizil Su, which later on becomes the Tarim Gol. Berond the
" Tagh Murun pass buth roads unit at Irkerhtam - that is, the direct one over the Kashgar*
"Daran, and the more circuitous one by the Tagh Murun. The Tagh Murun road is not,
"however, ;racticable throughont the year. It admits of progress only during the four sum-
"mer months, viz., from the middle of June to the midd!e of October. Fr.,m the middle of
" October this pass on account of its high position above the level of the sea life 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 " p"ssible by any route, but by the beginning of October it is practicable by eilher route."
M. Severtsoff crossed the Shart pass in October 1877.

Route No. 21 -contd.
From Marghilan to Alk Su viâ Audijan, Osh, the Taldik, and Rashgar.
Number and names of atager. $\left|\begin{array}{c|c}\text { Digtance in milbs. } \\ \begin{array}{c}\text { Inter. } \\ \text { mediate. }\end{array} & \text { Tutal. }\end{array}\right| \quad$ Bemarks.

6. Langab $\quad \cdots \left\lvert\,$\begin{tabular}{ll}
20 \& $99 \frac{9}{4}$ <br>
\hline

 

Berween Osh and Gulcha there are two rouls
\end{tabular}\right.

one, Karavan Kul, beine slightly the higher; it has the advantage of saving 12 miles.
Taking the cart road, pass Madi at $5 \frac{1}{\frac{1}{3}}$ miles, and along a hilly, but well cultivated, conntry. From Madi the road begins to follow the steppe oper an el-vated locality as far as the Taldik pass. Here it enters a gorge, and follows the pebbly bod of the river as far as the Lingar post. Wheat, welons, and cotton are grown on either side of the route. Fuel and forage.

7. GOLCEA $\quad \cdots\left|\xlongequal{29 \frac{1}{2}}\right|$|  |
| :--- |

At Langar the road to Gulcha bifuroates. One branch was made into a cart-roarl in 1876 ; the ot her is not made, but it culd easily be adapted for wheeled traffic. The former continnes to go along the upser course of the Tal lik, bending to the east at 13 miles. and going along the Chigirchik Bel sugorge. It thengoes over the Chigirehik Bel pass ( $7,70 \cdot$ feet), which lipy $2 \frac{1}{2}$ miles from the month of the Taldik river. Fro i. the pass the roal goes down the river, and through a seecnd gorge, from which it emerges at the puint where the Chigirehik and Gulcha meet, and at the sput where fort Gulcha is situated. The other road crossen the Taldik br a ford, an I turns br the Karvan Kul gorge to the pass of the same nume (7,40) feet). Two miles further on the Trak pass ( 6,800 f fet). is crossud. At 4 four miles from this, after passing the Kaplankul lake ( 5,801 ) feet), the road ascends the Kaplanknil pass (7,0)(1) feet). Frinn the lake to the pass the distance is $7 \mathrm{mil} s \mathrm{~s}$. From the pass descend into the Karoyan Sai gorge, and then into the Kurshab vall y, along which the road wees to Gulcha. Tine passes along this route ari steep, but practicable for baggage animals. Distance from Osh by this route 43 miles. On its returi journey (2tith March) the mission was obligod to take the borse track, the carriage road over the Chigirchik being covered with snow. Forage is evergwhere prucurable, and fuel is to be had in the shape of cow-dung. A small bazar.

## Note B.-Alternative Route from Osh to Gulcha vià Uzkend.

Bra whel road to Uzkend, halting at Kara Su $13 \frac{1}{4}$ miles, Turat Kul $14 \frac{1}{2}$ miles, Uzkend $10 \frac{1}{2}$ miles. Thence to Gulcha br a road practicable for animals, halting at wouth of Yalpaktash 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 distanee $88 \frac{1}{4}$ miles. There is another route from Osh to Uzkend practicable fur pack transport, by which the distance is $29 \frac{3}{4}$ miles; thence to Gulcha by the Isi Su brundary to Gulcha $35 \frac{3}{4}$ miles. Total distance from $\mathrm{Osh} 65 \frac{1}{2}$ miles.

| 8. Kizil Kurghan... | $-10 \frac{1}{2}$ |
| :--- | :--- | :--- |
| 9. Sufi Kurgitan ... | $-\frac{15 \frac{1}{4}}{}$ |

Up the Gulcha river, and along cornices as far as Kizil Kurghan.

At five miles reach Yangi Arik. Here the road crosses over two hanging bridges, of which the second is "ver the Belarli, an affuent 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 $1 \frac{1}{3}$ miles from Sufi Kurghan.

10. Sabi Kuchui $\quad \cdots |$| 10 |
| :--- |
|  |

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. Littledale 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 returuing from the Terek; the snow was too soft for them to get over (see also Note C).

Rolte No. 21-contd.
From Marghilan 10 Ak Su via Andijan, Osh, the Tallik, and Kashgar.

| Number and vames of stages. | Digtance in milege. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |


177 Horses pass with difficulty between the strawn
rocks, and the Terek Su is frequently forled. The fords are not deop. Cross the Terek Davan pass. The montains on eitner side are 500 feet higher and are covered with eternal snow. No fuel.
12. Ekezki $\quad . .\left|10 \frac{1}{2}\right| \begin{gathered}\text { The road passes along the stony bed of the }\end{gathered}$ 187 $\frac{1}{2}$ eastern Terek in the Terek defile; then down the Kok Su, past a post, and then up a steep ascent to the Elezek pass ( 10,000 feet).
No fuel. Grass plentiful.
13. Irgeshtam post $\left|11 \frac{1}{4}\right|$ The road goos down the narrow valley of

- $198 \frac{1}{9}$ the Ekezek, following the course of the river. Further on it leapes the river and turns north. east, ascending Ekezek pass No. 2. Aseent tolerably easy, and the road could be made practicable for wheels by clearing away the boulders. Height of pass $11,0 i(1)$ 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 Suf Kurghan viâ the Alai Dalley.

$\left.$| 10. Kizil Jar |
| :--- | :--- | :--- | :--- |
| 11. Taldik Davan |
| Pass |$\quad \cdots \right\rvert\,$| 12 |
| :--- |

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 roes, via forts Uch Tapa and Bussaga, to the passes which lie at $1 \frac{1}{3}$ niles distance from each other. The eastern one, Koijol Davan ( $11,40()$ feet), is the more sloping; the western one is Tallik Davan ( $11,5(H)$ fret). Dauvergne describes the latter as easy. He found no snow on it in June 1888 (see also Route No. 29).



#### Abstract

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## -(sprox














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|  | -bitiknidgontieid |  |  |

[^18]Route No. 2l-contd.
From Marghilan to Ak Su viâ Andijan, Osk, the Taldik, and Kashgar.

| Number and names of stages. | Dibtance in miles. |  | Hemarks, |
| :---: | :---: | :---: | :---: |
|  | Inter. mediate. | Totul. |  |

16. Fobt Agsalar ... $\left|-\frac{26 \frac{1}{2}}{}\right| 250 \frac{1}{2}$

The road from Ulugehat 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 willow woods then commenoe. The river runs under the vertical left bank. At about $2 \frac{2}{3}$ miles the road crosses to the left bank by a rather deep ford. Beyond this thickly growing willows oommence, in which there is much game (pheasants). At 4 miles $\frac{1}{2}$ furlongs firom the camping.ground the road again crosses to the right bank, and in spring and summer hangs over the river on a cornice, whioh is now much broken down. (In autumn one an travel by the bed of the river.) Further on the cornice descends down to the very stream, and is revetted with $\log _{\text {s }}$ on that side.

The cornice ends in gates which it is impossible to avoid. Beyond the gates is constructed a suball guard-house. Rock-salt is procured not far from this spot. Further on the road, fullowing a bend of the river, turns soutb, and now runs along the high bank, covered with large masses (f conglomerate, and then descends to the bed of the river. At this part the route is difficult and ouly fit for pack train. The stream fows slowly; it is broad, and there are n, fords. The valley is covered with wool. At 5 miles $7 \frac{3}{4}$ furlongs commences the most difficult part of the route. Large blocks of conglomerate completely block the roal, obliging it to cling for short distances to narrow cornices. These cornices might be easily destroyed by the spring Hoods. The road then descends on to a broad gentle slope, covered with rusged stones, along which it runs for about $1 \frac{1}{3}$ miles.

At 8 miles the road turas east into the broad channel of the Tugarak Saz Sai, along which it runs for 6 miles 5 furlongs, yradually rising to the Shur Bulak pass. This ascent is considerably strep towards the end. The height of the pass is 9,210 feet. A gentle des:ent runs along the bed of the Shur Bulak Sai over ground of the same character as the avcent, following the course of the Shur Bulak stream (with brackish water). This strean losses itself at 4 miles from its source.

At 10 versts frum 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 apparenlly difficult to avoid this fort, but easy to take it. It is surrounded by commanding heights, from whioh it could be easy to destroy it by artillery firc.

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 conld only be taken down by men. The clay soil of the descent with trifing 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 101 sajens ( $233 \frac{2}{3}$ rards) in width and covered with large willow trees.

Between forts Mashrut and Aksalar, 3 miles 21 furlongs, the road runs along the valley, and when near Aksilar rises on to the first terrace which continues up to the fort. The ascent over débris is very steep. The ralley is very marshs 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 aulumn 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. Korgashin Kani

1 | 18 |
| :--- |

For the first 2 miles the road runs along the
268 $\frac{1}{2}$ 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 Kirgliz. 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

Route No. 21-contd.
Irum Marghilan to Ak Su viâ Andijın, Ơh, the Tuldik, and Kushgar.

| Num and names of atages | Distance in milegs. <br> Inter- <br> mediate. Total. |
| :--- | :---: | :---: |$| \quad$ Remarks.

of Kush Uki (birds' camp). The valley of Kish Uki gradually contracts to LOO sajens ( $2: 33 \frac{1}{3}$ yards). Almost $p$ recipitous mountains of compact red clay border it. These hills to the east of the roal bear the name of Eiki-Yailau or Elki-Yurti (the suromering place of bomses). Mang willow trees grow in the valley. At 2 miles from the turn the valley of Koslı Uki again expands and runs north west from the road. It extends for abnut 6 miles 5 furlongs, and fioms 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 (f) miles, and runs throngh a narrow pasage bearing the name of Malageliat. Up to the ontrance to this passage the road may be reckonel a wheelose. The road runs through this corridor, fiom 6 to 15 paces wide, betwen vertical walls several hundred feet hinh of compact clay. In several places these walls overhans the road Twice the road runs in ateps, and trice, leaving the passage in consequence of its impracticability, makes a small circuit with inconsiderable, but stecp, ascents. The passage is very winding. Its lengl h is about $1 \frac{1}{3}$ miles. The making of a wheel road through it would require grat labour. It is casy to defend this passage, and it could be quickly destroyed. The passare can be circumvented by infantry. Buyond the passage an ascent commences by narrow water channels, and partly by cornices, on to the Kuruk mountains, after crossing which the road d-scends into the wide, but sterile, bed of the Kuruk sai (dry bet). Beyond the ber the rad runs along slopes over slippery flag stanes. This place is called Taigak Tash (the slippery stone). Beyond this a second pas. 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 pasage (corridor). The heirghts 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 $11 \frac{1}{4}$ miles the road enters the Elki-Yailan hills, turaing slarply to the north, and for several hundred sajens ( 1 sajen $=$ $2 \frac{1}{3}$ yards) runs along a broad, as it were, artificially-cut passaye and natural chunssée. 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. Beron! the road issuing on the Katta Shur Bulak vally follows this stream for about a verst. It then leaves it, and reaches the Kurgashin Kani mountains by small cornices and strep slopes permitting of only one single horse passing. It then makes a rather steep ascent, and a still steeper descent, and issues on the vailey of the kurgashin Kani (the lead min.), on the left bink 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 Kaui at the camping-ground is gocd.

## Note D.-From Aksalar to Opal, 843 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 $81, \frac{3}{4}$ miles distant.

## 18. Kanjegan Post <br> $14 \frac{1}{2}$

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 verst ( $\frac{2}{3}$ 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 differint parts-Baka, Kizil Oi, Kanjugan, and Terek. The width of this basin reaches 5 miles $2 \frac{1}{9}$

Rodte No. 2l-conld.
From Marghilan to Ak Su viâ Aindijan, Osh, the Taldik, and Kashgar.

| Number and names of atnges. | Distante in milbs, |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |

furlongs, and its length 13 miles 2 furlongs. Its height above the level of the sea according to barometric obscration is 7,1000 feet. In the basin and in the hills surrounding is grouped a Kirghiz population of the Chunbagish tribe to the number of 1.010 "kibitkas." The descent into this basin is steep, and runs over slippers flarstones with steps: After this descent the road mas be considered a wheel one right up to Kashgar, requiring only the most insignificant repairs, which would only delay the leading portion of a detaciment. After descending from the pass the road runs along the conrse of the Bargha Bulak (the stream of frogs) to the boundary of Bulak. The road after running for 4 miles $\overline{5}$ furlongs on the level approaches the mountains of Kizil Oi , and crosses several insignifirant water channels. The Kizil Oi bills then recede in a southerly direction, and the road continues straigit on eastward, and again runs over the level. The Bagha Bulak stream. along which the road runs for the first 5 versts ( 3 miles $2 \frac{1}{2}$ furlongs) from thr font of the pass, breaks through the Kizil Oi mountains to the south, and runs into the Kizil Su. In the portion along the Kagla 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 learing the Kizil Oi hills, the road runs for some vards over stons ground. Further on hillacks commence, overgrown with "chi" and bushes, and berond them about 1 verst the road runs through a marshy locality inundated by the overlow from the Kuz Gun, which, issuing from the Kuz Gun hills, flows through the basin in a southerly disection, and then traversing the Kizil Oi hills flows into the Kizil Su. The Kuz Gun stream is crossed at 15 versts from the camping-ground by a ford, which is not deep, but sticky. Rerond the forl wintering Luts, with good towers and stores of har, become more and more frequent near the road.

At 19 versts from the oamping-ground the road again approaches the Kizil Oi hills, winds round their base in a south-easterly diroction, crosses the Kanjugan, which has its source in the Kuz Gun mountains, and, following the left bank of the stream, apinoaches the Kanjugan post. The Kanjugan post consists ol an irregular-shaped four-sided wall with looph les, 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 qu:lity (in autumn). During movements in: prace time, fuel, forage, and cattle can be obtained in abundance from the Chunbagish Kirghiz. The water in the Bagha Bulak, Kuz Gun, and Kanjugau streams is in autumn slightly saltish, but fit to drink.

| $\substack{\text { 19. Montol. (Min-Ul) } \\ \text { post. }}$ | 303 |
| :---: | :---: |

The road following the Kanjugan stream enters a brood ilefile bordered by hills, which aro bare and destitute of vegetation. On the sonth are the Kanjugan, and north the Uita Bulak (middle stream). The width of the defile reaches 250 sajens ( $583 \frac{1}{3}$ fards), and the bottom is grow:a over with "chi" and occasional bushes. At $4 \frac{2}{2}$ miles the Urta Bulak stream runs into the Kanjugan. At 8 miles the road issues on to the valley of Karvanknl, abont $1 \frac{1}{3}$ miles in width, along which it runs at the foot of the Karvankul hills which form the valley. After iraversing this valley for $1 \frac{1}{3}$ 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 verst, the road issues on the second extensive basin of Min Ul Dala. The ford across the Uruk is rather deep.
Min UI 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 hes on it in the locality of Kapka. The surface of Min Ul Dala presentan

Route No. 21-contd.
From Marghilan to Alk Su vià Andijan, Osh, the Taldik, and Kashgar.

| Number and names , fatages. | Distafice if mileg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Inter. mediate. | Total. |  |

open piain covered with shingle, making the road across it very difficult. It is only covered with small bushes of "ishliku:" At 16 versts 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 rater in it running from the Uruk to the Min-Ul[Monpul] post. This post also consists of a quadrangular wall with flanking towers; the face is abont $81 \frac{3}{3}$ yards. Within are some covered dwellings. The walls are verg thin. The post looks very nest, and some gardens and Gelds give it an appearance of life. There is no grazing or fuel. The Kirghiz of the Chunbagish trihe can furnish these as well as cattle. There is water alinost along the whole mareh, and it is of good quality.
Note E-Kinjugen to Chakmak, -At ahoat 9 miles soath-east of Kanjugan a road rans up the Uruk to the Agach-chat post, and then on to pont Chakmak. This route, according to native information, is very difficult; in places it is necessary to lead one's horse.

\section*{| 20. Langar | 17 $\frac{1}{\partial}$ | $320 \frac{1}{2}$ |
| :--- | :--- | :--- | :--- | <br> 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 versts distance from the encamping-ground the road 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 grauually get lower, and finally the coarl merely runs under the vertical edge of the vailey. At 6 miles 5 furlongs the hills cease, and the road issues on the Kashgar plain. Near its issue on to it tie road passes an ancient watch-tower built by the Chinese, and now almost ruined.

The plain is covered with pebbles and occusioral sbrubs 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 $4 \frac{3}{2}$ furlongs the road crosses the Andijan Kichik canal. The ford across this canal even in autumu is something over $2 \frac{2}{3}$ feet in depth. Fir 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 eanals 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 foar watch-houses $\frac{2}{3}$ miles, one from the other. When the locality is innmated by water from the Kizil Su, these buildings show the direction to the fords across the canals. With very bigh 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 Kashpar. There are a few buts in it, rather considerable corn-fields, and many mulberry and other treas. There is no fo:age 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. Kasigar

[^19]
## Route No. 21-contd.

From Marghilan 10 Ak Su viâ Audijan, Osh, the Taldit, and Kashgar.

| Number and narnes of stages. | Digtanoe in miles. |  | Remaris. |
| :---: | :---: | :---: | :---: |
|  | Inter. mediate. | Total. |  |

Turkistan. The wall is about 26 fect 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 4,0110 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 connt on the surrender of the town of Kashgar without fighting '.' The road from the Kuniar Shalir to the Yangi Nhahr lies in part through occasional buildings and gardens, and then crosses a marshy loc, lity forming the Kizil Su valley. A splendid chauassée built be Yakub Beg is run across this ground.

342 ${ }^{1}$
The road runs along the Kizil Su to Chaharbash.
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 furage.
23. Shaptali


From the village of Yandam the character of 364 the road is the same. Salt soil is met with in places, nwing to which the road is very tenacions. There is fuel everywhere. Forsge and cattle can be furnished by the inhabitants. There is water in abundance in the canals along the road.

| 24. Faizabad |  |  |
| :---: | :---: | :---: |
| 25. Yangiamat | 10 | $383 \frac{1}{1}$ |
| 26. Kaba Zolghom | 16 |  |

From the village of Shaptali there is less saltsoil, and the road is better. Plenty of water. forage, and fuel. Village of 450 houses and garrison of $1 \underset{L}{ }$ c cavalry.
Rrad very gool. Water obtainalle from ca. nals and ponds in the villages along the ruad. For fuel thorn bushes on the road-sd. Cultivated country most of the "ay.

The road runs throngh serub jungle. In summer the road is well beaten and verz 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 $\frac{1}{2}$ verst. 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 wherls.
27. Ubdaklif

$415 \frac{1}{4}$
Throuph jungle with a good deal of water about. There is little forage, but plenty of fuel. The water at the camping-ground is wuddy. Elevation 3,850 feet. Supplies pro-
curable. 20 houses.


The road runs into a "turgak" wood, and runs through it up to the camping-ground. Fuel in abundance, but litte forage even in spring. Cattle must be taken with one. Water in abundance at the camping-ground (a canal from the Kizil Su).

The Kara Kilchin rabat is of the same proportion as the former one.


Through the jungle as before. Plenty of water and fuel, but no forage. A large inn and a few $\log$ huts. Eleration 3,870 feet.

Route No. 21-contd.
From Marghilan to Alc Su viâ Andijan, Osh, the Taldik, and Kashgar.

| Number and names of stages | Digtance in millre. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 30. Maralbabit $\ldots$ | 16 | 4574 | The Kashgar river is crossed by a floating bridge at about 14 miles. <br> From the Tshurga rabat the road at first rims through wood, and at 18 miles enters an extensive |
| tract of reeds, which and settlement of Mara paces each side; walls 2 surmounted by small to |  | tup to <br> Maral <br> and face | the Kashgar river. At $13 \frac{1}{\frac{1}{k}}$ miles enter the fields shi there is a rectangular fort measuring 500 with brick. At the corners there are bastions , 800 feet. |

 31. Chababbagh $\cdots{ }^{-14} 471 \frac{1}{4} \left\lvert\, \begin{aligned} & \text { oultivated country, but from } 11 \text { versts swampy }\end{aligned}\right.$ 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. Томснок
$\cdots \mid$

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 40 o sajens ( $933 \frac{1}{3}$ fards), 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. Chadir Kul $\quad . . \mid \xrightarrow{ } 12$ <br> 497편

ing camp. There is no forage. Fuel ample. Plenty of water, and of good quality.

| 34. Yaka Koduk ... | 11 | $508{ }^{\frac{1}{4}}$ |
| :---: | :---: | :---: |
| 35. JAIDI | 13 | 5211 |

Road grood. Ample water and fuel. Little forage. Elcvation 3,500 feet.

An alternative road can be taken from here to Chilian vid 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 localitr, 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.


From Jaidi the road runs over an even salt locality, grown over with tamarisk, thorns, and kuiruk." The road is good. There is no water on the march, and that at the caupingground is slightly saltislı. Plenty of fuel; no forage. Thirty poor houses with a little cul. tivation. The Maralbashi district enls here. Elevation 3.700 feet.

Route No. 21-concld.
From Marghilan to Ak Su viâ Andijıu, Osh, the Taldik, and Kashgar.

| Dintancie in miles. |  |  |  |
| :---: | :---: | :---: | :---: |
| Number and names of stuges. | Inter. modiate. | Total. | Remarks. |
| 37. Shor Kudue | $16 \frac{1}{2}$ | 5 小遃 | From Chilian the route runs over the open steppe. The road is firm and good. Plenty of fint; no forage. Water at the camping-g'ound is furnished from tivo wells 4 sajens derp (20 | feet) ; it is slightly salt, but hrinkuble. Elevation 3,501 .

38. Sai Abiik

$\cdots |$| $14 \frac{1}{2}$ |
| :--- |

From Shor Kuduk there is also steppe, in placers simdy and hillocky, in places pebbly. In approaching the village of Sai Arik the country beconcs very salt. The road is grood. The water at the camping-ground is from ponds. Furl and forage are to be found in the village. Eleration 3, ou.
39. Clguktal Rabat $\left|\quad 16 \frac{1}{\frac{1}{3}}\right| \quad$ Road gool; it passes through several villages.
$\left.-16 \frac{1}{3} \right\rvert\,$
$579 \frac{3}{4}$ At the village of Ai Kul alone it is marshy in spriag (there is a depression here). Water in ablundance and of good quality.
Forage can be had in the villages. There is no fuel along the route.
40. Aeso


From Chuk Tal rahat the road runs through a populated tract, and in places well cultivaten. It is quite good. There is water, forage, and fuel along the whole route.

The Ushturfan is crossed in this stage. Jt runs in three channels, one of which is crossed be a ferry in the cold seastn. 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 food, communication across the river ceases. Solid bridges are constructed for foot passengers and horses. The soil about Ak Su proluces good rice and wheat crops, and the gardens contain much valuable buiking wood. The district is chiefly irrigated by the Tushbian Daria, commencing approximitely opposite the sources of the Narin, and discharging into the Ak Su i)aria above the Kashoar road. Some of the irrigation canals are also fed by the la-t-named river. The rads 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 via the Belowti Pass.
Autiorities-Yareand Mission, 1874; Lieutenant Younghosband, 1887.

| Number and names of stages. | Distange of milirg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Inter: mediate. | Total. |  |

This route is an alternative one to N 0.21 . It is a litthe shorter, but is not, like the laiter, practicable for carts, as it passes through a hilly countre, where the ascents and desernts are difficult at times even for ponies. The first mi miles the roal goes over a plain

Route No. 22-contd.
From Kashgar to Ak $S u$ viâ the Belowti Pass.

| Number and names of stages. | Distanctin milig. |  | Remarbe. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |

passing through the rich district of Artish. After crossing the Beloriti pass, it desconds to the Ak Su valley, down which it goes over some rough country, which is ouly practicable for bagrage animals. From Ushturfin the country is level, and cultivation rxtends almost continuously between the two places. The river is generally fordable, but is liable to foods, which make it quite impassable. These Hoods come down very suddenly, and carts, horses, and foot passengers are often swept away by them.

1. Altin Abtish


Over plain for a great part of the was. Continuous cultivation to Kalti Ailak. Road goed. Cross Kashghar river hy 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 2,100 houses. Fruit in abundance.

| 2. Kalti Ailaif | $\cdots$ | 22 |
| :--- | :--- | :--- |
| 3. Kyb Bulat | $\ldots$ | 33 |

Good road over level plain.
plain. Camping.ground is occasionally used by Kirghiz.
4. Jai Tapa


97
An ocrasional 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 $\quad . . |$|  | 27 | Ruad good, but stons. Crosses a low spur into |
| :---: | :---: | :---: | 124 the Ili Bulak valles, where there is plenty of firewood and a moderate amount of grass. Water scarce, but plenty of snow.
6. Tigabek


141
Road up stream, and then over a spur from the main rilge, stony, but otherwise not difficult. Tigarek is in a lurge 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 passe up a ravine, a sleady 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. Buth aserntand descent are perfectly easy. The road descends on the north side of the pass in the valley of the Kokshal river.

The Belowti pass was the furthest puint reached by Captain Trotter, aud from it the marohes to Ushturfan were said to be as follows :-

| 8. Afchi | $\cdots$ | 10 |  |
| :--- | :--- | :--- | :--- | :--- |
| 9. Koyok Tokai | $\ldots$ | 22 | On Kokshal river. |

## Route No. 22-concld.

From Kashgar to Ak Su viâ the Betowti Pass.


Route No. 23.
From Kashgar to Rang Kul viá the Akbridi Pass.
Authority-Liedtrnant Davison, 1891.
Number and names of stages. $\left.\left\lvert\, \begin{array}{c}\text { Digtance in miles. } \\ \left.\begin{array}{c}\text { Inter. } \\ \text { medinte. }\end{array} \right\rvert\, \text { Total. }\end{array}\right.\right]$ Remarks.

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. Boba Katai $\quad . . |$| Road good throngh a thickly populated and |
| :--- | :--- | :--- |



24* well cultivated country.

Karawal or fort, a number of which line the foot of the mountains, nseful only against Kirghiz raids, rarely occupied by troops. Shape square, with sides about 100 yards long, containing quarters within.
3. Tarilgu $\quad . .\left|\quad 8 \frac{1}{2}\right|$ The road passes across a maidan for about 483 miles, when it turns off to the south east at a point where the Yaman Yar river skirts a spur running in a north-north-east direction. Then ascending ahont 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 treas. Fucl and water procurable.

[^20]Route No. 23-conth.
Firom Kashgar to Rang Kul viÂ the Aliberdi Pass.
Number and names of stages. $\left|\begin{array}{c}\text { Digtance in miles. } \\ \begin{array}{c}\text { Inter. } \\ \text { mediate. }\end{array} \\ \text { Total. }\end{array}\right|$ Remarks.

| 4. SIrwat | $\cdots$ | 13 | Road continucs about $\frac{1}{2}$ mile along the right |
| :--- | :--- | :--- | :--- | 61 bank of the river, which it then leaves, crossing a small pass, Slagullik, 6,650 feet, the ascent to which is about 1,200 feet; then, rejnining the river, it again continnes up the right bank for about $\% \frac{1}{9}$ 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.

## 

 crosses the Sowwai Bel pass, 8.250 feet, ascent 500 feet, descent very steep, difficult for laden animals; also the Alrikan pass, 8,280 feet, equally difficult. It then continues for about 2 miles. when it again crosses a small pase, Kosh Ailak, about $8,75^{\prime}$ feet; also the Ululak pass, 9,100 feet ; then, descending stefp 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 mad then descends a spur at a gradient of $\frac{1}{3}$ or $20^{\circ}$ to Kuruk Kurghan. Here there is a small fort and one or two stone honses. Fuel and water procurable. The road bere rejoins the river.

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 Gcz, where it crosses to the right lank. 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.

\section*{7. Bolun Kul* $\quad . . |$| 21 | 109 |
| :--- | :--- |}

Road rough over fragments of rock and bould. ers for about 2 miles; then crosses to left bank, running up a valley which has visible traces of glacial action ; then across timber bridge Kassin Kappa. so named from three mud-domed honses, the only sign of such a place existing ; then along more debris, you reach 1, al 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 $4 \frac{1}{3}$ miles further is Bulun Kul, where there is a Kirghiz encampment. T's the south-east is Muat Dufferin, the Tagharma peak being still more to the south. It is Mount Dufferin that is seen from Kasghar, and not the Tag harma as usually supposed. Captain Yonnghusband and Lieutenant lavison both took particular care to note this, as Mr. Ney Elias draws attention to this piece of new geugraphy. Here road to south-west reaches Little Kara Kul and Tashkurghau.
8. KuraSo $\left.\quad \cdots\left|-\quad 9 \frac{1}{2}\right| 118 \frac{1}{2} \right\rvert\,$

Road runs almost west from Bulun Kul. np right bank of Bulun Kul river to Kara Sa, so named from the dark appearance of the spring water existing there. From here a road via Chon Kathoi Jilgn runs in a curve over a pass of that name, said to be more difficult than the Akberdi pass to Rang Kul. A rond also up the Kul Jilga valley leads to Musi. UP central valley to the Akberdi pass, 15,100 feet. Fuel and water.
9. Afbebdi

$131 \frac{1}{2}$
The ascent to the pass is gradual and easy for laden animals. A slope of $20^{\circ}$ brings you down into a wide valley, throush which the Akberdi stream flows. The road continues about 3 miles

[^21]Route No. 23-concld.
From Kashgar to Rang Kul viâ the Akberdi Pass.

| Number and names of stages. | Dibtance in milig. | Remarks. |
| :---: | :---: | :---: |
|  | $\begin{array}{\|c\|c} \text { Inter. } \\ \text {-melliate. } \end{array} \quad \text { Total. }$ |  |

down the stream, whioh it then leaves, running in an almost westerly direction, while the stream at the present time continues towards Rang Knl, but has not sufficient volume to reach the lake. A Kirghiz encumpment and pasture ground.
10. Seng Jilga ... 20 | From below Akbrerdia splendid vintio of the

1512 $\frac{1}{2}$ Tarharma peak is oltaiteel. The road crossing a vidge descends to the Kizil Billai Jilga. so named from the rocks of red sandstone. Here Hang Kul appenrs, and finally on passing the Cbiragh Tash oue reaches Seng Jilga. A Kirghiz pasture ground.

Route No. 24.
From the Great Kara Kul to Bar Panjah mia the Murghabi.
Authorilies-Kostenko, 1880; Ney Elias, 1885.


Note A.-From Tashlurghan to Sarez.
From Tashkurghan a difficult road for foot men leads to Sarez. Osnid, 3 bouses, is reached after a long day's journey, and Sarez is about au equal distance beyond. At Sarez Ronte No .27 is struck.


From here the road runs down the Murghabi by the left bank to the village of Shugda, crossing several low ridges.

Route No. 24-conld.
From the Great Kara Kul to Bar Panjah viâ the Murghabi.

 Tashlurghan, the road down the Murghabi is quite impracticable for baggage nnimals, and riding ponies can only be used at intervals. though it is possible by leading and swimming them in curtain places to take them as low down as Wamar during the low-water seanon. At the high-water season the road must be considered elosed to ponies allogether. In some places ledges of rock, slightly improved, serve as a foolpath; in others a path has been made of poles, twigs, stones, \&e, bound trigether in a very rongh way, or of twig lathers suspended agrinst the face of the cliff by means of sticks or press let into holes and crevices of the rocks. From Shugla a triack continues along the Murghabi to Kila Wamar.

| 9. Shegda | $\ldots$ | 131 | 14.0 $\frac{1}{4}$ |
| :---: | :---: | :---: | :---: |
| 10. Ims | .. | 1421 |  |
| 11. Bastal | ... | 1112 |  |
| 12. Yamich | $\ldots$ | $11 \frac{1}{2}$ |  |
|  |  |  | 181\% |
| 13. Bar Panjait | $\cdots$ | $1 \frac{1}{4}$ | 159 |
|  |  |  |  |

Aote B.-P'asses leadiny across the range dirndiny the Laz Ghalam and bartang valieys.
"There are six passes between Wamne and somal, but not one of them can be a source of danger to the Afyhin provinces as affording a road to an invader. All of them were closed by the autumn snow at the time of my visit (0ctober 1885), so that I way unable to examine any of them ; but from what I could see from a distance and learn from the inhabitants of the inighbourhoud, 1 do not think the above npinion is libely to prove incorrect. The passes are:-
(1) Rehind the villare of Yams. Footpath.
(2) Belind Bhagu. Funtpath.
(3) Belind Sipanj. Footpath.
(4) Bain ravine between sipanj and Darianj. Fontnath. $\{$

Closed from October to July.
(5) Behind Upper Bijrand village. P'racticable for led ponis for 2 months of most farourable season by cussing a snow top closed even for men on foot rarly in N (vemibur, $1 \times 85$.
(6) Behind Rab Sharo, a pass called "Khurjin." Practicability the same as (5).
"It will he seen that none are practicable for baggage animals. Moreover, as regards the four upper passes, the road along the Murghali is so bad that supposing an cnemy to have crossed frow Yaz Ghulam during the summer, it would onls be necessary to destroy the ladilers 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 valler, for the only practicable track crosses and recrosses the river at intervals of every few wiles from Tashliurghan to Wamar." - Ney E'lias.

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 bevond 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.

Route No. 23-concld.
From Kashgar to Rang Kul viâ the Aliberdi Pass.

Number and names of stages. $|$\begin{tabular}{c}
Distance in mileg. <br>

| Inter- |
| :---: |
| Mediate. | <br>

\hline
\end{tabular}

down the stream, which it then leaves, rumning in an almost westerly direction, while the stream at the present time continues towards Rang Knl, but has not sufficient volume to reach the lake. A Kirghiz encampment and pasture ground.
10. Seng Jilga ... 20 | From below Aklurdia splendid vinw of the
$151 \frac{1}{2}$ Tagharma peak is obtainet. The road crossing a rifge descends to the Kizil Billai Jilga, so named from the rocks of red sandstone. Here Rang Kul appears, and finally ou passing the Chirareh Tash one reaches Seug Jilga. A Kirghiz pasture ground.

Route No. 24.
From the Great Kata Kul to Bar Panjah yiá the Murghabi.
Au:horilies-Kostenko, 1880; Ney Elins, 1885.


Note A.-From Tashkurghan to Sarez.
Frou Tashlurghan 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 beyoud. At Sarez Route No. 27 is struck.

| 6. RAH_SHADIB | $\cdots$ | $13 \frac{1}{4}$ |
| :--- | :--- | :--- | :--- |
| 7. BABIT | $\cdots$ | $9 \frac{2}{6}$ |

From here the rond runs down the Murghabi by the left bank to the village of Shugda, crossing several low ridges.

Route No. 24-contd.
From the Great Kara Kul to Bar Panjah viî the Murghabi.
Number and uames of atages. $\left|\begin{array}{c|c}\substack{\text { Dibtance in miles. } \\ \text { mediate. }} & \text { Totnl. }\end{array}\right| \quad$ Hemarkf.

| 8 Ak Kumghan | $\begin{array}{r} 14 \\ \hline \end{array}$ | 132 | From the Kudara conlluence, 2 miles nbove Tashkurghan, the road down the Murghabi is quite impracticable for baggage animaly, and riding ponies can only be used at intervals. |
| :---: | :---: | :---: | :---: | thongh it is possible by leading and smimming them in certain places to take them as low down as Wamar luring the low-water season. At the high-water season the road must be considered closed to ponies allogether. In some places ledges of rock, wlightly improved, serve as a foulpath ; in others a path has been made of poles, trigs, stonce, \&e., bound together in a very rough way, or of twig latilers suspencled against the face of the cliff by incans of slicks or pegs let into holes and crevices of the rocks. From Shugda a track continues along the Murghabi to Kila Wamar.



Ante b. - E'asscs lecting across the rangedirading, the Laz Ghalam and bartang valleys.
" There are six passes between Wamar and sonab, but not one of them can be a source of danger to the Afohtin provines as affording a roal to an invader. All of them were closed by the autumn snow at the time of my visit (0ctober 1885), so that I was unable to examine any of them ; but from what I could see from a ristance and learn from the inhabitants of the inighbourhood, I do not think the above apinion is likely to prove incorrect. The passes are:-
(1) Behind the village of Yams. Footpath.
(2) Belind Bhagu. Fuotpath.
(3) Belind Sipanj. Footpath.
(4) Baiu ravine betwcen sipanj and Darjanj. Footpath. $\}$

Closed from October to July.
(5) Behind Upper Bijrand village. I'racticable for led ponics for 2 months of most favourable season by coussing a suow top closed even for men on foot raty in Nuvember, 1885.
(6) Behind Rab Sharo, a pass called "Khurjin." Practicability the same as (5).
"It will he seen that none are practicable for baggage animals. Morcover, as regards the four upper passes, the road along the Murghahi is so bad that supposing an enems to have crossed trow Yaz Ghulam duing the summer, it would only be necessary to destroy the ladilers of twigs and basket work which form the road along the face of the clifls at sone places to prevent him from desceuding 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 raller, for the only practicable track crosses and recrosses the river at intervals of every few miles from Tashlurghan 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 whioh leads to Shetam, and the upper is berond 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.

Route No. 25.

# From Osh to Gilgit viá Ak Tash, the Little Pamir, and the Khora Вонит Pass. 

Authorities-Itanoff; Yarkand Mission, 1871 ; Khusbwakt Kban, 1890; Littledale, 1890 ; Stewart, 1891.

| Number and names of stages. | Distancein milug. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermrdialc. | Total. |  |
| 16. Ae Su-Ak Baital JUNCTION. | 24.1 | 244 | Vide Route No. 29. |
| 17 to 2(1, AR 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. |
| (i.e., junction of $A k S u$ and $A k$ 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

22. 

Khushwakt Khan describes the road from Ak Tash to Gilgit as passing through a maidan the whole way, by which he means there are ferw steep ascents and descents, and sajs it is possible to ride all along it, except in a verr few places. There is only one glacier to be crossed rumning into the main valley from the Karambar on the side of Hunaa, and that has been rendered casy of late years by a flow of mud and pravel over it from the hili 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 thẹm to get along the numerous difficult paris hetween 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 sce Note $A$.

Between Ak Tash and Baikm there is no wood, but a grass that burns well and bushes are plentiful.

Several streams coming down to Ak Tash from the Great Pamir have to be crossed, but all are fordable.

At 5 miles from Ak Tash is a Kirghiz grazing ground called Bazar Durah, where is abundant grazing. At 7 miles the road passes Kizil rahat, where there are five Kirghiz tombs. At 11 miles annther Virghiz camp at Kunja Bay is reached. At 19 miles Issylk Bulak is passed. At Andemin there are some ziarats as well as Kirghiz tents.
22. Chilab


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 AkS Su. At 7 miles the camping-ground of Yach Kali is passed. Here the Chilab lake ends about 2 miles wide. A Cbinese kotwal is stationed here. Route No. 26 over the Benderski pass enters about here.
23. Bozai Gumbaz ... $12 \mid$ Road easy and practicable for laden animals 363 up to the Bohrt pass. The grazing ground of Gurgati Yasi is reached at 4 miles. No supplies, and only wormmood root for fuel.
From here a route goes by the Walkujui 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-confd.
From Osh to Gilgit vî̂ Alt Tash, the Little Pamir, and the Khora Bohrt Pass.

| Number and names of stages. | Distance in miles. <br> Inter- <br> mediate. | Total. |
| :--- | :---: | :---: |$\quad$ Liemarks.

The practicability of the Khora Bohrt route seems to be as follows:-In a normal sear, as soon as the snow has melted sufficiently to render the pass feasille, the Karambar river has thereby become so swollen that the river portion of the route is an longer pracicable, and it remains in this state until all the snow has inelted, or oriug to the approaching cold weather it ceases to thaw. Ordinarily the pass may be considered npen from July to eud of September. In 1891, however, troops could not have moverd over it before September. In order to make sure of not being blocked, the safest course woutd secmo 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 Bohrit pass itself. Further, more supp'ies are obtainabie on the Darkot route thinn on the Karambar. The Karambar glacier in sowe years might offer an almost iusurmountable obstacle to animals, although it was quite easy in 1891.

24. Baikba $\quad \cdots \left\lvert\,$\begin{tabular}{l|l}
12 \& 375

 

A very easy road, throughout over open grassy <br>
downs. Alung the right bank for 5 miles <br>
Here the river is furded, water waist-higi, in the <br>
deepest places. From here pass along the left
\end{tabular}\right. bank of the $\Lambda$ b-i-Panjah to the plain of Kara Jilgha.

At Bailra the hishad strean and Ab-i-Panjah unite, A few supplies procurable.

25. Lupsur $\quad$... $|$|  |  | 10 | 385 |
| :--- | :--- | :--- | :--- | The road runs along the bed of the nala through open conntry 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 ronte to Hunza takes off at Lupsuk. There are 7 inarches; distance 55 miles to Gireha on Ronte No. 3.5 (see Route No. 8, Gazetteer of Upper Oxus for desoription). Firewood scarce ; supplies nil.
26. Cbilingi $\quad \because|-16|$ bar Sar, is clearly visible, and also the road leading to tiae Baroghil on tho sonth side of the lake. Snow was Ifing on the pass in Scptember 1891. Desend steeply for a mile to a plain about 4 miles long, perfectl $\delta$ open, and covered with grass. The main ralley from the Baroghil joins in about here (see Note A). Suktarabad is passed at 11 miles. The Karambar stream is crossed by a ford just beforə reaching camp. Firewood plentiful; supplies ni/. From here a difficuitt road leads to Hunza. There is usually less snow on the Kho a Bohit 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 in another pass, the Gazan, by which the Hindu Kush may be crossed in this stage. It is situated a fer miles west of the Khora Buhtr; altitade 16,000 feet. The campingground on the uorth and southern sides are the same, and the pass is practicable for animills in summer, but difficult.
 bar stream is passed. From here the road traverses a pari. Pass through the Chatibu defile, where for a short distance horsemen and laden ponies have to wale the stram at the foot of the hill, whilst a footpath runs along the hillside. From about here there are thre 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 oliaciei.

Route No. 25-contd.
From Osh to Gilgit viî Al Tash, the Litlle Pamir, and the Khora Bohrt Pass.

| Number and uames of stages. | Dibtance in milbs. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Inter. mediate. | Total. |  |

This road has during recent gears, in consequence of a deluge of mudand gravel over the upper portion of the glacier, become practioable for laden tralfic. The middle road is only passable for footmen and unladen animals, and crosses the glacier at a point where it is $\overline{0} \mu$ gards 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 practicuble for foutmen and uuladen animals. Bobrt is a small village. No supplies.
28. IMIT

$429 \frac{1}{\frac{1}{3}}$
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 Bilbanj are reached ( 16 houses). Just before reaching Imit, a stream coming from the Munjawir nala is crossed by a wooden bridge. This strean 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.


Note A.-Altcrnative Route from Lupsuk to Imit viâ the Darkot and Alang passes.
The Darkot and Alang passes are both casy and practionble for animals. The Chatibu glacier is the only real obstacle. It could be easily improved and made more practicable.
26. Foot of Glacier $|\quad 17| \quad$ Closs the Karambar nala near Suktarabad; the $4 C 2$ bed is full of boulders, and water as high as the knees in September. At 5 miles reach the Chutibu glacier, which completely blocks the valley. It is over a mile in breadth, and is very difficult for laden animals.

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 abont 3 miles long, and is almost covered by two lakes-one, a fow hundred yards in diameter, in the north-west comer ; the other filling nearly the whole of the castern sile of the watershed, abont 2 miles long ly 1 mile broad.

Route No. 25-concld.
From Osh to Gilgit viâ Ak Tash, the Little Pamir, and the Khora Bohrt Pass.
Number and names of stages $\left.\left\lvert\, \begin{array}{c|c}\text { Distancrin miles. } \\ \begin{array}{c}\text { Inter. } \\ \text { mediate. }\end{array} & \text { Total. }\end{array}\right.\right] \quad$ Remarks.
23. Sowargheen
$|-12|$

First 3 miles rather stony and marahy in
428 places: thence down a long. easy, tery gradual dexcent, fording the Yarkhun river at 12 miles. There is nofised spot for a camp, but anywhere below the glacier it is easy to find suitable ground. Firewool scarce; supplies nil.


From the left bank of the Yarkhun river brar south-west up an eass ascent over a glacier, and cross the Darkot pass.

Passable for animals; for the most part eave, thongh there are n few steep plices. Along the right side of the nala for Darkot, and ascend to the Alang pass; thence deve ind steeply, last
mile cass. Firewood soarce; supplies nil.
31. Astimuman $\quad \cdots \left\lvert\, \begin{aligned} & 10 \\ & \end{aligned}\right.$

Supplies and transport obtainable.
s2. Imat
$\cdots|-6|$
478
472 Except the first few milis, the road has an 472 easy descent throughout, rimning through birch wourls, \&c., for the last 6 mides. At $1^{\prime \prime}$ miles: cruss to the left bank. Asliknman, a big village.

About 9 A.m. is the best time.
$N . B .-1 t$ will be observed this route is about 50 miles longer than the one via Bolut.

Route No. 26.

## From Neza Tasif Pass to Yasin via the Basi Gumbaz, Benderseit, and Dariot Passes.

Authorities.-Ivanoff, 1893; Littledale, 1890 ; Yarkand Mission, 1574.

| Number and names of stages. | Distance in milbs. |  | Remarks, |
| :---: | :---: | :---: | :---: |
|  | Interme. diate. | Total. |  |
| 1. Cbadir Tasil .. | 8 | 8 | Tide Route No. 29. <br> A rock standing alone in the centre of the valley. |

Route No．26－contd．

## From Neza Tash Pass to Yasin viâ the Bash Gumbaz，Benderski，and Darkol Passes．

| Number and names of stages | Distanct in milbg． |  | emark |
| :---: | :---: | :---: | :---: |
|  | Inter－ | Tota |  |
| 4．Littie Pamir LaEe． | 70： |  | This distance is taken from the map． <br> Ivanoff describes the Bash Gumbaz as very <br> difficult．Mr．Littledale was told that near the <br> entrance to the Bash Gumbaz valley there is |
| esoellent 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 concecrned；but my guile 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 ontside．＂－October 1855．The route descends from the pass to the Victoria lake，which it slirits，and crosses to the Little Pamir by the Benderski |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| pass．Mr．Littledale，who journeyed from Osh to Yasin via the Khargosh pass and Vietoria |  |  |  |
| lake，sars the lake was half covered with ice in June 1890．Altitude 13，980 feet．At the east end there is much grass，and bigher 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 Robat is only used in summer；and the Year Meuse，the last and most easterly pass，is open in winter and summer． |  |  |  |
|  |  |  |  |  |

Route No． $2 \tilde{5}$ is entered at the Little Pamir lake．

| 5．Chilab－ | 12 | 90 | \} Tide Route No. 25 |
| :---: | :---: | :---: | :---: |
| 6．Bozai Guabaz ．．． | 12 | 90 | $\}$ Vide Route No． 25. |
| 7．Langab | 14 | 102 |  |
| 7．Langai ．．． |  | 116 |  |
| 8．Shatior | $13 \frac{3}{4}$ |  |  |
| 9．Sabiad－I－WaEHan | $9 \frac{1}{9}$ | 1209 | \}ride Route No. 41, Eastern Hindu Kush. |
| 10．Dasht－i－Baroghil | 12⿳亠丷厂彡 |  |  |
| 11．Cayp | 9 |  | ） |
| 12．Dabiot | 7 |  |  |
| 13．Handob ．．． | 102 | $\begin{aligned} & 167 \frac{3}{4} \\ & 178 \frac{1}{4} \end{aligned}$ | Vide Route No．84，Eastern Hindu Kush． |
| 14．Y abin | 13 | $191 \frac{1}{4}$ |  |

Route No. 27.

# From Marghilan to Gilgit via Daraut Kurgean, Soma Tash, tee Baroghil Pass, and Yasin. 

Authorities-Kostenko, 1880 ; Lieutenant Davison, 1891.

| Number and names of atages. | Dibtancein milig. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Interme. diate. | Total. |  |
| 1. Ucir Kohghan | $21 \frac{1}{4}$ | 214 | Yonoff with between 800 and 1,500 troops marched from Som a Tash to Marghilan in 1892 in three weeks by this routc. <br> Kostenko, Volume I, page 110, gives the | distance from Och 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.

2-6. Dabatt KUR. |tis| The road gors along the gorge of the river
ghan. Isfairam. On leaving Uch Kurghan, it immediately enters the gorge just spoken of, and lies over cornices constructed on either badk 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 hure 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 noncommissioned 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 $\mathrm{r}^{\text {rass }}$ 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 gees for a distance of 2 miles over steps cut in buge 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 Ichwe 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 afluent 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 literal road leads hence to Great Karamukh (see Note A, Route No. 28).
7. Altyn $M_{\Delta Z a r} \quad . . \mid$ P are those made by the party of infantry who escorted Lieutenant Davison from Soma Tash to Marghilan.
Cross the Altyndi pass, about 12,000 feet. The descent is easy, over grassy slopes, which on leaving baraut Kurghan are varied by yellow crops of barles. Altyn Mazar is a Kirghiz encamproent on the right bank of the Muk Su. Kostenko says :-"The course of the Muk Su from Altyn Mazar to its mouth (see stage 9, Route No. 28) is known only by inquiry.

Route No. 27-coutcl.
From Marghilan to Gilgit viâ Daraut Kurghan, Soma Tash, the Baroghil Pass, and Yasin.
$\left.\begin{array}{l|l|l}\hline \text { Number and names of stager. } & \left.\begin{array}{l}\text { Distance in miles. } \\ \hline\end{array} \right\rvert\, \begin{array}{c}\text { Intere } \\ \text { mediate. }\end{array} & \text { Total. }\end{array}\right] \quad$ Remarks.

| "According to native statements, the road along the valley is very difticult, and is impracticable for pack animals." Elevation of Altyn Mazar 9,610 feet. |  |  |  |
| :---: | :---: | :---: | :---: |
| 8. North foot of Kai Indi Pass. | P | ? | At 2 miles the Suk Dara and Bilunkeek rivers join. From here the road goes up the Kai Indi river, erossing and recrossing several times. Water and fuel obtainable. Elevation 12,300 feet. |
| 9. South foot of Kai Indi Pags. | $p$ | ? | Rough road, along a talus of shate, gorge, and wide narrow grully. Gross the Kai Indi pass, $1(6,20) 0$ feet. Fuel scarce. Water obtainable. |
| 10. Billuneeet ... | P | ? | Road goes up right bank of the Bilunkeek river, which cuts its way through beds of conglomerate and a form of luess. Fuel scarce. Grass plenliful. |
| 11. Kofdjar | P | P | Direction S. T. Cross Talshita Kuram pass (about 15.50 ) feet). Ascent very ronglio over fragments of rock, perhaps the moraines of glaciers. First part of descent dilficult. |
| 12. Tiliegor | P | p | South-cast over a stretch of gravel and fine land, and alterwards down the right bank of a river. A few Kirghiz tents. Fuel scarce. |
| 13. Kara Bulak | ? | P | South, passing a lake, and ascend to the Kara Bulals 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. Subkomisie | P | P | 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. Sabez |  |  | Roal, vers rough, ascends 1,000 feet to the Boz Taki pass, 11,500 feet. In the winter the road is by the riper, which is frozen, and skirts the spur. At $\frac{1}{2}$ mile from Sarez the river is crossed. |
| 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 en route, 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 ou 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 ןlace with an old fort situated on the right bank of the Murghabi. About 50 'lajiks. Elevation 10,200 feet. |  |  |  |
|  |  |  |  |
| 16. Marzenai Pags... | ? | ? | 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. |

Route No. 27-concld.
From Marghilan to Gilgit viâ Daraut Kurghan, Soma Tash, the Baroghil Pass, and Yasin.

| Nümber and names of stages | Distancl in miles. |  | Remarts. |
| :---: | :---: | :---: | :---: |
|  | Inter. modiate. | Total. |  |
| 17. Soma TasI ... | P | ? | A steep ascent to the Marzenai pass, 15,700 fect. Thence south-west to the Bugrumal pass. and afterwards turns south to the uorth shore of | miles. A little snow lay on the Marzenai pass in Aurust 1891.


| 18. Modth of Kifar. gosh Ravine ... | P | $p$ | $)$ The path leads at ane point over some very |
| :---: | :---: | :---: | :---: |
|  |  |  | difficult recks on the margin of the Yeshil Kul. |
| 19. Khargosh Pass... | 14 | P | Ney klias rays the road in all probability is |
|  |  |  | passable by baggage animials. |
| 20. Yol Mazar | 15 | $p$ |  |
| 21. Yomihana ... | 13 | ? |  |
|  |  |  | \} Fide Route No 29. |
| 22. Langab Kisht ... | 18 | ? |  |
| 23. Badatangi | 18 | ? |  |
| 24. Rachat | 16 | ? |  |
| 25. Samiad-i-Wakian | $10 \frac{3}{4}$ | ? |  |
| 30. Yasin | $52 \frac{3}{4}$ | $P$ | Five stages,-vide Route No. 84, Eastern |
| 40. Gilait | 86 | P | Hindu Kusli. <br> Teu stages, - vide Routes Nos. 30, 33, and 34, |
| do. Gixar |  |  | Eastera Hindu Kush. |

Route No. 28.
From Margitlan to Chitrat viá the Kara Kazik Pass, Kila Khum, Zebak, and the Doray Pass.

Aulhorities-Kostenko, 1876; tee Havildar, 1874; Kosyakoff, 1882; Yalkand Mission, 1873; Ney Elias, 1885.

| Number and names of stages. | Digtanct in mileg. |  | Romarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 1. Wadil |  | 17\% | For the shortest route, see No. 27. |
|  | 1714 |  | This route was followed from Marghilan to |
|  |  |  | Great Karamukh by the Russian expedition to the Alai in 1876. Wheel road to Shah-i.Mardan. |

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

| Nunter and names of stages. | Distancrim milbs. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Inter- mediale. | Total. |  |
| 2. Shat-i-Mardan | 153 | 321 $\frac{1}{3}$ | Shah-i-Mardan is at the junction of several ravines, and is a much frequented resort of Khokand pilgrims. Horage and fuel. |
|  |  |  |  |
| 3. Kaba Kazik pass | 30 | 621 | Up the Shah-i-Mardan river by a rather diffcult ascent. Cavalry crossed the pass in September $\mathbf{1 8 7 6}$, but thes had to lead their horses owing to newly fallen snow. Height of pass 14,400 |
|  |  |  |  |

fect. The ridge is barely 28 inches wide at the pass. Forage and fuel.


Descend to the valley, the height of which is 9,500 feet above sea level. The locality is perfictly devoid of vegetation, even the centre of the valley being quite barren.
oat-fields occur, which are irrigated by small camals. 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.

## Note A.-From Great Karamuklh to Archa Bulak on Route No. 21.

Along the right bank of the Kizil Su to Daraut Kurghan, 19 miles. Mountains rise on either side to an altitude of about 9,100 feet. Near the foot there is some little cullivation. 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 maroh across the spurs. At 46 miles from great Karamukh, Route No. 21 is struck. The Kizil Su can be forded with difficulty between Great Karamulihand Daraut liurghan, but only when it contains little water.
 torrents. In places where the Surkbab flows by several brahches, it is possible to get across on a horse.

| 8. JILGAN | $\ldots$ | $17 \frac{1}{4}$ | Ascend steeply the Kichik-Karamukh Su, and |
| :--- | :---: | :---: | :---: | :---: | :---: |

Route No. 28-contd.
From Marghilan to Chitral viâ the Kara Kazik Pass, Kila Khum, Zebak, and the Dorah Pass.

| Number and names of stages | Distanceinmiles. |  | Remarts. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |

winter season, the other descends direct from the Kashka.Shiviak pars. The descent is stepp, but it runs over soft ground. Just before reaching Jilgan, the river is crossed by a rather unsafe bridge. Jilgau is a large wintering place.
9. $\mathrm{Z}_{\mathrm{ANH}} \mathrm{J}$


164 Rnad fairly good. From the junction of the 104 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 ateeply to the Jul Terek pass. From here descend to a lateral valley, and cross the Zanku by a $f_{\text {ford }}$. The water is trace high, and the forl is generally not easy. Zanku is a wintering place some $1 \frac{2}{3}$ miles from the river (see stage 7, Route No. 27 , for route from Altyn Mazar on the Soma Tash road).
10. Pildan $\quad . .|10|$ : The road at first is barl, gning over cornices, and

| 11. KHait | 11 |
| :---: | :---: |

174 crossing by a ford, a branch of the Surkhab. Fur the last 2 miles the going is over even ground. Pildan is an isolated garden lying on the Zanku. (Surkhab ?)
goes by the Ab-i-Kabud. Down this stream the Yarkbich pass road comes (see Note B, Route No. 20). Khait his 150 houses.


Ford the Ab-i-Kabud, and througha thickly inlahited valley. By a tolerably easy ascent reach the Turpa pass. descending sharply to the village of Namaki-Bulo. This ridge separates the Surk-
hab valloy from that of the Ab-i-Yasman.
13. Gharm


2193
The last six miles of this stage is orer tolerably even ground. Gharm stands on the right lank of the Surkhab; 200 or 300 houses. There is no town wall, but a fortification is construcled on the bank of the river. It is the chicf town of Kiratigin. Below here the river is called the Waksh.

rak pass ; this is the most direct route.
 second road leads from Sar-i-Pul down the left bank of the river, passing through a defil-.

From the pass the road runs along the Shakab, at the month of which is situated Cbahil Dara, on the right bank of the Khulias. The read over the Kamchirak is not practicable in winter. The 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 Kamcha-
$\qquad$

Route No. 28-contd.
From Marghilan to Chitral viâ the Kara Kazik Puss, Kila Khum, Zebuk, and the Dorah Pass.

| Number aud names of atages. | Distance in mileg. |  | Hemarks. |
| :---: | :---: | :---: | :---: |
|  | Intro mediate. | Total. |  |

The latter is apparently a rery narow place; it is avoided by the small Yafich pass, which recrives its name from a Kanitigin village on its summit. Distance by the latter route is $34 \frac{3}{4}$ miles.

16. Tafil Daba $\quad \cdots \left\lvert\,$\begin{tabular}{l|l|l}
\& 10 \& $255 \frac{1}{2}$

 

Practicalble for pack animals. The Khulias is <br>
only fordable here and there in autumn and win- <br>
ter. Consequently a bridge has been built over it <br>
below Chahil Jara at the Darwaz village of Pas.
\end{tabular}\right. hal. The roarl gres by the right bank of the Khulias through a well cultivated and thickly populafel villey, pasing the hamlets of Yorgan, Jiria, Dashta Kosan, Kham Dara, Libo du..l. am Giurlin. Sea Note B, next page, for road up the Bala Wakhia.

Upposie the fiet of Taril bara is a bridge. The fort covers an area of 210 feet in length by 175 feet in bresth built of stone and wood. At each angle is a tower.

| 17. Saghir Dasit ... | 103 | 260 | Leave the Khulias valley, and reach the village of Saghir Dasht. The vallay of Saghir Dasht in its lower part changes into $n$ narrow defile passable with diffeulty; it is only used when the |
| :---: | :---: | :---: | :---: | winter snows render the direct route from Tavil Dara to the Zak'h Bursi pass impracticable. The distance by the direct road (summer route) is about $10 \frac{1}{3}$ miles, and by the winter one about 16 miles. A fort and village of 40 houses.


| 18. Kıор |  | 16 | 282 | By the I'hobu-Rabat pass cross the Darwaz range, which liere forms the watershed between the Surkhab and Ab-i-Panjah river spstems. This pass is lower than the Zakii Bursi, but more stony |
| :---: | :---: | :---: | :---: | :---: | and sterper, especially the descents. On its southern side are situate, opposite each other on the banks of the Klum, the two villages of Khobu or Khop and Rabat.

19. Kila Kifum $\quad \cdots |$\begin{tabular}{l|l|l|}

\& 16 \& $298 |$| Road stony and very difficult, but, fit for caval- |
| :---: |
| ry, 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 |

\end{tabular} frequently br bridyes. There are altogether 10 bridges in this part. Kila Khum is on the riglit 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 Darmaz to Bokhara, it bas still remained the chief point of administration. The citadel is reckoned strong. The area of the fort is 280 feet loge by 210 feet broad. It is built of stone interlaid with wood and comented together. Walls 14 feet high and nearly 6 feet thick. Six towers are built on the walls. In the town there are about lion 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.e., inflated skins.

20. Jobfor Jaruf ..

Route No. 28-contd.
From Marghilan to Chitial viû the Kara Kazik Pass, Kila Khum, Zelak, and the Doral Pass.

Number nind names of stages. $|$\begin{tabular}{c|c}
\(\substack{Dintance in milea. <br>

\)|  Inter- $\\ \text { mediate. }$ |
| :---: |\(<br>

\hline Tutal.}\) \& Remarka. <br>
\hline
\end{tabular}

Note B.-Up the Bala Wabhia viver to Karatigin.
The road goes up the right hank, and passes the following hamlets :-2 miles, Langar ; 3rd mile, Sikhuni: 4th mile, Girkham; 10th mile, Pashter ; benon a rond to Saghir Dasht; 18th mile, Zapsi-Kharp; hence a road up the Ab.i-Shurab to Karatigin; P4th mile, a road g'es over the Ayuli Kharvi pass to Karatigin; 35th mile cross by a bridge the Raznan. Hence another road to Karatigin over the hazam pass. So far the road is good, a few places excepted. Further on it hecomes bad. At the 45 th mile is Iangar. Frem here another road to Karatigin vid the Kiftne Gurdan pass. At the 5lth mile is Lyajur, and at the 50 th is Sangur. Further on, according to uative information, there are no liamlets.

The Bala-Wakhia valley is said to afford excellent pasturage. Hence the rond goes over the Akba-Istargi pass and along the Ab-i-Sitar to the Wanj valler: The road is practicable for footmen in June and July only; in August and Neptomber the iee cracks and forma crevasses, over which it is impossible to make one's way.- (Kosy,

Note C.-A very practicable road is said to lead from the lambet of Uz-Harf, up the stream of the same name, to Kurghan Liajur on the Wiksh (see Nute $D$ ) over the AkbaiUz. Harf pass. Uz-Harf is 19 miles from Kila Khum.
22. Waniod

$334 \frac{1}{2}$
Road dicecult over rocks, Passes the rillige of Ghuch, Wand, liawand, 「aslikar, and Bumigal. Wakhia stream is crossed by a bridge near Korgawad.
Note D.-From Wakhud up the Wanj to Mazer.
North-east along the right bank of the river. At 5 th miles pass Vitch Harf; lian 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 milss. 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 Wakhid (sce Note D). At 31 miles is Wanvar. 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 gringr from Mazar to Kamatigin. Ten miles begond Mazar further progress is said to be immossible nwing to huge bloeks of ice ard masses of snow which cover all the gorges issuing from the Dara Abduk and Kasholagak streams.-(Kosy akoff', 1852.)


Pass fort Kalaban. At Yaz fohulam are 80 houses and a fort. Road difilicult.

Fort Wamar is situated $1 \frac{1}{8}$ miles below the junction of the Murgbabi and Ab-i-Panjah. Route No. 24 comes in here from the Great Kara Kul. Wamar is the copital of Roshan.
At 6 miles pass the Darband tower built on a rock, the boundary between Shignan aud Raghan. Here the valley is very narrow.
From Sacharv the Panjah ralley is wide and comparatively populous. Fruit is abundantmulberries, apples, prars, apricots, and walants are the most common.
At $4 \frac{1}{2}$ miles reach Yumj village. Road good. Supplies plentiful. For the river at 6 miles at Dishar, or cross by ferrs at Bar Panjah. a village of 29 houses on the right bank. From here Ronte No. 30 gnes to Faizabad. Bar Panjah is the capital of Shignan. Adjacent to it stands a stone fort on the margin of the river.

Route No. 28-concld.
From Marghilan to Chitral viâ the Kara Kazik Pass, Kila Khum, Zebak, and the Doral Pass.
Number and namos of atages. $\left|\begin{array}{c|c}\text { Distance in miles. } \\ \begin{array}{c}\text { Inter. } \\ \text { mediate. }\end{array} & \text { Total. }\end{array}\right| \quad$ Remarke.

## Note E.-From Rar Panjah to Kala Panjah up the Shakh Dara.

Leave the Glund at its junction mith Shoclian 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. A.bove Raj the valley opens out and grassy slones take the place of barren crags. Mountains on the suathern side give rise to glaciers. From Upper Joshangaz a path strikes off up the monntain 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 explo. er, a level track passable for horsemen leads by the Jushangaz pass to $\mathrm{Ab}-\mathrm{i}-\mathrm{Ma}$ atz.

| Rinad good.
$415 \frac{1}{2}$
Pass Deli-i-Kurghan at 2 miles, and Vear at, $5 \frac{1}{2}$ miles, the latter a scattered village of about 4i) houses. Camp on the left bank. Darma. ralcht is on the opposite bank, from whence supplies are procurel 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 bants of the Shakh Dara.


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. Yaghdora | 9 |
| :---: | :---: |
| 31. Ishiashim | 11 |
| 32. Bazaiban | 81 |
| 33. Zeraik ... | 101 |
| 34 to 41. Chitral ... | 84 |

River forded three times above the village of Sari Shakih. Left bank is avoided, being dangerous for horses. Supplies plentiful.

Road good and througl cultivation.
See also Route No. 64, Eastern Hindu Kush.

Vide Route No. 64, Eastern Hindu Kush.

Tide Routo No. 87, Eastern Hindu Kush.

Route No. 29.
From Osif to Cuitral viá the Tuyur and Khargosh Passes, Kala Panjah, and the Baroghil Pass.

Authorities-Yankand Mission, 1874; Kostengo, 1876 ; Littledale, 1890.

| Number aud names of atages. | Distance in mileg. |  | Bemarke. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |

Mr. Litilenale says :-There is only one road by which the Russians can come from Osh to the Murghabi, that is, up the Guicha river, over the Taldik or Shart passes, across the Alai platean and Kizil Art pass, through the Kara Kul basin, and over the 'l'usuk pass, and down the Ak Baital to the Murgh:bi (AkSu). A very little labour woald make the route quite practicable in summer for carts of the country."

| 1. Langai | 20 | 20 |
| :---: | :---: | :---: |
| 2. Golera | $20 \frac{1}{3}$ |  |
| 3. Kizil Korghan... | 102 |  |
| 4. Scfi Kurghan | $15 \frac{1}{4}$ | 60 |
| 5. Fort Kizil Jab | $14{ }^{3}$ | 75 |
| 6. Koijol Datan | 1012 |  |
| Pass. |  | $100 \frac{1}{2}$ |

At Kizil Jar the rond 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 via forts Ucha Tapa and Bossaga to two passes which lie at $1 \frac{1}{3}$ milies distance from each over. The more eastern of thes is the Koijol Davan ( 11,400 feet). The other is the Taldik, 11,600 feet (see lioute No. 21).

| 7. Vallfy of the Alat. |  | 1091 | Cross the low Katin pass at 5 miles. Further on a traok leads down to the Alai valley (see Note A, Route No. 28). |
| :---: | :---: | :---: | :---: |

Note A.-Alternative Route viâ the Surik Mogol pass.
By this route the road from Osh to the Kuknuat gorge goes along a wide valley, and then turns this gorge by bending east and crossing the low Kukunat pass, after which it immed intely descends into the Ak Bura by fort Ropan. Passing along $: \mathrm{k}$ Bura for 12 mifes, 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-Mngol pass lies 13 miles from the mouth of the river of the same name. Altitude 14,000 feet. The nort hern slope is very steep; the southern one is less precipitous. This is a much more difficult route then the one given above. Distance from Osh 100 miles.

Note B.-Alternative Route viâ the Jiptilc 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 slill 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 snowields, and even a small glacier.

[^22]
## Route No. 29-conda.

From Osh to the Chitral viâ the Tuynk and Khargosh Passe., Kala Panjah, and lhe Baroghil Pass.

Number and names of stages. $\left|\begin{array}{c|c}\text { Distance in mitirs. } \\ \hline \begin{array}{c}\text { Interme- } \\ \text { diate. }\end{array} & \text { Total. }\end{array}\right| \quad$ Remarles.

The descent is rendered still more difficult by the snow, and, if not more steep, is certainly quite as much so as the previous ascont. Here the horsaman has constantly to dismount. The track is often crovsed by ridges formed by fragments of detached rook. This débris, which consists of sharp stones, ve:y greatly impeles progress. The length of the descent is from $3 \frac{1}{3}$ to 4 miles. At this distance, and from a height of about 11,000 fect, can be traced the regular conve of the northern diptik, which fowards its source is made up of numerous springs and affluents, which converge towards it. The gnrge now opens out, and bushes and grass make their appearance. Two miles low.r domn sueculent pasture and dendroid juniper come in sight. These attract the Kirghiz, whose tenta are to be seen around. Still further down the gorge, at a height of abont 8,00 ) feet, patches of barley and wheat are presented to the view. These are watered by canals. Lower down, at a height of 7,510 feet, there are willows, birches, roses, Sc. The road throughout is practicable, aml gaes along a smooth an soft incline, down to the brd of the northern Jiptik. The road passes from one bank of the river to the other by fords, which are shallorv and practicalle. 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 liptik cuts deeply into the sides of the gorge, so that, the route for about $1 \frac{1}{3}$ miles lies over a high cornice on the right bank of the river. It afterwads sharply descends into a wider part of the gorge, which is called Khojr-Kiliat. Here the roa! again passes over a soft suil, and is very practicable. The valley of Khoja.Kilint is 5 miles long and about 2 miles wide. Almost the whole of it is taken up with eultivatell patehes and the winter quarters of the nemads. The abundant deciduous tree forest along the river bed aids in attracling the Kara Kirghiz to this spot.

The rirer at this point is forlable evorywhere. From the valley of Khaja-Kiiiat the northern diptikenters a very maroor defiln, and the road is taken over a cornice overhanging the left bank of the river. The length of this cornice is from 1 to $1 \frac{1}{3}$ miles. The road then descends in ziguags in such a way that hetween the begiuning and the ond of the descent the distance in a straight line is about $1,40^{\prime}$ feet. It is impossible to ride over this part of the roal, so that the horseman is compelled to dismount. At the base of the descent just described bridges across the river apprar. These are on the same princiule of construction as obtains generally throughout the Central Asian mounfains. Further on the road is equally diffiult, for it lies over cornices and the so-called balconics. 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 wiles from the point where it left the Khoja-Kiliat valley.

| 8. Kizil Abt defile | $11 \frac{1}{4}$ | $120 \frac{3}{4}$ |
| :--- | :--- | :--- |
| 9. Kizil abt Pass ... | $16 \frac{1}{3}$ | $137 \frac{1}{4}$ | through and a road could easily be mande animals. The gradient is moderate all Mr. Litt Mr. Littledale found no snow on the pass on the 7 th June 1890.

The ridge of the pass affords a good view of the entive 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 enst to west. The perfectly bare hills about this valley consist of elforescent clajey sandstone, and do not reach the snow line.

The valley of the Saksteadily ascends for 13 miles in an easterly direction, and terminates at the top of a mountain range composel of conglomerale, and ahout 11,700 feet in height. Beyoud this range lies the mountain-locked dale of lake Kara Kul.

Route No. 29-conid.

From Osh to the Chitral viâ the Tuynk and Khargosh Pusses, Kala Panjah, and the Baroghil Pass.

| Number and names of stages. | Distance in miles. |  | Remaris. |
| :---: | :---: | :---: | :---: |
|  | Lntermodiate. | Total. |  |


| $\begin{aligned} & \text { 10. Kichines } \\ & \text { Art Pass. } \end{aligned}$ | 20 | 16T ${ }^{1}$ | Berond the pass the road offres no obstacles, axcept the want of forage and fuel. The soouth side lias a gentle slope down to the Markan Su ( 13 , (i) O)feet), where there is a little grass in places ; |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  | also root fuel. Thence there is no grass on lla way, but on the north side of Kara Kul is some fuel. In October 1890 Captain Younghusband returned frow Kara Kul to Kashgar by a road down the Markan Su.

The lake is abont $11 \frac{1}{4}$ miles long from north to snuth, and about 11 miles broad from east to west. It has several large islands and peninsulis. It absorlss several torrents, but has no efflox whatever. It is surrounded by mountains at a distance of about 7 miles on the east, while on the wist the mountains close on to the lake. The bottom is of sand and the water clear, but having a slightly litter taste, horses will only drink it when very thirsty.


The gromed is loose, comsisting 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 desicoating.

| 12. Little Chon So | 1914 |
| :---: | :---: |
| 13. Tuyde Pass ... | 1911 |

After passing the lake, the road goes due 184 $\frac{1}{2}$ south up a sandy waterless valley to Oksali Mazar.

The defile of the Chon $S_{u}$ is broad, and the road
204 might be easily made fit for wheels. At 6 miles rach the conlluence of the Chon Su and Uzbel Su, where grazing is to be found. There is a branch road hence over the Uzbel pass to Rang Kul, 16 miles.* The whole ralley of the Chon Su is seen very plainly from this puint.

The ranges are composed of clay slate, and the height mas estimated at 12,000 feet above sca level. The ascent to the ridge leads over a steep slope. The raliey of the Chon Su measures from 1 to 2 miles in width, and extends frum south-east to north-west.

Altitude of Tuyuk pass, 15,525 feet. The pass is presumed by the Russians to de open from June to December.
14. $\mathrm{C}_{\triangle M P}$


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 eleration decreases, small patches of grass bccome numerons; but Mr. Littlodale 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.


Route No. 29-contd.
From Osh to the Chitral via the Tuynk and Khargosh Passes, Kala Panjah, and the Baroghil Pass.

| Namber and names of stages. | Distancr in milma. |  | Remarlis. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |

as wnter comes down by midday; the depth then reaches $2 \frac{1}{1}$ feet. The height of the Ak Su at the passage (ford) is about 12,000 feet.* Plenty of grass; fuel scarce.


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:"

Altitude of pass 14,550 feet.


Route No. 29-conh.
From Osh to Chitral viâ the Tuyuk and Khargosh Passes, Kala Panjah, and the Baroghil Pass.


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

| 29. Safbbeg | 19 |  | Cross Baroghil. |
| :---: | :---: | :---: | :---: |
| 30. Chaseridch | 14 | 460플 | From here Yur in Wakhan is reached in one march, or 20 miles by the Khau Khon pass. |
| $\begin{aligned} & \text { 31. Topkiana } \\ & \text { deg. } \end{aligned}$ | 9 | 4693 ${ }^{\frac{3}{4}}$ |  |
| 32. Shajanilli | 13 | 482\% $\frac{3}{4}$ | Cross Shajanilli spur, closed by snow in winter, but easy to horses in summer. Yust in Walshan reached from here in 24 miles by the Uchli pass, practicable for footmen in summer. |

Route No. 29-concld.
From Osh to Chitral viâ the Tuyuk and Khargosh Passes, Rala Panjah, and the Baroghil Pass.

| Number and names of stages. | Distance in milms. |  | Memarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Inter- } \\ & \text { mediate. } \end{aligned}$ | Total. |  |
| 33. Rich ... | 21 | 603 ${ }^{\frac{3}{4}}$ | Large village, 400 honses. Panjal Wakhan (Kala Panjah P) reached on foot in summer in two days by the Ruch pass. |
| 34. Ujno | 7 |  | Large village in Turikho valley. |
| 35. Shagram ... | 15 |  | Large village in Turikho valley. |
| 36. Madar ... | 15 | $540{ }_{4}^{3}$ | At 3 miles cross Tirich stream, and pass Surwat at junction of Mulkho and Tirich |
| 37. Kala Drasan ... | 18 | 5588 |  |

N. B.-The above route is that generally nsed between Sarhad and Chitral in summer on acenont 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.
From Kasegar to Faizabad viâ the Little Kara Kul, Rang Kul, and the Alichur Valiey.
Authorities-Kostenko, 1880; Ney Elias, 1885.


[^23]Route No. 30-contd.
From Kashgar to Faizabad viâ the Little Kara Kul, Rang Kul, and lhe Alichur Valley.

| Number and names of tages. | Distance in mileg. |  | Bemarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Inter- } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 6. Sharghot ... | 19 | 113 | Up the Chimgan 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 ani- |
| mals must be unloaded. | ss i | q | tities and saxaul. A few Kirghiz here generally. |
| 8. Little Kaba Kol (soUTH END). <br> encampment) at about | $\underline{12}$ | 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 Kangshiwar (Kirghiz ley of Kara Kul outlet to north end of lake is | about 5 or 6 miles.

 terbi Pass. branches off here; then up ravine to foot of pass. Little grass ; fuel nil.
Water scarce in autumn ; none in winter.
10. Kara So

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. Rana Kul 〈east 20 | 20 Over open pamir the whole way. Grass, end).


187 water, and saxaul.

|  |
| :---: |
|  |  |

Down south shore of lake for $11 \frac{1}{2}$ miles, where the lake ends. At $15 \frac{1}{9}$ 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 oamp 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 tiver.
13. Yaman Tax


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 wil-
low jungle.
14. Oros Bulak


Rotte No. 30-contd.
From Kashgar to Foisubued viâ the Little Karn Kul, Rang Kul, and the Alichur Valloy.

| Number and names of stages. | Distance in mileg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Introme- } \\ \text { diate. } \end{gathered}$ | Total. |  |
| 15. Aptulla Kian's Romat. | $17$ | 269 | Down the Alichur valley, passing Chadir Tash. Campat mouth of Bash Gumbaz ravine. Water, grass, saxaul, and fish. Level road all the way. |


| 16. Burzilla | $\cdots$ | 17 |  |
| :--- | :--- | :--- | :--- |
| 17. Bulun Kul | .. | 21 | 286 |
| 307 |  |  |  |

Road, \&c., as before.
At 5 miles south end of the Sasik Kul (fresh above small lakes. At $11 \frac{1}{2}$ miles pass Ter Kul (salt vater). At 13 miles cross mouth of Khargosh ravine, up which Route No. 99 goes. Water, grass, and a little saxaul.


Water, grasar, and fuel.


Down the valley. Jungle all the way, which sometimes makes it difficult for liulen animals to pass. At 10 miles deserted Shigni villages. Water, grass, and fuel.

Dorn valley. Jungle troublesome in places. dt 12 miles junction of Alichur river. Three houses; supplies scanty. From bere a path goes to the Murghabi (see Note C, Route No. 24).

Note A.-Six miles before reaching Sardin, a road goes off to Joshangaz at the mouth of a dara in the Sbakh Dara valley. A road leads southwards from Joshangaz to Panjah Fort in. Walihan in two days, and another eastward to Victoria lake in five. This last no donbt is the route by the Joshangaz pass to the Ab-i-Natz tributary of the Panjal. It is a high pass closed by snow, except for three or four months. It is the summer route between Kala Panjih and Bar Paujah. The Russian expedition of 1883 esplored it; but see Note $E$, lioute No. 28.

| 21. Chafarsim | $\cdots$ | $14 \frac{1}{2}$ |
| :--- | :--- | ---: | ---: |
|  |  |  |
| 22. Deh Basta | $\ldots$ | 20 |

$366 \frac{1}{2}$ Domn the left bank. At $12 \frac{1}{1}$ to 13 miles road goes over rock by side of rapids. Ponies mostly require unloading. Seven houses ; supplies.
Down left bank. Pass Wir at 7 miles, scven $386 \frac{2}{9}$ 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 Note C, Route No. 24).
23. Suctinan

Down left bank for 1 mile ; then cross to right
$401 \frac{1}{2}$ by a bad lridge. At 4 miles is Revalk or Gokevak. Here recross to left bank by a lad bridge. Village; supplies.

Route No. 30-concld.
From Kanhgar to Faizabad viâ the Little Kara Kul, Rung Kul, and the Alichur Valley.

| Number and names of stages. | Dibtance in miles, |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 24. Bar Panjait ... | 15 | 417! | At $\frac{1}{2}$ mile cross to right bank. Road a little diffiont for bagrage animals. At 8 miles is confluence of Shakh Dara at Kharok village. A 12 miles emerge on Panjah valler ; then down | Panjah, on right bark, and cross by ford or boat, according to season, to Bar Panjah on left bank. Fort and supplies. Afighan garcison, \&c.

25. Gabjiman
26. Guriel Pass


From Bar Panjah the road turns south up a stream flowing into the Ab-i-Yanjah.

From the village of Garjiwan the route soon $463 \frac{1}{4}$ enters ladakhshan territory over the elevated talle- land or pamir of Shiwa. After crossing Shima, the road erosses the Guriel pass, whence it turns sonth and runs duwn 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. Uba Shar |  | 14 ${ }^{\frac{1}{3}}$ | 4779 |
| :---: | :---: | :---: | :---: |
| 29. Gazan | . | 161 ${ }_{\frac{1}{2}}$ |  |
| 30. Faizadad | ... | 7 |  |
|  |  |  | $501 \frac{1}{4}$ |

Route No. 31.
From Faizabad (Badakfstan) to Chitral viá Zebak and the Dorah and adjoining Passes.

Authority—Routes in Eastelin Hindu Kosh.

| Number and names of atages. | Dietancein milig. |  | Hemarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 1. Khangail | 7 | $\begin{array}{r}7 \\ \hline\end{array}$ | TFide Route No. 88, Eastern Hindu Kush. |
| 3. Cemikaran | 15 | 24 |  |
| 4. Tigaran | 17 | 39 |  |
| 6. Zidak | 17 | 56 |  |
|  |  | 73 |  |

Route No. 31-contd.
From Faizabad (Badakhshan) to Chitral viâ Zebak and the Dorall and adjoining Passes.

| Number and names of stages. | Digtance in milbs. |  | Remarts. |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Inter- } \\ & \text { mediatc. } \end{aligned}$ | Total. |  |
| 6. Iskatul | 10 | 83 |  |
| 7. Senalich ... | $9{ }^{\frac{1}{2}}$ |  |  |
| 8. Саmp -.. | 112 | 104 |  |
| 9. Seati Salim ... | 12 | 1 |  |
| 10. Bamzin | 10 |  | Vide Route No. 87, Eastern Hindu Kush. |
| 11. Diteshp | $7 \frac{1}{4}$ |  |  |
| 12. Shogoth | 109 |  |  |
| 13. Chitral ... | 121 | $157$ |  |




Route No. 31-concld.
From Faizabard (Barlakhshan) to Chitral vî̂ Zebaki and the Dorah and adjoining Passes.

| Number and names of atages. | Dibtance in miles. <br> Interme. <br> diate. Total. | Remarks. |
| :--- | :--- | :--- |

Note C.-Alternative Route from Dehgul viâ the Agram P'ass.

| 7. Agram | ... | 16 | $98{ }^{\frac{1}{2}}$ |
| :---: | :---: | :---: | :---: |
| 8. Rubat | ... | $8 \frac{1}{4}$ |  |
| 11. Ceitral | ... | 312 |  |
|  |  |  | 138 ${ }^{\frac{1}{4}}$ |

Route No. 32.
From Yarrand to Sharidulea via the Sanju Pass. Authorities-Brelew and Trotter, 1873.
 Sanju stream. Sanju is a populous settlement. The last Chinese post is here. Cultivation extends for 8 or 10 miles along the river. Elevation 6,07 ) feet.
 twiee. In August 1870 Dr. Henderson found the Sarikyar, or Sanju, unfordable, so made a detonr up a valley to the left and over the Chuchu pass (see next stage) to the bauks of the Arpalak, which flows to the east of the Sanju stream.
8. Tam
$\cdots\left|-16 \frac{1}{\frac{1}{2}}\right|$
152

Pass the Chuchu glen on the left, a narrow defile which conducts over the Chuchu ridge to Shabidulla, and is taken as an alternative route when the river is unfordable during the summer

Rocte No. 32-contd.
From Yarkand tợShatidulla viâ the Sanju Pass.

| Number and names of stages. | Diatance in miles. <br> Interme. <br> diate. Total. |
| :--- | :--- | :--- |$\quad$ Remarks,

floods. The Sarikyar is crossed repatedly from side to side, and the road goes up the marow 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 fect.
 ridge of mica slate, 16,650 fert high. From the pass descend a narrow, deep, rough gorge to a strip of turf in a trickling stream between lofty vertical cliffs. No fucl or pasture. Elevation 12,050 feat. Dr. Bellew's paty were 11 hours on this march, and lost cight cattle on the road.

11. Hila-ta-gilasi ... $|$| $11 \frac{1}{2}$ |
| :--- |
|  |
| $187 \frac{1}{2}$ |

Down the gorge to the 4th mile path very steep, rough, and difficult of passage owing to repeated crossings of the frozen rivalet. At $4 \frac{1}{2}$ miles is Mirza Abakar campingrgoond at a cluster of graves on the right bank of the Karakash river. From here the road goes down the Karakiash ralley by a very rough road, fording the river tirice. Valley very narrow; hills high and bare. Camp on a limited flat of brushwood and pasture by the river bank.
12. Shatidulla $\quad \cdots|\xrightarrow{15}| \begin{aligned} & \\ & \end{aligned}$

Follow the Kirakish by a rough road in a winding valler with brnshwood and forage along river conrse, their palches interrupted by projreting moraine banks. At 4 miles, at junction of the Kilian with Karakash, stands Sanju Kurghan, a mud castle with loopholed walls. Here oross the Kilian stream, and at 9 miles cross the Togra Luee river. The Karakash is crossed three times before reaching shahilnla.

Route No. 33.
From Kashgar to Leh viá Yarkand and the Kilian and Karakouem Passes.
Authorities-Shaw, Haymard, Trotter, and Bellew, 1873; Colonel. Bhle, 1887.

| Number and names of stages. | Distance in miles. | Interme- <br> diatc. | Total. |
| :--- | :--- | :--- | :--- |

are the Tazgun and the Kara Su. Pass the villages of Kasr Robat, Turmalak, and Tazgun.
Altitude 4,210 feet.

Route No. 33-con/h.
From Kashgar to Leh viA Yarkand and the Rilian and Karakorum Passes.
Number and names of stages. $\left|\begin{array}{c|c}\text { Distance in ariles. } \\ \begin{array}{c}\text { Inter. } \\ \text { midiate. }\end{array} & \text { Total. }\end{array}\right| \quad$ Remarks.
2. Yangi Hisar


38
The rond is much cut up by branch canals. Soil generally sandy. Cross by a wooden bridge the Kusan river, and then cross ly another wooden bridge a large canal from the Kusan river. Pass the villages of Tuglok, Sorgoluk, and Kauka, and cross iwo branches of the Sailik canal from Kusaunk. At 19 miles is the Zaikash stram 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 nbout 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
$\cdots\left|-28 \frac{1}{2}\right|$
$66 \frac{1}{2}$
Cross the Yangi Hisar river, and over a flat plain irrigated by suall watercourses, fassing the scattered villages of Kalpin, Tuglok, KoshiGuwbaz, Kudok, and Chemalung. Kizil bas about
job housps. Altitude 3,910 feet.
4. Kok Robat $\quad . .|\quad 26| \quad \mid$ Pass the dre bed of the Kizil stream, coming $92 \frac{1}{2}$ from the Kizil Tagh on the west. Thence over flat waste for about 13 miles to Ak Rohat, where are two small wells. whence surface is 93 feet brow the ground level. From here the road skirts the Hamel-i-Disht, a barwen desert without habitation or cultivation. At Kuk Robat (blue post-house) are about 200 houses. Altitude $3,83 \cup$ feet.

5. Yamkand $\quad \cdots |$|  |
| :--- |
|  |

Orer a deselt waste and grassy swamps, occasionally passings small villages. At about $17 \frac{1}{2}$ miles is the village of Kiakorum. Alout here the road crosses tie Urpi canal by a ronden bridue, and then gres aloug the north wall of the fort. Altitude $3.9 \% 3$ feet. 'The fiangi Shahr of Yarkad 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 cold ; aiso beef and mutton.
6. Posgam
$\cdots|-17|$
The route by the kilian is practicable in the hot weather from July to Octelber. 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 food season.

At 11 miles cross the Zarafshan or Yarkand fiver. Ford across a fine pebbly bed be$t$ ween low sandy banks 400 to 500 yards apart. The river flows in too clannels, efparated by tamarisk jungle, across a cultivated plain covered thicklv with farmsteads, and traversed by numerous irrigation cuts. Pongam is a market town of 600 Louses. Elevation $4, \dot{1} 10$ feet.

| 7. Karghalik ... | 24 | 155 $\frac{1}{2}$ |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |

## Road grod.

Through a cultivated phain, farmstearls and firlds, with marshes and jungrle patches. At about 13 miles pass Yalishumba hazar, BOH hoonses. Abrat haif-way eress the Tiznaf riser
by a firm pebbly ford. Thence over patches of saline incrustation, marsh and waste. Trees in plenty. Karghalik, a market town of 1,000 homses. Rest-houses. Elevation $4, \dot{5} 0$ fuet.

Route No. 33-conld.
From Kashgar to Leh vià Yarkund and the Kilian and Karakorun Passes.

| Number and unmes of stages. | Distance in minkg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Interme. diate. | Total. |  |
| 8. Bora -.. | 25 | 180 $\frac{1}{2}$ | Fass Beshtarik; thence over a wide waste of |
|  | 13 |  | coarse gravel. Bora is a settlement of some 40 houses situated on the cuturse of a stream. |
|  |  |  | Elevation 5,4)0 feet. <br> A rest-house and a small village. |
| 10. Kilian |  | $\begin{aligned} & 193 \frac{1}{2} \\ & 205 \frac{1}{2} \end{aligned}$ |  |
|  | 12 |  | Pass Suzam on the border of the Dashti-i. |
|  |  |  | Bora at 8 miles, and immediately afterwards |
|  |  |  | ford the Kilian. The stream, thoush rapid, | village with a market and school. Kilian is the last Chinese post. Elevation 7,000 feet.



Note $A$.-From here a road strikes of to Sanju-Route No. 32.

| 14. Chadul Tash | .. | $22 \frac{1}{2}$ | 254 |  |
| :--- | :--- | :--- | :--- | :--- |
| 15. Kilian Pass | ... | 15 |  |  |
|  |  |  |  |  |

Up the valley as before, passing Klitai Tam, where there is an old Chinese boundary pillar at 15 miles. Chadur Tash is a haltirg-place in fine pasture on the north of the Kilian pass.
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 dalien over it with difficulty. The nsual cnstom of the traders is to hire jaks from a neighbouring camp of Wakhis. Khoten Bhai Kargill is passed at about 6 miles, and Shuskhum at about 8 miles.
16. Bobtan
17. Gbunjitublik ...

| $\cdots$ | $7 \frac{1}{2}$ |
| :--- | :--- |
|  |  |

A halting-place in the Kilian Dara.

Descend gradually to an old fort (Sanju Kurghan ?) at $4 \frac{1}{2}$ 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 difticult for horses to keep their legs.
 emall tribe of Kirghiz. G:as: plentifnl ; tamarisk and scrub for fuel. ail

Route No. 33-concld.
From Kashgar to Lek viA Yarkand and the Kiliun and Karakorum Passes.


Route No. 34.
From Maralbasht to Aktagh via Yarkand, Kugiar, and the Yang Pass. Authorities -Yarkand Mission (partly from native information), 1873-74; Lieutenant Bower, 1989.


Route No. 3 -
From Marallashi to Aklagh viâ Yarkand, Kugiar, and the Y'any; Pass.

| Number and names of stages. | Distanca in milef. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Inter* mediate. | Thetal. |  |

To stage 6 the entire route lies through jungle. At Shamal is only a old rest-house, but a mile to the east, on the bank of the river, is a cluster of some sis houses, where the traveller may get some supplies.

| 2. Aegar Maral | $22 \frac{1}{2}$ | 36 | Fourteen houses at the halting-stage; accommodation in ench ; suppliss, \&c. |
| :---: | :---: | :---: | :---: |
| 3. Alaigue | 1312 | 493 | The road approaches the river once on route; 23 houses. Supplies and water. |
| 4. Menut | $22 \frac{1}{2}$ | 72 | The river is encountered twice en route, but is nowhere crossed; 16 houses ; supplies, water, Sc. |
| b. Lailie | 18 | 90 | Road goes near the left bank of the river ; 22 houses; supplies, \&o. |
| 6. Terie Langar ... | 311 $\frac{1}{3}$ | 121 $\frac{1}{2}$ | Through desert and low jungle. At $1: 3 \frac{1}{2}$ miles a deserted Langar of the time of the Chinese; 40 houses and 2 musjids. |
| 7. Yariand | $31 \frac{1}{8}$ | 153 | Pass Charshamba and Ekshamba bazars. Cul. tiration and gardens from the lst mile to Yarkand. |
| 8. Yanaichik | 12 | 165 | Tris route avoids the ciiffionlt Sanju pass, but is only practicable for caravans in winter, when the upper parts of the |
| 9. Yaificimba BazAR. | 18 | 183 | Yarkand and Tiznaf are low and frozen. $\}$ However, it is thought to be the best route |
| 10. Kabgealik |  | 199 | use chiefly owing to the depredations of the Kanjuti robbers. <br> Vide Route No. 33. |
| 11. Beshtabik |  | 219 | At 3 miles leave the cultivation and pass nver a שide gravelly waste of arid desert stream with boulders and thoongh a gap in a ridge of sandhills, which is about $\frac{1}{2}$ a mile to a wile broad. |

At Beshtarik there are some 8 or 10 huts.

Fourteen houses at the halting-stage; accommodation in ench ; supplics, \&c.

The road approaches the river once on route; 23 houses. Supplies and water.

The river is encountered twice en route, but is nowhere crossed ; 16 houses; supplies, water, Sc.

Road goes near the left bank of the river ; 22 houses; supplies, \&o.

Through desert and low jungle, At $1: 3 \frac{1}{2}$ miles a deserted Langar of the time of the Chinese;

Pass Charshamba and Ekshamba bazars. Cul. tiration and gardens frow the lst mile to Yarkand.

Tris route aroids the diiffoulti Sanju pass, but is only practicable for caravans Y winter, wh
\} However, it is thought to be the best route from Yarkand to Leh, and has fallen into disuse chiefly owing to the depredations of the Kanjuti robbers.
At 3 miles leave the cultivation and pass nver a wide gravelly waste of arid desert stream with hills, which is about $\frac{1}{2}$ a mile to a wile broad.

## 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, Baterak 'Lurba, Alichik, Takma. Tupa-Dawan, Azghan, Kilik Dawan, Lnrcha Yo Tuba, Gor Jilga, Mazar Khoja, and Shabidulla. 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 te made practicable for ponies.

12. Yolabik $\cdots \mid$ 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. |

Route No. 31-contd.
From Marallashi to Akłagh viâ Yarkand, Kugiar, and the Yangi Pass.

| Number and names of stages | Distanca | milege. | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Tutal. |  |
| 13. Kugiar | 13 | 244 | Cross the wide, sla llow, pebbly watercourse and a high ridge of loose sand. Frow the 6 th mile ascend the Kugiar gully. |
| 14. Ais Masjid | 24 | 268 | Cross the stream and through 3 miles of cul tivation. At 6 miles the hamlet of Fusar is reached, and cultivation and habitations eud. Thence up a narmw winding gully to the camp- |

ing-ground on the banks of a stream at the foot of the Tupa Dawan. Hills of shale resting on linestone and sundstome. Vegelation scanty. Elevalion $r, 870$ feet.

## 15. CHIKLIK <br> 11 <br> In the first 6 miles ascend with a steep rise

279 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 Tizinaf river.
16. Mazal Knoja ... 14 | Road goes domen the bed of the river, which

293 has to be forded (girth deep in June) 24 times, en route on a roush boulder bottom in a deep winding defile. Camp on a turfy slope on the Ifft bank of the river. Brusl wood and forage plentiful. Elevation 9,250 feet.
17. Dubs $\quad . .|\quad 6|$ The roa! in winter is over the frozen river.

290 In summer through it, and is dangerous from sudden foods. Large boulders aiso make the fords difficult. Cabop at angle of junction of two torrents. Banks fringed with millow and poplar. This is a favourite pasture ground of the Paklpu tribes.

| 18. Gurunj Kaldi ... | 9 | 308 | Up the stream, crossing two tributaries from the right. Camp on a turfy slope with bogey 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 decp laser of snow, over which the road passes. |

N.B.-There appears to be some confusion here, or there is more than one Chiragh Saldi. According to ('aptain Younghusband, Chiragh Saldi is west of Kulanuldi and not north as here desoribed (see Route No. 40).

| 20. Kulancldi | 11 |  | Ascend easily to the top of Yangi Daman, 15,800 |
| :---: | :---: | :---: | :---: |
|  |  | 330 | feet, at 3 miles. Descent easy for 2 miles. At |
|  |  |  | 5 miles a gully joins from the left. Route |
|  |  |  | 40 is probably entered abont here. Down | narrow, tortuous, and deep gorge, that is, blocked till June by a glacier, but melts array in the nest month.



River has to be forderd 5 or 6 times; it was girth deep in June 1874.

Nr.B.-This camp must be the same as stage 2, Route No. 40.

Route No. 31-concld.
From Maralbashi to Aklagh viâ Yarkand, Kugiar, and the Yangi Pass.

| Number and names of stages. | Distances in milie. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermedinte. | Total. |  |
| 22. Finshmir Jilaa | 25 | 27i) | Through a long stretch of brushwood callid Kirghis Jangal, and an alternately widening and narrowing valleg. At 17 miles pass the ruin of an outpost fort called Nazar Beg Kurghan. |

23. Khofelana ... 11 | Road good all the way. The valley gradually 281 expands between two cliffs running from east to westas far as Khufelang. Grass and fuel procurable. A halting-place in the junction of two branches of the river. It is also called Loougpa by the Thibetans and Khupulaghsee by the 'lurks, all three terms meaning mouth of a pass.


Route No. 35.
From Kashgar to Hunza via the Tagdumbase Pamir and the Mintaka Pass.

Authorzlies-Captan Riddulph, 1874 ; Lifutenant Bower, 1889 ; Captain Younghosband, 1889; Dauvergne, 1889; Captain Pemberton, 1892.

| Number and names of stages. | Distance in milmg. |  | Remnrks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 1. YapCHAN <br> 2. Yangi Hisar .. <br> 3. Ighiz $^{\text {Yar }}$ | $14 \frac{1}{2}$ | 14늘 <br> 38 <br> 57 | Fide Route No. 33. <br> 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 |
|  | 231 |  |  |
|  |  |  |  |
|  | 19 |  |  |
|  |  |  |  |
|  | miles practicable for wheeled traftio | Travellers to Sar-i-Kul take from here gram and flour. |  |
| 4. Ae Tala | 17 | 74 | Kirghiz camp. South-west 4, miles over plain to Ak Tha valley; then up valleg 13 miles. At 6 miles pass through ruined Chinese fort closing the valley. Fuel, grass, and water abundant. Road good. |
|  |  |  |  |
| 5. Sasal Taka $\quad$.. | 13 | 87 | Out of main valley into side valley to south. First few miles narrow and stony; then opens cut and travelling inproves. Wood and grass abuoddant. Kirghiz camp. |
|  |  |  |  |

Route No. 35-contd.
From Kashgar to Hunza vià the Tagrumbash Pamir and the Miutukin Pass.
Number and names of stages. $\left|\begin{array}{c|c|}\hline \text { Distance in mitbe. } \\ \hline \begin{array}{c}\text { Intrir. } \\ \text { mediate. }\end{array} & \text { Total. }\end{array}\right| \quad$ Retnarks.
6. Kaska So


101
Kirghiz camp up valler. Travelling goon. Grass plentiful, but fuel scarce. Many Kirghiz, in this valley in summer, but only a feiv in winter. Sheep, oil, and carriage can be procured.
7. Chahil Gumbaz .. undulating grassy liills round head of valles 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 tronbles me to laden animals on account of its strepness. Road geod for $\frac{3}{3}$ a mile along narrow ridge ; then strep rigzag descent of 1,000 feet into Charlung valley to Chiahil Gumbir at junction of two vaileys. Grass and water plentiful; fuel scarce. Route No. 37 comes in here from Yarkand.


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 Sn pass; first $\dot{\text { in o }} 0$ yards steep; then for 3 milos winding through

Route No. 35-conth.
From Kashgar to Munza viâ the Tagdumbash Pamir and the Mintaka
Number and names of atages. $\left|\begin{array}{c|c}\text { Digtance in miles. } \\ \begin{array}{c}\text { Intrr- } \\ \text { mediate. }\end{array} & \text { Tutal. }\end{array}\right| \quad$ Rembrks.
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 Kolc Mainak pass.

The ascent to the pass iegins almost immediately over a long grassy slope. Descent difficult for ponies, and goes through a narrow defile down the bed of the torvent. Tagharma is reached at about 22 miles. No supplies. Grazing good. Frow here Tashkurghau is 18 miles. This route was taken by Captain Pemberton, R.E., in Octuber 1892.
14. Chadar Tase .. $\left|\begin{array}{|c|}\hline 60^{*} \\ \end{array} 222 \frac{1}{\frac{2}{2}}\right|$

The valley of the Tagdumbash river extends from Taslikurghan to the Khunjerab pass, with a branoh on the west known as the Kam Chunlar valley and a smaller on the east, down which runs Route No. 38 to Raskam. As far as the old fort of Karghan-i-Ujadbhai the average breadth is 3 to 4 miles; after that it rradually narrows. The Kara Chunkar branch is much narrower, probably being nowhere more than a mile wide, and generally much less. The aspect of the valleg is bleak and dreary in the extreme, giass in putches along the river and boortsia scattered about the hiils being almost the only vegetation, though higher up the valleys, near the bead of the Kara Chunkar valley, the crisp grass of the pamirs is plentiful. It seems to be an extremely nourishing grass. The onlr attempl at anything like cultivation above Tashkurghan consists of a few seatered patches of proor looking barley about Dubda and Khusghum. 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 inhaibitants are Sarikulis. The Pamir rises from $10,0(6)$ feet at Tashkurghan to 14,311 ) fuet at the Khunjurab pass. Captain Younghusband went from Ilisu to Tawhkurgban, 70 miles, in two days. Chadir Tash is the head-quarters of the Kirat Chunkar Kirshiz.

The route over the Nintaka pass is practicable for laden animals, but closed by snow from the midulle or end of November tiil the end of April. Sheep and goats obtainable, but no other supplies. Grass plentifui; fucl 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. $K$ uzghun, 0 mud huts, is reached at 10 miles. and Gelachurti at 28 miles. The track is ver bad from here, and one has to scramble along the hest way possible over rocks and boulders on the mountain sides. Kurghan-i- Cjadbhai is reached at about 40 miles. Here the river is crossed and the proper rome fullowed.
15. Mintaka Ae Sai $\quad$ le| $\quad$ Ascent the valley of the Kara Chunkar stream

$\left|\quad 234 \frac{1}{2}\right|$| Ascent the valley of the Kara Chunkar stream |
| :--- |
| at Mintaka Ak Sai. Fuel is scarce; grass plentiful. <br> Kirghiz encumpment with large flocks of sheep <br> and goats. |

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 pouies, leads over the Wakhujrui pass to Wakhan. It is occasionally used by the traders between Yarkand and Badakhshan.

[^24]Route No. 3j-concld.

# Frono Kashgar to Ilunza viâ the Thgdrmbash Pamir and the Mintuka Pas.s. 

| Number and names of stages. | Diata ficb in mileg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intcrme. diate. | Total. |  |

Lieutenant Bower marched from Chadar Tash to the camping-ground of Kukturnk in 3 days. Thre 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 eavier. Camp on the river bank. Follow the river for 15 or 16 miles, descending some $1, \overline{0}$ : 0 feet. Here is found grass. Five miles more noth-west, still following the river, Buzai Guınbaz is reached (see Route No. 41, Eastern Hindu Kush).

Captain Younghusband foind a new pass between the Wakhujrui and Kilik in 1891, and returned from Bozai Gumbaz by it. Altitude $\mathbf{1 7 , 0 0 0}$ feet. Praclicable 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 fur men ou foot. It must be over 16,000 feet high.
 grass, and are much frequented by the oris poli. The camping-ground is about $1 \frac{1}{\mathrm{f}}$ mites on the north side of the pass, at a spot where grass is plentiful, but fuel somewhat scarce.
17. Moneusi

$254 \frac{1}{2}$
Ascend bed of stream for one mile; then zigzag up mountain-side to the Mintaka pass, 14,400 feet. At the summit in the begiming of Norember there was deep snow, but in the summer the pass is said to be free of snow. The mountains alongside are ve; high and rugged, and some of the peaks are probably close on 23,001 fect in height. 'Iline 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 peblly bed of the Lop Jangal strearn to Murkush. The Mintaka pass, although the ascent and descent are sterp 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 bouses.


Route No. 36.
From Tasheurghan to Kala Panjaf viá Ak Tash and tee Victoria Lake.
Authorities-Biddulph, Thotter, and Gordon, 1874.
Number and uames of stages. $\left.\left\lvert\, \begin{array}{c}\text { Distance in milems. } \\ \text { Interme. } \\ \text { diate. }\end{array}\right.\right]$ Total. $\mid$ Remarks.

1. Kanseuban $\quad \cdots \mid$

17 The first 3 miles of narrow dafile stream with boulders, very diffioult travelling, after which valley opeus out and road gradually improves.
Furil and grass plentiful. Elevation 12,980 fect.
2. Ae Tasm $\quad . \quad 18 \mid \quad$ Up valley to right, and after a mile fork


35 to left to font 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 valleg runing south. Grass avd fuel pientiful. Elevation 12,600 feet.
4. Istik


Pamir. Grass and fuel in plenty
 mit more than 2 wiles in brealth. Very good pasturage in summer. Campat east end on l:he.
7. MAZAETIPA $\quad \cdots\left|-16 \frac{1}{2}\right| 126 \frac{1}{3}$
secm to be almost double the actual amount.
8. Bilaor Bas
9. Yol Mazab

146 $\frac{1}{2}$
$157 \frac{1}{2}$


Elevation 13,220 feet.

North up the Ak su valley to the junction of 72 the Ak Su and Isligh rivers. The later goes through precipitous mountains. Here may lie considered the commencement of the Great

Along the banks of the lake and domangentle grassy slope. Elevation 13,760 fect. The distance from Mazar Tapa to Yol Mazar is given on the authority of C'aptain Trotter, but it would
of the Ab-j-Matz. Elevation 13, $1: 0$ feet.
lioute No. $2 y$ from the Khargosh pass comes in about here.
Along right bank of the river through a grassy plain.

Route No. 36-conld.
From Tushiurghan to Kala Panjah vî̂ Ak Tash and the Victoria Lathe.

| Number and names of stages. | Distanof, in mlibg. |  | Remarka. |
| :---: | :---: | :---: | :---: |
|  | Interme. diate. | Total. |  |
| 10. Yumktana <br> 11. Langar Kisht ... <br> 12. Kala Panjai ... | $\begin{array}{r} \frac{13}{18} \\ \hline 6 \end{array}$ | $170 \frac{1}{2}$ $188 \frac{1}{2}$ 194 | Fride Route No. 29. |

Route No. 37.
From Yarkand to Hunza viu Tashúghan and the Khenjerab Pass.
Authorities-Yarkand Miss!on (native information), 187.3 ; Lieutenant Bower, 1589; Captan Younghlsband, 1859.

| Number and names of stages. | Dietinc | maise. | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intrrmediate. | Total. |  |
| 1. Yakir-t-Kurghan. |  | 20 | Road passes orer a well cultivated and thick! inhabited plain cut up by innumerable itrigntici canals, which are bordered by rows of willow and poplar trees. |

The font 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 fect broad at top, 12 feet deep, and 6 feet broad at bottom ; it is commanded by the paripet. On each side of the entrance, which is on the sonth side, the walls are immensely thickenct. On the ligh ground to the west, about goo yards off, are situated twolook-out towers. Tiere are no troops. but it contains a custom-honse.

| 2. Kizil Tagh | $\cdots$ | $23 \frac{1}{2}$ |
| :--- | :--- | ---: |
| 3. Abpalik | $\ldots$ | $15 \frac{1}{2}$ |

$\left.43^{\frac{1}{2}} \right\rvert\,$ " Dovil's Sand." ${ }^{\text {Goorer }}$ the "Slaaitan Khum" or
50 At 7 miles the road passes along a vers naryow 59 ravine, very difficult to traverse in the afternonn owing to flools 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 . 1thicult, the rite 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 (Ronte No. 34), is passed at about 30 miles from Yakir-i-Kurghan. Lieutenant Bower had to warch from thence to Yiakir-i-Kurghan owing to there being no water between these two places.


Route No. 37-contd.
From Iarkand to Hunza vî̂ Tashkurghan and the Khunjeral Pass.

| Number and names of stages. | Distance in mimes. |  | Reinarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Totnl. |  |
| 6. Chatil Gombaz | 19 | 1132 | Up the river. Pass Alumbiti Kurghan. Route No. 35 is entered at Chahil Gumbaz. |
|  |  |  |  |
| 7. Past Rabat ... | 9 |  |  |
| 8. Tabpashi ... | 8 |  |  |
|  | 17 | 130 ${ }_{2}^{1}$ | Tide Route No. 35. |
| 9. Shindi $\quad .$. | 17 |  |  |
| 10. Tashetrighan ... | 19 |  |  |
| 13. Kada Chunikar | $532{ }^{2}$ | 1662 | Tide Route No. 35. |
| 13. Kama Chuniar | - | $2: 0$ |  |
| 15. Khenjerab Pass | $?$ |  |  |

As far as the Khmijerab pass the road is easy, leading up the broad pamir. The pass is 14,310 fect high, and is quite eass 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 Octoler and the middle of Mar. It is possible, however, to take ponies by it in the sumner. The route enters the valley of the Hunza river between Misgrar and Gircha. From camp to the Khunjerab pass is two marches, and to Gircla three more. No supplies, except sheep and gats, are obtainable. Girass is plentiful ; fuel scarce.
18 Gircha
19. Khaibar
20. Pasc
21. Gulmat
22. Atabad
23. Hunza

$\left.\left.\begin{array}{l|}P \\ P \\ P \\ P \\ P \\ P\end{array} \right\rvert\,\right\}$ ride Route No. 41, Eastern Hinda Kush.
Route No. 38.
From Tasheurghan to IUnza viâ the Kurbu and the Shimshal Passes. Authority-Captarn Younghusband, 1889.

| Number and names of stagee. | Dibitace in miteg, |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 3. Kira Chefrir Valley. | 631 | 532 | This distance mas estimated only by Captain Younghusband. It is probally some 8 or 10 miles in expess. <br> ride Route No. 37. |

[^25]From Tashkurghan to Hunza viâ the Kurbu and the Shinshal Passes.

| Number and names of stages. | Digtatce in mides, |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Inlermediate. | Total. |  |

Road as tar as Shimshal Ak sai is pacticable for laten animals, but imp wsable for pomies during the summer months up till the end of September or middle of October on acconnt of the deplh of the Yarkand river. Camels can be taken by the ronte a month or inore earlier. No supplies obtainable en route. Grass fairly plentiful; fuel plentiful. Sheep and goats can be obtained in the pamir, but no other form of supplies.
4. Ilisu $\quad . . \left\lvert\, \begin{array}{ll}16 \frac{1}{2} & \text { The road leads over the pamir, an open plain }\end{array}\right.$ partly of stone and partly covered with grass. At $14 \frac{1}{2}$ miles a route leads off to the left over the Nitiam pass to the luwer valley of tho

## Yarkand river.

At Ilisu there are three or four Kirghiz yurts (tents). Grass plentiful; dung only for fucl. Large flocks of sheep and goats; also ponies and yaks. From here roads lead in all directions over the 'Tagdumbash Pamir, and there is no difficulty in moving in any direc. tion. Elevation 11,256 feet.

5 Tolti Jilaa $\quad \cdots |$| 11 | 81 |
| :--- | :--- |

Up the bed of a stream, and aseend at a steep gradient practicable for laden poniss to the Kurbu pass, 14,700 fert. Summit of the pass is rounded and smonth, and the descent is quite easy down the pebbly bed of a stream in a narrow valler. Tolti Jilga is at the junction of two streams, of which the northern one leads from the Kurbu piss. Grass and luel obtainable.

| 6. Keatin Ax Sai | 8 |
| :---: | :---: |
| 7. Unue $\mathrm{Saim}^{\text {... }}$ | 11 |

Jungle becomes a little dense and at times obstructive. Deseend the Ilisu valley. Campinesground close to a hot spring. Grass and fuel abundant.
The vailey 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 an 1 about $1 \frac{1}{2}$ feet deep. At $5 \frac{1}{2}$ miles leave the Ilisu valley and enter the valley of the Yarkand river.

Keep up the left bank of the river, passing at 8 miles a large patch of high jungle called Sarik Kumish. Opposite this there is another large stretch of jungle with agnod many trees, and all about here used formerls to be well-populated. Uruls Sai is at the muuth of the Uruk stream, flowing down from the sonth. Grass and fuel plentiful.

There is no road down the Yarkand, as the mountains are said to close in, so that the river runs between precipitous cliffs; but a road leads for one mareh down the valley oper a kotal called the Topa Dawan to a pisture ground, which is much frequented by the Kirghiz from the Tagdumbash.
8. Chong Jangal... 13i

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 male practicable for laden ponies, lies alung the right bank. The bottom of the valley is about $\frac{3}{4}$ mile broad, covered with pebbles, over whioh 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.
Thre? marches (Tashnuma, Azgar, Surukwat) up the valley of the Yarkand river. Road said to be dilficult, but practicable for ponies. Grass and fuel plentiful. Surukwat is stage 6, Route No. 40.

Route No. 38-concld.
From Tashturghan to Ilunza viâ the Kurlu and lhe Shimshal Paspes.

| Number and oames of stages. | Distance in metege. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Interme. diate. | Total. |  |
| 9. Shor holak .. | 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 tho former eight times, depth 4 feet, and | fords very dificult, as the stream can only be crossed where the current is rapid, for where the current is smouth the stream is ton deep. Grass and fucl are plentiful near a warm sulphur spring. Shor Bulak is a spot situated near the junction of a stream, 15 jards broard and 1 foot deep, fowing 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. Shimsual Af Sai | 11 | 14014 | At 4 miles a patch of jungle on the right called Kuram-Jilga, near the junction of a small streain. The track gnes up the valley of the Oprang river, crossing the stream 9 times, |
| :---: | :---: | :---: | :---: | depth $3 \frac{1}{3}$ fect, and very difficult to ford on account of its rapidity and strengrtl.



Route No. 39.
From Shahidulla to Tasheurghan viá the Kilian Pass and Kugiar. Authority-Lieutenant Bower, 1589.

| Number and names of stages. | Distajcrin miles. |  | Remarks, |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |



Rocte No. 39—con/d.
From Shahiilulla on Tashkurghan vit lhe Kilian lass and Kugiur.

| Number and names of stages. | Diftafce in miles. |  | Rema; ${ }^{\text {s }}$. |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Inter- } \\ & \text { mediate. } \end{aligned}$ | Total. |  |
| 5. Camp | 1919 | 53 | On desconding the pass grass is plentiful and of good quality. C'ontinue along the Yarliand road for 6 hours, and then strike west up a about 2 miles up to camp |
| 6. Kusnech Loch ... | 15 | 68 | Continue up the nala, and passing Namlung Mazar arrive at Kusnech, a Wakhi camp. |
| 7. Karatag | 162 | 84, $\frac{1}{5}$ | The next camp is Karatagh, about a six-hour march. The Saragat lowan ( 14,000 feet ane roil), one of the numerous ridges that intersect this valley. is crossed. Ascent is bad in farts, | and the descent is steep. At Karatagh threc valless meet. Here are about 6 huts and somo 3 acres of cultivation. It is the winter quarters of the Karatagh Kirghiz; Ghulam Yusuf Beg is the head. Elevation 9,100 feet.

 with steep hills each side. After marching 7 hours the water in the nala ceases, and there is no more till Kugiar is reached.

| i2. Kugida | $\cdots$ | $2 t$ | $187 \frac{1}{2}$ |
| :--- | :--- | :--- | :--- |
| 13. Osciletch | $\cdots$ | 20 | $207 \frac{1}{2}$ |

Osohlech on the Tizuat 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 | 2191 ${ }^{\frac{1}{2}}$ | Another march over the low sand-hills to Ojung. |
| :---: | :---: | :---: | :---: |
| 15. Thangneabie | 14 | 2331 | A 5 hours' march to Thangneasie, easy going through cultivation. |

The Touslar Daman ( 14,600 feet) is crossed. Halt at Sultan Kalich Mazar. Grass pleutiful.

Pass the Dana Ostang camping-ground at 4 miles from Sultan Kalich Mazar; and after $x$ iours reach Ivoulong, crossing the Tups Dawan ( 10,400 feet), a stiff pull.
Cruss the Samich Dawan ( 16,000 feet). a long climb, but easy on both sides, and descend to the Samich valley.

From here the best road to Als Manjid 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 Tide Route No. 34.

From the Kugiar valley the road to the Tiznaf valley runs west over low, barien sandhillw; highest ridge is 10,000 feet. A long tiresome march-ll hours-before the village of

Route No, 39-concl.!.
From Shalinilulla to Tashkurghan viâ the Kilian Pass aml Kugiar.


| 18. | Langar | $\cdots$ | 10 |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

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 ( $12,725 \mathrm{feft}$ ). Camp at Langar, a small village, just below the junction of the Tung and Yarkand rivers.

The hills about here are perfectly barren and very precipitons, the Yarkand river flowing in places between clifts which rise sheer up from the water's edge, thus shatting out all communication along the river banks. The ferry is about a mile above the villare. 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.


On the south side of the Tung river. The valley uear the village is very fertile.

Follow the river by a bad road. There are patches of cultivation here and there, but in most places the valley is little belter that a marrow gorge. On the cast side of the Koti...i-Kandhar is the Kirghiz encampment of Rahbut. Grass plentiful ; wood nil. Elevation 12,0\%) feet.

| 21. Shaidan | 15 | 3091 | An case path runs over the Kotal-i. Kandhar 16,350 feet) till near the top. Ascent gradual, butstony. The top of the pass is very difficult, and may be considered impracticable for laden |
| :---: | :---: | :---: | :---: |
| animals. Elevation 17,000 feet. Descent is eass. At SLaidan grass and water are found,but no wood ; boortsa plentiful. |  |  |  |
| 22. Wachi Valley ... | 12 | $321 \frac{1}{2}$ | 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 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | 20 | 3412 | From this valley the Tashkurghan valloy is reached by crossing the Ogriat pass (14,400 fect), very easy, and descending to a place about 6 miles above the Tasalsurghan fort. |
| 23. Tabhiurgian ... |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Authority-Captain Youngilusband, 1887 and 1889.

| Number and names of stages. | Distance in arileg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |
| 1. Tar | $142$ | $14 \frac{1}{2}$ | This route is praclicable generally for laren animals, but impassable during the summer months up till the end of August on account of the depth of the Yarkand river. No supplies |

Road good and practicable cven for guns. Grass plentiful and good the whole way; brushwood plentiful in the Inwer part; searce higher up. Leaving Shahidulla, ascend open, pebbly valler, 400 to 600 yards wide; stream $2 \frac{1}{2}$ feet deep, 15 yards wide. Khalchuskun, a plain covered with efforescence 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. Kibghiz 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 obtain- |
|  |  |  | n small quantity in ravive leadin | Yarkand river, and in plenty at Kirghiz Jangal.

Learing Tar the road goes up the valley; here only 300 yards broad, bounded by rocky momntains. At $1 \frac{1}{2}$ miles leave stony bed of stream, and keep along sinooth muddy side of hill (le l't bank) for 1 mile; then cross Kuksin stream, 5 jards broad, and another. At $4 \frac{1}{2}$ miles is junction of Sokh Bulak stream, up which is a read to the Raskam (Route No. 34). The Khalchuskun strean here flows over a peblly bed 200 to 300 gards wide.

At Sokh Bulak camping-ground grass is plentiful ; no fuel; valley $\frac{1}{2}$ mile wide. Road now good over an earth nud gravel slope on left bank of stream. Descend gradually into bed of stream again here (about half-way), 120 sards broad. The bed of Khalchusisun 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 $\frac{3}{6}$ mile beyond. Ascent is gradual and easy; descent very steep for 600 yards down side of monntain to bed of a nala, which road now descends for 8 miles to its junction with the Yarkand river. Bed of nala covered with débris and boulders and going difficult. The pebbly bed of the river here is 600 sards 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 Younghusbaud was 10 hours 50 minutes in traversing this stage.
 Flevation 12,637 feet.


Continue down the pebbly bed of the Yarkand from $\frac{3}{t}$ to 1 mile broad, crossing it ten times; depth $2 \frac{1}{2}$ feet. At 6 miles canping-ground of Tokanak, to which Route No. 34 comes from Yarkand vid 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, Guws 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-conld.
From Shalintulla to Hunza vî̂ the Shimshal Pass.

| Number and names of stages. | Distance | miles. | Bemarles. |
| :---: | :---: | :---: | :---: |
|  | Inter. mediate. | Total. |  |
| 5. Igar Saldi $\quad$. | 13 | 7812 | Still down the valley. At $2 \frac{1}{4}$ miles stream trum north. At $6 \frac{1}{2}$ miles nnother stream from the north, up which a difficult track leads to Pakha pu. 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 Salli. Pass over this for $\frac{1}{4}$ of a mile, and over a mass of boulders. At $10 \frac{1}{2}$ miles cross a plain with remains of houses on it, formerly occupied by Kirghiz, called Karashtarim, $3 \frac{1}{4}$ miles long hy 600 pards broad. At $12 \frac{1}{2}$ miles a path leads by steep zigzag over a spur to lgar Saldi. This path is only practicable for footmen, and ponjes 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 vailey having narrowed to a width of 300 to 400 yards with lofty precipitous sides.


feet deep, flows in from the north, and at the junction there is a fine paich of erass 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 contracls and the river flows through precipitous clift. 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, 1897, Captain Younghusband crossed with ponies, but with some difficulty, and at one plice hal to make a path round a cliff. At $\frac{1}{2}$ mile berond the gorge the Surukrat stream joins in from the south. There is a camping-rround called Kul, where is good grass and high jungle on the Yarkand. A fem hundred yards up the Surukrat stream is the Surukwat camping-iround. This march is a trying one owing to the depth of the Yarkand river. By the beginuing of Octuber, when the waters have falleu, there is no difficults 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 Kurumpass into the valley of the Tiznaf river.


Road good enough for $10 \frac{1}{2}$ miles up the pebbly bed of the Suruswat 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.
Ascend the Surnkwat stream for $2 \frac{1}{2}$ miles till it bifuroates; then ascend the mestern branch, still over a pebbly bed, $\frac{1}{4}$ mile wide. At $4 \frac{1}{4}$ miles a camping-ground with phuty 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 $1 \frac{1}{2}$ miles beyond this the Aghil pass stream passes through two narrow go"ges. It is possible to talie 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 cosered rith boulders, and the stream, about 2 feet deep, flows with a very rapid current through them. Bejond the gorges the road is very bad, leading up the bed of the stream, Which is here covered with bir boulders for $1 \frac{1}{4}$ miles, and then ascending the right bank. The camping.ground is in a small plain on the right bauk of the Aghil pass stream. Grass and fuel fairly plentiful.

Route No. 4.)-contld.
From Shahidulla to Inunza viâ the Shimshul Pass.

| Number and names of stages. | Distance in milers. |  | Remarts. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |  |
| 8. Siamigam ... | 118 | 1133 | Road fairly good. <br> Leave Ayhil Bohor, ascending the Aghil pass stream, and passing for 1 mile over a plain 400 |  |
|  |  |  |  |  | jards wide. At $1 \frac{1}{t}$ miles a stream comes down from the west through a valley $\frac{1}{2}$ mile wide, and about 6 to 3 miles long. At $3 \frac{1}{2}$ miles pass ruins of a hut near a patch of very good grass. The ascent is now eary and gradual over the long slopes leading from the eastern range. Grass plentiful; fuel scaree. At $6 \frac{1}{5}$ miles reach the summit of the pasa, where there is a small lake $\frac{1}{4}$ mile in length ( $15.266 \mathrm{fe} \cdot \mathrm{t}$ ). Descent down a ravine, corered with boulders, rather bad. At Shaks, an a small patch of good grass ; fuel scarce. Camp on right bauk of the Oprang river.

$$
\text { Note C.-From Shalisgam to the Saltoro Pass, } 33 \text { miles. }
$$

This route is impracticable for military purposes on account of glaciers.
Ascend pebbly bed of $\mathrm{O}_{\text {prang rer }}$ river frow $\frac{1}{2}$ to $\frac{2}{3}$. 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 bushwood is obtainable. At $\frac{3}{4}$ mile further on a stream, 15 to 20 yards wide, depith 1 foot, flows in on the right bank. Cross the Oprang three times, 2 feet deep, and divided into many channels. At lō miles is Gusherbrum Jilga camping-ground on the right bank. Small amount of low scrub about, which serves for grass and fuel.

Jearing this camp the firat 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.s. it was $3 \frac{1}{2}$ fect deep with a strong current. Ascend the monaine of the Urdok glacier, going fair for 2 miles; then rery bad. Scrub is found at the end of the glacier. The breadth of the glacier at the end i* 1,000 yards. Camp at 21 miles from Shaksgam.

Still ascend the glacier ; going very bad, and ponies not able to keep their footing on the thin layer of gravel whicl covers the ice. No grass or fuel. Camp at $27 \frac{1}{2}$ miles from Staksgrm.

Ascend the glacier, up a medical 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 Shaks.am.

Time taken by Capitain Younghusband in traversing the last three marches was $8 \frac{1}{2}$ hours, $8 \frac{1}{3}$ hours, and $7 \frac{3}{4}$ lours respectively.
 131 $\frac{8}{4}$ to $\frac{2}{3}$ of a miles broad, crossing it six times; width of river 20 to 30 yaràs, depth $2 \frac{1}{3}$ 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 (see Route No. 40-A). Fuel and grass scarce.


Follow down the valley of the Oprang, crossing the river six times; width 30 to 40 yards, depth $2 \frac{1}{3}$ feet to 3 feet; ralley $\frac{3}{4}$ mile wide; hilisides stcep. 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 muoh frequented by the Kanjutis. Elevation 11,208 feet.

11. Yalpak Tash $\quad \cdots |$| 131 |
| :--- |

Cross river nine times; depth as before. Fuel pleutiful; no grass. Bhusa plentiful, but no grass. Ele ration 10,503 feet.

Route No. 40-concld.
From Shahidulla to IIunza viâ the Shimshal Pass.

| Number and names of stagss. | Dista mee in milibg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Intermediate. | Total. |  |

 $169 \frac{3}{3}$ feet to $3 \frac{1}{2}$ feet; current rapid. At $3 \frac{1}{3}$ miles pass Shimshal Aksai. 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 zigzagr 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 nalas, at which there are small walls of defence. Several stretches of good grass too are crossed. Grass and fuel plentiful.

| 13. Shorshama |  |
| :---: | :---: |
| Aghil. |  |
| $14 \frac{1}{3}$ | $183 \frac{7}{8}$ |

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 $\mathbf{1 4 , 7 1 9}$ feet. Descent is equally easy till within $\frac{3}{d}$ mile of caup, where there is a sleep zigzag to the bed of a stream which flows down from a glacier. Grass obtainable, but no fuel, except dry dung.
16. $\mathrm{Pasu}_{\mathrm{SU}}$


- From here a road leads to the Innza valler, P 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 Younghnsband 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 | $\left.\begin{array}{l\|} p \\ p \\ p \\ p \end{array}\right\}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 18. Atabad | $\ldots$ | 912 |  |  |  |
|  |  |  |  |  |  |
| 19. Honza | - | 9 |  |  |  |
|  |  |  |  |  |  |

Route No. 40-A.
From Suget Jangal to Skandu viáa the Mustagh Pass.
Authority-Captan Younghusband, 1898.

| Number and names of stages. | Distance in mileg. |  | Remarks. |
| :---: | :---: | :---: | :---: |
|  | Interme. diate. | 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. 4.0 - A -concld.
From Sujet Jangal to Skardu viû the Mustagh Pase.
Number and names of atages. $\left.\left\lvert\, \begin{array}{c|c}\text { Distance in milegs. } \\ \hline \begin{array}{c}\text { Inter. } \\ \text { methate. }\end{array} & \text { Total. }\end{array}\right.\right) \quad$ Remarks.
impracticable on account of the descent of a difficuit glacier. If a straight line be drawn from Yarkand to Srinagar, it will be seen that it passes very near the Mustagh pass and Skardu, and that this route must be considerably stoorter than the route iy Leh at present in use. But on the Mustagh route there are the two great obstacles, viz., the Mustagh pass and the Yarkand river, which have entirely closed this route for trade purpose, and merchants prefer to take the longer, but easier, route by the Karakorum. However, after the lapse of some years, the glacier which at present blocks the way may possibly level down and become passable; but the Yarkand river will always be a difficulty, while at the end of October the Mustagh pass becomes impassable on account of snow.

1. Parong


For Suget Jangal, see stage 9, Route No 40. 8 There are no supplies till askole is reached.

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 | 62 | 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. Goler |  | 20 |  | Descend the glacier for 6 miles further, when it ends abruptly ; thenoe down the Braldu river ; three huts at Golep. |
|  | ..' |  | 72 |  |
| 7. Askole | - | 18 |  |  |
|  |  | 60 | 90 | \} Vide Route No. 65, Gazetteer of Kashmir an |
| 15. SIIARD |  | 60 | 150 | \} Ladakh. |

[G.C.F.]



[^0]:    "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 routeits want of supplies, forage, fuel, avd two high passes to cross-its difficulties appear to be considerable.

[^1]:    * Alichur-Neza Tash.

[^2]:    * Captain Picot, r.s.0., was informed by M. Petrovski that this force numbered 1,500 men.

[^3]:    Mountaing.

[^4]:    * See also page 1 .
    $\dagger$ But see article on " Kirgliz," page 37.

[^5]:    Geographical description.

[^6]:    * The appointment of a British consul at Kasligar is now under consiteration. At present Mr. G. Mccartney is starioned there on apecial duty, but Las no official status.

[^7]:    * Not to be conforumded with the Kilik ou the Tagdumbash Pamir.

[^8]:    "The question of population in an Asiatic state is always no unsatisfactory one to deal with, and the figures given cangencrally lie regarded as only rough estimates. Shignan proper (without Roshan) is to some extent an exception to this general rule, fur Gulzar Khan was good fough to place at my uliposal the firures he had obtained for revenue porposes. These are wiven, as is usual in the fast, with "houses" for the notit instead of individaak; and it moy be ormenally assmod that a house is taken to mean a family of which the members are setiled at certain spot. But thre is almags a small Goatiag poputation-usually single man connected, for instance, with the groverament, the troops, \&e.-whose numbers are not inchuded in an esimate by the house. ${ }^{*}$ ln some countries (as Kashmir, for example) such

    | * 'These are- | Housos |
    | :---: | :---: |
    | Darmaroh | .. 32 |
    | Wir, or Yiar | B0 |
    | Shakh Darab | ... 80 |
    | Chand :mat Suchan | 11.011 |
    | D. i, 「anjah | ... 250 |
    | ashuiv | 100 |
    | Weh Panjah | $8:$ |
    | kiliof and Baju | ... 60 |
    |  | 762 | prople amount (o a large proportion, but in Shignan thoy musi be faw, and I have added only 2 per cent. to aceount for them. For each house or family I believe fire persons in a Musalman country may fairly be taken as an average. Thus Gulzar Khan's computation shows 76: 'houses' for the eight dishricts into which he divides Shignan, and these would give a total papulation of 3,810 persons, or, with 2 per cent. adiled for the floatiog portion, about 3,904 in round numbers. In addition to these, there would be some 800 or 900 Afghan troops, followers, \&c."

[^9]:    * 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 Shiguan, but no inscription or mark is to be found in or near it. Anolhor and similar ruin exists in Wakhan, and is referred by tradition to the same ruler.

[^10]:    - Shah Wanju is said to have iuvaded Badakhshan at one time, but was not able to hold it.

[^11]:    ${ }^{*}$ These Shiahs talk Persian, and are not followers of Aghan Khan.
    $\dagger$ Oxus being probably the same as $\mathrm{Ak} \mathrm{Su}^{\boldsymbol{\prime}}$.

[^12]:    * Description of these passes will be found on page 47, Part II.
    $\dagger$ Of the three elements-breadth, depth, and velocity-the first is greater in the Murghabi in summer and in the Parijah in winter; the second is alwayg greater on the Panjah; and the third is always greater on the Murghabi.

[^13]:    * From the best estimates I have been able to procure 1 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 femilies, making a total population of about 5,000 or 6,000 persons. This estimate is, however, only a rough one.

[^14]:    * As a matter of fact, as I afterwards saw for myself, they frequentig obtain supplies from tho Shignan villages, but it is done by stealth.

[^15]:    *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 proviuce of Ferghana" by A. Von Kuhn, 1876, page 23.
    $\ddagger$ 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.

[^16]:    *This, though evidence from.the.British side, is, I consider, most important, no the Russinus had not then annexed Kbokand.-E. $\dot{\boldsymbol{R}} . \boldsymbol{E}$.
    $\dagger$ Presumably the Khargoshi Pamir.
    $\ddagger$ This is west of lake Kara Kul.

[^17]:    * In order to avoid the inconvenient descent from the Chakir Korum pass, enravans travel from the janetion of the Yaktakland 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 direet road. It is necessary to observe that this circuitons route is the more often used by loaded caravans from Kanhgar, for which tho aceent to the Chadir Korum is diffeult. Kinpty carapans do uot fear the descent from this pass.

[^18]:    

[^19]:    - Captain Pemberton gives the distance from Kashgar to At Su as 307 milos. This is 40 miles .more than that here given, and which has been taked from Captain Bower's diary.

[^20]:    * These distances were estimated only by Lieutenint Davison.

[^21]:    - Not to be confounded with the Bulun Kul near to Soma Tash-Route No. 30.

[^22]:    * Shart ?

[^23]:    * All distauces from this stage are approximate ouly.

[^24]:    - This distance is taken from the map. Captain Bower informed the compiler that the ronte is almost perfectly straight ; that there are two halts between Chadar Tash and lashkurghan; and that the.road for the wholo diatance is fit for wheeled irafic, or with very little labour might be mide so.

[^25]:    - Esimaided.

