## MAIN EINES OF COMMUNTCATION

# THE INDUS AND THE HINDÚ KUSH-HELMAND. 

Part I.-Nortabra Routes,

PREPARED IN THE INTELLIGENOE BRANOH OF THE QUARTER MASTER GENERALI' DEPARTMENT IN INDIA.


MAIN LINES OF COMMUNICATION THE INDUS AND THE HINDU KUSH-Helomhiticy

Part I.-Northern Routes.

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CALCUTTA:

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## INTRODUCTION.

THIS pamphlet is not a general Route-book, but is intended to give as full an account as possible of all the main routesthose which might be used by troops-leading from our frontier to the great outer line of defence represented by the Hindú Kush and the Helmand. In examining the strategical conditions of the theatre of war enclosed by this line and the Indus, no other routes but those described need be taken into immediate consideration.

The following general summary of the relative importance of these routes and their bearing on strategical conditions may be of some use to those who have not already studied the subject.

Route No. 1, Murree to Gilgit vid the Kamri Pass.-This road is practicable for mule or pony carriage only beyond Bándipúra. It is closed by snow from November to June, at all events for troops or convoys. Its only value is with reference to Gilgit. The bearing of Gilgit on the defence of the Passes is fully discussed in the Secret Report on the strategical aspect of the Eastern Hindú Kush. The best defensive position on the line Bándi-púra-Gilgit is the Hatú Pír, just above the junction of the Astor and Indus rivers.

Route No. 1A, Gilgit to the Kilik Pass.-This is only of importance with reference to the possible advance of an enemy by the Kilik Pass. It is not a route that would ever be used by our troops. It is unfit in its present condition for laden animals. For further information vide the Secret Report.

Route No. 1B, Gilgit to the Baróghili.-This also is only of importance with reference to the movements of an enemy. It is only fit for foot passengers and unladen horses. The Darkot Pass is closed by snow from November to Junc or July. For further details vide the Secret Report.

Roulc No. 2, Peshuluar to the Dorál Pass viä Dir and Chitral.-This is the great caravan route between Peshawar and Badakhshán. It is practicable for mule traffic, but very difficult nevertheless. The route between our frontier and Dír, practically speaking, is closed for any but a strong column owing to the fanatical and turbulent spirit of the inhabitants. It is not therefore likely to be of any value to us. From December to April it is closed by snow at the Lowarai Kotal.

Route No. 3, Jalálábád to Chitrál viá Asmár.-As we must deny the route from Badakhshán to Chitrál to an enemy (vide Secret Report), this route becomes of very great importance. It is the only one to Chitral which is open throughout the year. It is far shorter, and less difficult on the whole, than the Gilgit route, though at present not fit for mule traffic. It is safer for a small column than the Dír route.

Route No. 4, Pesháwar to Kábal vid the Rhaibar.-This road is so well known that it scarcely needs detailed description. The great natural features on this line are of course the Khaibar hills at its eastern end and the Karkacha range at its western end. It is believed that the Amír is making a road from Bagrám down the Panjshír river to Jalálábád. This projected road com. pletely turns the Kábal-Gandamak section of Route No. 4; it may therefore ultimately become of greater strategical importance than the main route to Kábal, but at present the Khaibar hills represent our defensive line and the Karkacha hills the preparatory position from which we should take the offensive towards Kábal and Bámián. Should Russia occupy Afghán Turkestán, this Karkacha range-i.e., on the hills about Gandamakwill play an important rôle.

Route No. 4A, Basawal to Jalálábád.-Is merely an alternative one to the above between the places named.

Route No. 5, Kábal to Bámián via the Shibar Pass.
R oute No. 5A, Glorband Valley to Khinján via the Kaoshán Pass.

Route No. 5B, Ghorband Valley to Surkháb viá the Chahárdar.

These three routes may be eollectively defined as the Ghorband group of passes across the Hindú Kush. The Shibar
leads towards Bámián and is hy far the best. The highest altitude reached along this route is only $9,800^{\prime}$, and it might soon be made a good wheel road. Traffic goes on by it all through the winter, except for a few days at a time when rendered impassable by new and soft snow. Although the Shibar route crosses the main axis of the Hindú Kush, it can scarcely be said to cross its ridge, as at this point, as well as at the Irák and Háji Gak, there is a distinct break in the range, and the point where the summit is reached is scarcely noticeable. The Kaoshán and Chahárdar, on the other hand, are passes over the main ridge, and not through breaks in the mountain chain. The Chahárdar route was that taken by the main body of the Boundary Commission when returning to India. It reaches a height of $13,900^{\prime}$ above the sea. This pass is consequently only open from May to November. The Amír is constructing a road by this route, but nevertheless it can only be regarded as a subsidiary line to the Shibar. As it now is, laden camels would experience great difficulties by the Chahárdar route.

The Kaoshán route is even higher, the highest point being $14,340^{\prime}$. It used to be considered the best natural caravan route east of the old Bámián road, and is practicable for laden camels.

It will be observed that all the Ghorband and Panjshír routes (the Kháwak, \&c.) meet at Chárikár. The vicinity of that place would therefore be the position for a force watching the passes over the Hindú Kush east of the old Bámián route.

Route No. 6, Kábal to Bámián viâ the Unai and Irák Passes:Route No. 6A, alternative route viá the Hájí Gak.-These are the old caravan routes between Kábal and Turkestán. The altitudes reached on them are low, and they may be considered open for ten months of the year, but for troops they would probably not be practicable till May. The Irák appears to be higher, though less difficult, than the Hájí Gak. Both passes are, however, very easy, and have been frequently traversed by wheeled guns. Road-making would, however, no doubt be required, whenever it was desired to take guns over. The head of the Maidán Valley, which is about half-way between Kábal and the Unai Pass, would seem to be about the best position for a force watching this line of approach.

Route No.7, Kohát to Kábal viâ the Kúram.-This route is so well known that comment seems superfluous. It may be as
well to note, however, that its great valuc to us in 1879 was solely due to the fact that we had a strong force quartered so far up the line as Alí Khél. Under ordinary circumstances, the best and most direct route from British territory to Kábal must always be the Khaibar.

Route No. 7A, Bannii to Thal.-Is merely a feeder to the above, and serves the Bannú garrison.

Route No. 8, Banmi to Ghazni via the Tochi Valley.-This, with the exception of the Khaibar line, is probably the shortest route leading from our old frontier to the Kábal-Kandahár front. Its length is about 187 miles, and certainly not more that 200 miles. It appears to be a singularly easy line, fit for laden camels, passing through Dáwar by the Tochi valley and over the Kotanai Kotal, which is not much more than 8,000' above sea-level. The ascent and descent of that watershed appears to be singularly easy, and possibly in the future this may prove to be the best alignment for a railway into Central Afghánistán. Water, forage, and firewood are, it seems, plentiful along this route. It therefore offers many advantages, but unfortunately it has never been traversed by any European, and for immediate operations this line, though possibly the best, cannot be recommended, as it would not be safe to rely on our present information. Its value, however, as an alternative line should not be lost sight of. By it the troops from the Deraját garrisons could be rapidly placed at Ghazni, where they would form a support to the right and left wings of our army at Kábal and Kandahár.

Route No. 9, Dera Ismail Khán to Ghazni via the Gomal.This is Broadfoot's route. It is the one followed by the Povindahs in their annual migrations, and it may therefore be presumed to be an easy camel road, perhaps the easiest of all. It is, however, nearly 300 miles in length, and a very circuitous one for any but troops stationed at Dera Ismail Khán; and even if the objective were Ghazní, it would seem more advisable for the troops from Dera Ismail Khán to march to Bannú and thence by the Tochi route, as that route would probably prove a march or two shorter than the Gomal; besides whicb it would certainly be advisable to move through the intervening country in force, and it would be far easier for a suitable column from the frontier stations to concentrate at Bannú than at Dera Ismail Khán. As far as distance
goes, it is much the same for the Dera Ismail Khán troops whether they march by route No. 8 or Route No. 9, but for the Kohát and Bannú troops it would add nearly 200 miles if route No. 9 were adopted in preference to route No. 8.

Route No. 10, Dera Ismail Khán to Kandahár via Marúf.This route seems to offer a very direct line for a force marching on Kandahár, but we know so little about it that it would at present be either rashness or a waste of strength to use it, according as the force were weak or strong.

The general conclusion to be drawn from a study of the theatre and the routes through it is that for an advance on Kábal, the Khaibar line is under present conditions the one to take. By adopting it we cover the direct line to Peshawar, mask the new road which the Amír is constructing down the Panjshír valley, and give support to any column in the Chitrál direction. These are advantages which the Kuram route never could give.

If an occupation of Ghazní should be necessary, the Tochi route appears preferable to any other.

As regards routes 9 and 10, whatever advantages they possess, these are counterbalanced by the fact that they traverse regions inhabited by unruly tribes on whom we cannot rely. Of course if these tribes eventually come under our control the situation will be altered, and it may then be advisable to use these routes; but for the present, at all events, they may be disregarded.

The great point to remember in connection with these routes is that now that our railway system is completed to the Khojak, and the Russian railway to the Oxus, the direction of their line of attack has shifted from the Herát-Kandahár line to the Bálk-K'ábal line, and that consequently the Khaibar route has regained its old importance; and it is to perfecting our arrangements in that direction that our efforts should now be chiefly directed.

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# MAIN LINES OF COMMUNICATION 

## BETWEEN

# THE INDUS AND THE HINDÚ KUSH-HELMAND. 

\begin{abstract}
Route No. 1.
From Murree to Gilgit via Báramúla, Bándipfra, and the Kamri Pass. Authority-Captain Barrow.


2 Kohála . . 9 | The road descends the whole way to the Jhelum $19 \frac{1}{4}$ river, except in places where the spur along which it is carried flattens out for a short space. The gradients are easy, and the road may be character. ized as a well-constructed pack road. The new cart road now (1885) in course of construction lies at a lower level. At 7 miles cross a ravine from the left by a temporary suspension bridge.

At Kohála there is a dak bungalow and post office, as well as a small river-side villuge. Supplies scarce; excellent firewood. Water plentiful. Camping ground confined. The last 2 miles into Kohála are along the right bank of the Jhelum river by the new cart road.

There is a new dâk bungalow on the Kashmír bank of the Jhelum at Basála, 11 miles further on, which is a better stage for ordinary travellers.

|  | Dulai . . | $12$ | $31 \frac{1}{4}$ | Cross the Jhelum, which is here a rushing about 80 yards wide, by a fine suspension bri fit for cart traffic. From here there is a country coolie-path by - |
| :---: | :---: | :---: | :---: | :---: |

$1 \frac{1}{2}$ miles from the bridge pass Basála, a small hamlet with a good dâk bungalow. Troops marching by this road might encnmp, part at Kohála and part at Basála.

The road is level along the left bank of the Jhelum up to the 8th mile, when it descends by a zigzag to the bed of the Agar (or Azi), which is crossed by a fine new wooden bridge. Just before reaching the zigzag, pass the old deserted bungalow at Chatrkalas, where there is a large and good encamping ground.

## Route No. 1-continued.

At Dulai there is an excellent furnished bungalow, but space for encamping is limited. The road throughout is a fine broad carriage road, but is not yet quite fit for cart trafic, as it has still to be metalled. It will be rendy in 1887.

4 Domín • $\quad \cdot \mid-9$
Good level road the whole way, along the left bank of the Jhelum and about $50^{\prime}$ above it. About half-way pass the deserted stage of Rara, opposite which the Kaghan river joins the Jhelum. ToWards the end of the march the valley opens out somewhat, and a fair amount of cultivation is met with.

Domél is a small village at the janction of the Jhelum and Kishanganga opposite Muzaffar.亿bád. There is an excellent new dak bungalow, and supplies are fairly plentiful.

Good and ample encamping ground. The country round is fairly open, and there is mach cultivation.

Just beyond the dalk bungalow pass by the suspension bridge across the Jhelum. This bridge is practicable for pack mules. It lends to Muzaffarábéd, distant $1 \frac{1}{2}$ miles. For 10 miles the road follows the line of the new cart road, but owing to its incomplete condition and many diversions, it is extremely bad. At 7 miles pass the old stage at Tindali. The last 2 miles are level and easy. There is an old and very bad bungalow at Garhi. The camping ground is, however, very extensive and good. Forage excellent. Firewood plentiful. Water from Jhelum.

|  | Hatti (3,200') | $\begin{array}{r} 9 \\ \hline \end{array}$ | $62 \frac{3}{4}$ |  | On the whole a tolerably easy march through a picturesque country; there are, however, one or two very steep and rocky ascents and descents; by far the worst is about half-way, where a narrow rickety bridge crosses a deep ravine. At Hatti there is the usual dirty bungalow and a charming |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | little comping ground, but the space is very limited. Wnter, wood, and forage abundant. On the plateau nbove Hatti there is additional spnce for camping, but no shade.

 well shaded by trees. The road is carried along the hillside high above the Jhelum, and there are many very unnccessary ups and downs. There is a bungalow, but no regular camping ground, at Chakoti. There is, however, ample space in the fields on the plateau below the village. Supplies scarce. Water plentiful from streams.


A tiring march with several ascents nnd descents. Four considerable streams are crossed in the first 10 miles. The rond is in fair order and there is a toleruble amount of shade. At 13 miles a broad stream is crossed by a wooden bridge, after which there is a very stiff ascent to the plateau on which Uri stands. The camping ground is on the plateau close under the fort, and is an excellent one, affording ample space. Water from springs. Uri is a large village where supplies are procurable. Near Uri the Jhelum can be crossed by a rope bridge, and here too the road by Yánch and the Háji Pír joins in. The fort at Uri is a wretched tumble-down construction of mud and rubble. It is armed with one brass 6-pr. aud a few shér bachas.


Route No. 1-continued.

| No. of Etages. | Names of Stages. | Digtancre. |  | Remarig. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{\|c} \text { Inter- } \\ \text { mediate } \end{array}$ | Total. |  |
| 10 | $\underset{b}{\text { Bíramf́na }_{6}} \text {. }$ | 14, $\frac{1}{2}$ | 1151 | At 1 mile cross the Harpetkai stream by a wooden bridge. A little further on pass a grand old Buddhist temple. At 10 miles nenr the village of Kechama the defile opens out into a brond, oral, cultivated plain surrounded by low wooded hills. The road leads down to the bridge, which crosses | the river draining this valley, and then ascends to the Báramúla pass about $500^{\circ}$ above the plain. The ascent is not half a mile long, and is tolerably easy, though the road is often very narrow; the descent is somewhat similar. After which a mile of level road lends to the Jhelum river.

The town of Beramúla is situated on the right bank of the Jhelum, which is crossed by a kadal bridge. The dâk bungalow and camping ground are on the left bank; the latter extensive and good. Forage and supplies of all sorts plentiful. From Báramúla take boat across Wular lake to Bándipúra. Any number of boats cau be collected by giving due notice.

| 11 | Bíndiptia | 25 | $140 \frac{1}{3}$ |
| :---: | :---: | :---: | :---: |
|  | Trigble . . | 9 |  |

Bándipúra is a small village at the northern end of the Wúlar lake. It is reached by boat from: Srínagar in about 12 hours and is the usual start-ing-point for Gilgit or Skardu. It stands amidst much rice cultivation, Water, supplies, and Grewood abuadant. Elev. 5,200',

On leaving Bándipura the road rums along the foot of some stony hills on the right for half a mile, passing Nuupur, a hamlet of 10 houses. At $\frac{1}{2}$ a mile cross the Madmati, a swift strenm about $20^{\prime}$ wide and $11_{2}^{\frac{1}{2}}$ dcep, by a frail wooden bridge practicable for laden mules. The road then goes through irrignted fields for about a mile, passing en route the hamlets of Khararpúr and Sarwehan ( 8 or 10 houses each). At $1 \frac{3}{8}$ miles cross the Búdkal Nadi, $3^{\prime}$ deep, but a rapid torrent and quite unfordable. The bridge is a wooden one about $7^{\prime}$ broad and 20 yards in length. At $2 \frac{1}{2}$ miles Mehtargion, a hamlet of 12 houses. Just sh ort of this the road begins to ascend. Pass hamlets of Dar Muhamınad and Králpúra. At $4 \frac{1}{2}$ miles hamlet of Nangaum, where there is sufficient space for a smull camp. Water, fornge, and firewood plentiful. The road now becomes very steep indeed, the gradient being about 1 in 7 . At $7 \frac{1}{1}$ miles pass a dâk chowki on the left of the road, which now enters a fine forest. The road still ascends, but not so steeply as before. At $8 \frac{1}{4}$ miles the top of the ascent may be said to have been reached. Just beyond this the forest opens out iuto glades suitable for encamping. In the further glade (at 9 miles) there is a large pond at which animals can be watered. Forage and firewood abundant; no supplies.

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From Trígbal there is a very steep ascent through forest for several hundred feet, then fairly level open ground for a quarter of a mile, and then a very steep rocky ascent to the level of the pass ( $2 \frac{1}{2}$ miles). Here there is a $d \hat{a} k$ chowki. For the next 2 miles the road is fairly level, winding among the open rounded tops of the watershed. Pass the Trigonometrical station, which lies a few hundred yards to the left of the road and $200^{\prime}$ above it (elevation $11,950^{\prime}$ ). The road after crossing the watershed commences to descend gently by a long, uarrow, bare spur for anotber 2 miles. It then becomes steeper, and, finally re-entering the forest, descends by a series of abrupt and very difficult zigzags to the level of the Búrzil or Zotkasu stream at Zotkasu, which is merely an open fan of ground with a d $d k$ chowki. Here cross a tributary of the Búrzil by a narrow wooden bridge; the stream is, however, fordable. The road now lies along the left bank of the river for a couple of miles, descending a thousand feet in those 2 miles. The camping ground at Gurai is fuirly good. Forage and firewood plentiful. Water from the river. The best ground lies across the Gusain torrent, which here joins the Búrzil from the west, a wooden bridge crossing it.

This march, though only 11 miles, is a very severe one. The ascent and descent are about as bad as they can be, and when the pass is covered with snow four difficuit miles are added to the other difficulties of the march, besides which the Búrzil valley is very subject to avalnaches and snow-drifts. Colonel Lockhart's mission, crossing the 'Trágbal on July 5 th, was 8 hours en route. The snow, howevor, was abnormally heavy aud late.

Route No. 1-continued.

| No. of Stages. | Names of Stages. | Distancra. |  | Remarie. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intermediate. | Total. |  |
| 14 | Kanzlwin | 6 | 166 | Road lies along the left bank of the Zotkasu stream and is fairly easy, except here and there where some small mountain torrent has to be crossed or an avalanche obstructs the way. At $5 \frac{1}{4}$ miles the road quits the river bank for a short distance in order to crose a projecting spur ; a short |
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zigzng on the other side brings it again to the level of the river. At $5 \frac{3}{4}$ miles cross the Zotkusu river, where an island divides its stream in two parts, by a couple of narrow wooden bridges, ench about $4^{\prime}$ broad and $12^{\prime}$ to $20^{\prime}$ long. At 6 miles Kanzlwan, a camping ground in the angle between the Kishan Ganga and the Zotkusu. Ample space for a regiment. Firewood and forage abuudant. This is an unnecessary stage,-vide foot-note.*

$15 |$|  | GUrait $\left(8,160^{\prime}\right)$ | $\cdot$ | $9 \frac{1}{2}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  | Ganga by"a single-span bridge 40 yards long and $10^{\prime}$ broad. Here ngain animals must be led over singly. At $5 \frac{1}{2}$ miles the road ascends by a steep path to the top of a spur, whence it descends to the Gurais valley, which is about 5 miles long and 1 broad. The valley is well cultivated and uffords splendid pasturage. It contnins, besides the Gurais fort, 4 or 5 small villages of $\log$ huts. At $7 \frac{3}{4}$ miles Walpúr ( 25 houses). At 6 miles Khandial ( 30 houses), aloout $\frac{1}{4}$ mile to the right of the road, is passed. At $8 \frac{1}{4}$ miles close to $n$ ziarat a rapid torrent $22_{2}^{\frac{1}{\prime}^{\prime}}$ deep is crossed ; though fordable, a bridge is very desirable. At $8 \frac{3}{4}$ miles village Danwar ( 28 houses). At $9 \frac{1}{2}$ miles the rond passes between the half-ruined fort of Gurais and the river, which is here crossed by a single-span bridge 40 or 50 yards long, the camping ground being on the right bank. This ground is bare, stony, nad hot, and the meadow-land west of Walpúr is far better suited for camping. Forage and firewood plentiful. Supplies procurable. Millet, buckwheat, and peas alone are grown. The valley is bounded on the sonth by wooded mountains, on the north by great steep cliffs of limestone.

 miles cross Búrzil stream by a wooden bridge 12 yards long and $5^{\prime}$ ' broad. (Animals must be taken over singly). At $5 \frac{1}{2}$ miles across to right bank by a similar bridge. At $6 \frac{1}{2}$ miles pess lamlet of Dudgai, where there is ndák chowki and 3 or 4 honses. At 8 miles pass Linmlet of Zean or Zingai (5 houses). At 9 miles reach camping ground at Bangla, or, more pioperly speaking, Hanrai, the truc Bangla being a mile further on. The camping ground is on a grassy sloping shoulder or ledge, several hundred feet above the Búrzil river. Witer from a mountain torrent. Forage and firewood plentiful. The road, though a mere path, is fairly good throughout and presents no difficulties.

The road follows the river bank for a mile, being usually a bundred feet or so above it. At 1 mile a carnping ground (also called Bangla) is reached. The space here is somewhat restricted and the ground a mile back is preferable. The road now turns sharp to the left (northwards) and ascends the hill. At $1 \frac{3}{d}$ miles pass Gurikot, a hamlet of 8 houses about $\frac{1}{2}$ a mile to the left. At $3 \frac{1}{2}$ miles reach Jarjú, an undulating grassy plateau with an excellent and plentiful water-supply. This would necessarily be the stage for any large force, as Mehtar Doban, 3 miles further on, is not suited for a large eucampment.
*For troops, all things considered, it would perhaps be better to adopt the following stages, viz. :1. Trágbal


This would reduce the number of stages by one without anduly distressing troops or animals. The atage between Gurais and Kanzlwan is needlessly short.

Route No. 1-continued.

| No. of Stages. | Naiues of Stages. | Pistancre. |  | Rrmabke, |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Iuter- mediate. | Total. |  |
| 18 | Kálapáni | 13 | 2011 | The road still continues to ascend for about a mile. It then winds in and out, up and down, across the spurs from Gatumi or Gotamara mountain for several miles. At 3 miles pass the camping ground of Mehtar Doban situated in a sloping bay of the mountains; at $5 \frac{1}{2}$ miles reach the crest of the |
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Kamri pass ( $13,100^{\prime}$ ). The road so far is by no means difficult when clear of snow, but under snow is very difficult indeed. From the cotal the descent is very easy for about $\frac{1}{4}$ of a mile. The path then enters an excessively steep ravine, down which it zigzags for about $400^{\prime}$ (vertical). At $6 \frac{1}{2}$ miles strike the left bank of the Kamri Dara, which is here forded. For the next 4 wiles the road follows the left bank of the river and is fairly easy. It then re-crosses to the right bank. At 13 miles cross the Kélapáni, an affluent from the last, by a wooden bridge 20 feet long and 3 feet broad. There is an excellent grassy campting ground suitable for a large force. Forage abundant. Water from river. The Kamri Dara, the roughest, is a untrow valley averaging $\frac{1}{4}$ to $\frac{1}{2}$ mile in width, between bare rocky hills rising about $3,000^{\prime}$ above it.
19 |Shantar Ghar . $11 \mid$ Road along the right bank of the Kálapáni (or

## Route No. 1-continued.

For the next mile or so the road is carried along the slopes skirting the Astor river. At $5 \frac{1}{2}$ miles reach Idgath, where there is a large orchard and the Astor polo ground, which together form an excellent camping groand. Astor itself is a mile further on.

| Dasherin (7,900) | 12立 |
| :---: | :---: |
| DABEEIIN ( 7,000 ) |  |
|  |  |

Starting from Idgáh at 1 mile reach a deep and nar. row ravine with steep banks, on the opposite side of which is the fort and town of Astor or Hasora, The fort is quite untenable against modern firearms. The garrison live in the town, just beyond which there is another deep ravine to be crossed, Astor being situated on a spur between these two ravines. The road now winds along the steep, arid, rocky slopes which hem in the Astor river. Between the 2nd and 3rd miles pass the two hamlets of Los ( 8 or 10 houses each) on the opposite bank. At $4 \frac{1}{2}$ miles crosb the Astor river by a bridge $4^{\prime}$ wide and $80^{\prime}$ long. At 5 wiles re-cross to left bank by a similar but shorter bridge. At 94 miles Harcho ( 25 houses). At 10 miles Giskomb ( 10 honses). Close to both these villages there are bridges about $20^{\prime}$ long across side torrents, which, though but $2^{\prime}$ or $3^{\prime}$ deep would be very difficult for animals to ford. at Dashkin there are 25 houses, a bürj, and 4 water-mills. Camping ground in the terraced fields which surround it. This march is a very trying one for man and benst, and in some places it is incredibly bad, considering it is supposed to be a made road.
24
 then turning a spur enter a pine forest in a bay of the hills. Wind through this for about 3 miles, fording several shallow streams. Pass the upper hamlet of Turbling ( 6 houses) standing on open ground at $5 \frac{1}{2}$ miles. Descend into a deep ravine with a steep and difficult ascent on the far aide, at $6 \frac{3}{4}$ miles rench the top of a long spur whence there lis a grand view of the Indus nnd the Snowy Range north-enst of Gilgit. From this point there is a stendy descent to Doián, a village consisting of 6 houses and a couple of búrjs. A garrison of 50 men is maintained here as a protection against Chilásí ruids. Cump in the terraced fields close by. Better ground might be found a little higher up the stream. Water good. Forage and firewood abundant on the hillsides a little above Doián.

25 Dachint (4,200) • $\left.8 \frac{1}{2} \right\rvert\,$
2712
From Doián the road leads up the hillside for $2 \frac{1}{4}$ miles by a narrow and in places difficult path to a point just below the summit of the Hatú Pír $\left(10,250^{\prime}\right)$. It then descends the bare rocky slopes of that mountain by a very steep and stony path (gradient, generally speaking, 1 in 4) for about 5 miles, when the Astor river is reached. This is quite the worst part of the road between Kashmir and Gilgit, and is especially trying as there is no water en route. Laden animals take about 3 hours to descend, while the ascent is a terrible one. The Astor river runs in a deep trough with terrific force. It is crossed by a siogle-span bridge nbout $6^{\prime}$ brond and $120^{\prime}$ long. There is also a rope bridge. On the cliff above on either side are towers to protect the passage, which together have a garrison of 25 sepoyé under a native oficer. The place is known as Rám Gáht or Shaitán Nára.

There is no room to encamp. The road now mounts the cliff ( $200^{\prime}$ ) and then winds nlong it till the descent to the Dashkat nálá is reached. Camp may be pitched either here or iu the angle between the Astor river and the Indus. In either case the camping ground is a hot, dusty, stony one. Nothing but water procurable.

26 Darot or Sai $9 \left\lvert\, \begin{aligned} & \text { On leaving the Dashkat nálá, the road ascends a }\end{aligned}\right.$ $\left(4,250^{\prime}\right)$. $\quad 280 \frac{1}{2}$ hundred feet or so to the pleateau above, and for the next $5 \frac{1}{2}$ miles is fairly good, traversing what on the frontier would be known as the Maira, a desolnte stony plain at the foot of the hills. It then crosses the Bunji nálá, a clear, shallow, rapid stream, about 100 yards wide. Ascending the opposite bank, cultivated fields and plantations are entered. At 6 miles Bunji Fort. Water and shade abandant. A mile or so beyond, and $700^{\prime}$ below, is the ferry across the Indus; there two boats are maintained, each capable of carrying 20 maunds, or 4 horses at a time. On the opposite bank, at the junction of the Sai stream, is the Sai Fort, which commands the ferry, but is a place of no strength; $1 \frac{1}{2}$ miles up the left bank of the Sai nálá is Darot, a hamlet with an abundant supply of good running water round which there is ample space to encamp. If preferred, camp might be fformed at
Bénji.

Route No. 1-continued.

| No. of Stagen. | Names of Stages. | Difta | nces. | Rumabis. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Inter- mediate. | Total. |  |
| 27 | Pari (4,330 ${ }^{\prime}$ ) . . | 10 | $290 \frac{1}{2}$ | Through abandoned fields for about a mile, crossing two fine water-courses, then across the Sni nalá |
|  |  |  |  |  |
|  |  |  |  | The road now turns up the left bank of the Damot |
|  |  |  |  | nálá. At $1^{\frac{1}{2}}$ miles Damot ( 14 houses), with | bends north-west returning to the Sai nálá, the right bank of which it follows till Chakarkot (20 houses) is reached at 5 miles (elev. $5,050^{\prime}$ ) ; there cross to the left by a bridge $30^{\prime}$ long and $3 \frac{1^{\prime}}{}{ }^{\prime}$ wide. The river is only 2 or $3^{\prime}$ deep, but is rapid and generally difficult to ford. At Chakarkot there is a nice encamping ground. After crossing the river the road turns south-east, and then ascends the waiershed between the Gilgit and Sai valleys. Ascent easy for several hundred feet, then a mile of fairly level ground, then another straight ascent to the crest of the watershed ( $5,700^{\prime}$ ). From this point there is a sharp and very rocky and difficult descent of 1,000 to the stony plain below. Two miles from the foot, Pari is reached, a rocky, arid spot close to the river, from which very muddy drinking water is obtained. There is a dâk chowki at Pari, no other houses. Rond generally good except the descent mentioned.

$28 \mid$ MINAWAR (5,050') . $\quad 14|\quad|$ Road good over maira for 4i miles. The hills then
 infringe on the river and the road becomes very bad, being carried along the steep slopes of the hills $100^{\prime}$ or so above the river. Frequent ascents and descents. At 7 miles pass Chamogáh ( 10 houses) on opposite bank. At $10 \frac{1}{2}$ miles there is a bad descent to the river bed, which is followed for $\frac{1}{2}$ mile. Then commences a rocky ascent, which ultimately becomes frightfully steep, nurrow, aud tortuous, only just practicable for laden animals. At 12 miles reach the summit. The Gilgit valley now lies spread before one and the road descends gradually into it, crossing several ravines. At $13 \frac{1}{4}$ miles cross the Miváwar nálá, a stream of excellent water flowing in a deep ravine, and at 14 miles camp in a plantatiou. Good water from irrigation channels. Ample space around for a large camp. The village of Mináwar lies nearly a mile to the south-east ( 25 houses).

29


Road across the plain, $8^{\prime}$ wide and good throughout. At 2\& miles pass village of Sakwar. The next 3 or 4 miles are over a bare stony waste. At 6 miles enter cultivation, passing the village of Jutil, which lies half hiddeu by fruit trees. At 8 miles pass the fort of Gilgit, which is garrisoned by nbout 1,000 of the Maharaja's troops. There is a good camping ground in a grove a few hundred yards further on. Abundant water and shade. Supplies procurable.

## Note on Road.

## SRINAGAR TO GILGIT.

The road over the Kamri pass would not be difficult in ordinary seasons, but when covered with snow it is more or less impassable for troops. The road between the Kamri pass and Astor has been constructed without the slightest attention to gradient. It is of cen nothing better than what in India would be called a pagdandi. Water throughout is plentiful. Forage and firewood are obtainable in large qnantities, but other supplies are scarce, as the villages in the valley are few, small, and poor.

Beyond Astor to Gilgit the road may be characterised generally as a footpath indifferently made, but fit for puck-mules and ponies if led separately and not chained together. There is, how. ever, one portion of the road-that down the Hatú Pir-which presents difficulties of the worst description. So bad indeed is it, that I cannot conceive any portion of it being forced by an enemy from the north if resolutely defended by a small force.

The Astor river is, if the bridge at Rámghát be destroyed, in itself a very formidable obstacle. It is a raging torrent about 40 yards broad and 6 or 7 feet deep, which can only be crossed by a bridge, while there are no large trees or other material suitably for bridging to be obtaiued in the neighbourhood. A boat or raft could not live in such a torrent.

The Indus also presents a very formidable obstacle to an enemy. There are only two small boata obtainable along this portion of the river, and rafts could only be constructed with great difficulty and delay. The strength of the current would also render them very unmanageable, The carryiug capacity of the boats employed is 20 maunds or 4 horses.

## Route No. 1-concluded.

If it were not for the political aspects of the question, and the loss of prestige involved, one could bardly, in my opinion, find a better place to dispute the advance of an enemy than the country between the Iudus ferry st Bunji and the top of the Hattú Pír. This tract presents three distinct lines of defence of enormous natural strength, viz. :-

> The line of the Indus.
> The line of the Astor river.

The Hattú Pír ( $10,250^{\prime}$ ).
Beyond the Indus the road is fairly good except between Pari and Mináwar, where there is an extremely bad bit (vide report) which would require the service of sappers if it were intended to pnes a large body of troops and animals over it.


| No. of Stages. | Names of Stages. | Distancbs. |  | Remanis. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\left\lvert\, \begin{gathered} \text { Inter- } \\ \text { mediate } \end{gathered}\right.$ | Total. |  |
| 1 | Pilche ( 5,000 ) | 61 | $\ldots$ | Cross the Gilgit river opposite the fort by a rope hridge. Horses can ford the river in winter. Along the left bank of the river for $2 \frac{1}{2}$ miles. Then up the right bank of the Hunza river. On the opposite bank at the junction is Dainyúr, a fort village with 50 houses. Here there is | rope bridge across the Hunzn river. The road to Pilché is good throughout. Pilché is a sandy waste near the river. Water and firewood only obtainable.

 garrisoned by a
plies procurable.

$3 |$|  | SaFíd Pini $\left(5,500^{\prime}\right)$ | 8 |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |

In winter rond fairly good throughout, as it lies in the bed of the river, but in summer a path winding along the cliffs, which is not so good, has to be taken. At 6 miles pass Jutal ( 12 houses) on opposite bank. Nomal is a scattered village of about 90 houses, with a wreteled mud fort
From Nomal a foot-path leads to Bargú. Sup. commands it. There is, however, a spladid wood. The road so far is quite practicable for laden animals, except at the fords. The summer wood. The road so far is quite practicable for laden animals, except at t
road from Nomal is nloug the right bank to Gwech, and is very dificult.

4

 bridge : horses ford. From 1t to $2 \frac{1}{2}$ miles pass through the deserted ficlds of Matun Dass (P), of which the fort is still standing. Cross a deep ravine. The rest of the road is easy. Safíd Páni is a barren open space opposite Gwech, which

At $\ddagger$ mile cross to right bank by a rope bridge : horses ford. At $1 \frac{1}{2}$ miles a bad, but short, pari, very difficult for horses; men on foot can go along the base of the cliffs. At $2 \frac{3}{4}$ miles there is another short pari, which is extremely difficult and quite impracticable for horses, which must be swum round. In summer this bit of the road is quite impassable, and men on foot have to take a path going bigh up the hillside : borses cannot go at all. The rest of the road is easy, except that in me place an avalanche of snow, which falls every year, has to be crossed. Chalt is a double fort, staading on the two banks of the Chaptut ravine, and is garrisoned by a detachment of Kashmír troops, though otherwise Nagar territory. Supplies and firewood procurable. Water plentiful. The place contains about 50 houses.

Route No. 1A-coutinud.

| No. of Stages. | Names of Stages. | Distanceg. |  | Remabeg. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intermediate. | Total. |  |
| 5 | Mayto (6,650') | 71 | 36 | Cross the Chaprot ravine on leaving camp, and at |
|  |  |  |  | $1 \frac{1}{4}$ miles ford the Budlas atream down its left bank for $\frac{1}{2}$ a mile, then ford the Hunzs river. |
|  |  |  |  | At 3 miles cross again to right bank by fording. |
|  |  |  |  | Just beyond this there is a bad pari ; horses must |
|  | mile, then over gently sloping but rock-strewn ground. Then another pari, and then the fields of |  |  |  |  |
|  |  |  |  |  |  |  |
| Mayún. Cross a deep ravine nid camp close to the fort ( 60 houses), which stands on a promontory $300^{\prime}$ above the river. Opposite, on the Nagar side, is the fort of Nilt. Supplies procurable. |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| In summer, the first mile after the Budlas ravine is almost impracticable, as the river is unfordable and the only path is most dangerous, even for experienced mountaineers. |  |  |  |  |

6

| Hiní (7,000 $)$ | $\quad 6$ |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

$42 \frac{3}{6}$
The first 4 or 5 miles are a succession of difficult paris, the road often not a foot wide and quite impracticable for laden animals, though horses may be brought by it with care. The next 2 miles are over a stony undulating plateau and then the fields of Hiní, a large village ( 130 houses) with two forts. Water plentiful but muddy. Supplies obtainable. at mile pass Tol, at $2 \frac{1}{2}$ Gulmat, at 6 Pisan. All villages on the Nagar side.
(
 Hurza

After the first $\frac{1}{2}$ mile, which lies through fields, the road runs along the face of a cliff for about 4 miles, being several hundred feet above the river,
with many ups and downs, in places very narrow aud difficult for ponies; the next mile is over a stony slope, but otherwise easy. At 5 miles Motnzábád, a poor-looking place with a couple of forts, no trees to spenk of, At $5 \frac{1}{2}$ miles the Hunza valley comes in view. Cross the deep broad Hunza ravine (in summer unfordable) by a bridge or by fording, and at $6 \frac{1}{2}$ miles reach the platean of Hasanábád, the first of the Hunza villages. There is only one path to it, up the cliffs which bound Hunza, and this is guarded by a fortified post. Through fields the rest of the wny. Aliabad a large fort with about 100 houses Excellent encamping ground, the best in the valley. The Hunza fort is about $3 \frac{1}{2}$ miles further on, the road lying the whole way through terraced fields : supplies procurable.

$59 \frac{1}{2}$
Starling from the fort, through fields and houses for $\frac{1}{2}$ a mile, then down a steep hillside for several hundred feet, then through fields to Altit ( $1 \frac{1}{2}$ miles), a fort village with about 50 houses. At $2 \frac{1}{2}$ miles road descends into a deep ravine by a steep path difficult for laden animals, then along bed of river for nearly a mile, and then up the hillside again to Muhamadábád ( $4 \frac{1}{2}$ miles), village with 30 houses. At 5 miles, very stiff descent to river bed, which follow for $1 \frac{1}{2}$ miles. From here a very steep ascent to the crest of a broad spur ( 7 miles ), then for 1 mile comparatively easy going, then a steep descent to the broad sandy bed of the Hunza river, over this for about a mile. Camp in river bed, nt foot of hill on which is the fort of Atábád ( 30 houses). Forage and firewood procurable; good water from spring.













Note.-The road between Muhamadabád and Gúlmit is quite impracticable after the lst May for any but foot-men.

Route No. 1A-continued.

| No. of Stages. | Names of Stages. | Dibtanobs. |  | Rrmarif. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | \| $\begin{gathered}\text { Inter- } \\ \text { mediate. }\end{gathered}$ | Total. |  |
| 10 | Påsto (8,200') | 8 | 77 | This stage is practicable for laden animals. Down hill and across a stream. At 1 mile a path branches off to the left to Ghulkin, distant 1 mile. At 2 miles cross a stream issuing from the base of a great glacier a few hundred yards west of the road. At 4 miles Susaini ( 10 houses). Short |
| ascent from villnge. Road now runs along an undulating plateau several hundred fert above the |  |  |  |  |
| river. At $6 \frac{3}{4}$ miles steep descent to rocky bed of the stream which issues from the Pású glacier. Cross this and camp in plain beyond the village. Pású contains about 40 houses. Supplies, \&c., |  |  |  |  |
|  |  |  |  |  |  |  |

11 |  | Khaibar $\left(8,700^{\prime}\right)$ | $\cdot 104$ |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |

874
At 3 miles a great glacier, at least $1 \frac{1}{4}$ miles broad, has to be crossed. Impracticable for horses, which must ford the main river just above Pású, as well as the Shimshál river 2 miles above it. The horse road then goes along the river bed for 3 or 4 miles, fording the stream several times. This is impracticable after the lst May. The foot-path, after crossing the glacier, goes along the foot of the hills for $5 \frac{1}{2}$ miles. It then turns up a narrow ravine for a few hundred jards and then ascends to the Khaibar plateau. At 5 miles the horse road joins in. The road generally may be characterised as stony; gradients easy. Khuibar is a miserable hamlet; supplies scarce.

$12 |$| GIROHA | $\left(8,900^{\prime}\right)$ | $\cdot$ | $8 \frac{9}{4}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

The foot-path along the right bank is quite impracticable for horses, which have to ford the river at 2 miles, and go along the left bank, where the road is easy : the horse and foot paths rejoin at Múrkhún. As regards the latter, at $\frac{1}{2}$ a mile cross a side stream by a good bridge over a level plateau for 1 mile, and then along the river bank. At 2 miles horses have to ford to left bank. At $3 \frac{1}{2}$ miles pase a rope bridge, and at 6 miles ford the river to Múrkhún ( 15 bouses). The horse road here joins in. The next 2 miles are easy and level. Here a eliff abuts on the river, and horses have to furd twice, us the path along the cliff is only practicable for men on foot. At Gircha there is a fort, as well as about 40 houses. Supplies procurable.

$13 |$| MISGÁH $\left(10,200^{\prime}\right)$ |  | 12 | 108 |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

Up left bank of river. At 2 miles Sat ( 20 houses), at 3 miles junction of Chapúran and Khúnjúráb nálás. Up the former is the road to the Irshél pass. The road to the Kilik goes up the latter for 4 miles, crossing and re-crossing from side to side. Horses keep almost entirely to the river bed, having to
ford at least a dozen times. Foot-men avoid half of these by taking a difficult path aloug the cliffs. This bit of the road is a defile between high cliffs, usually quite impracticable for horses after the 1st May, and difficult even for men on foot, on account of the swolles state of the river. At 7 miles the road leaves the Khúnjúráb, and turns north-west up a deep narrow valley for 3 miles. Horses lave to cross the stream and go along the left side of the valley, $400^{\prime}$ above it, re-crosaing the stream, and rejoining the foot-path at the 10 th mile. Here there is a short, steep ascent of $300^{\prime}$ to the platrau opposite Misgah-over which for $\frac{1}{2}$ a mile-then a deep drop into the same nálá, and a final ascent to Misgal.

Camp on the side stream at the far end of the village, which consists of a fort and about 60 houses. Firewood and forage plentiful; supplies scarce.


First 4 miles north-west to the junction of two streams, then turn north, up the left bank of the stream, from that direction. At 5 miles ford stream, at 8 miles a grazing ground with sheeppens, \&c. At 10 miles a thick birch and willow wood, and at 12 Múrkúsb, a grazing ground close to a wood similar to the last. Firewood plentiful. The road on the whole is fairly good with no steep gradients, but it is very stony in places.

Route No. 1A-concluded.

| No. of Stages. | Names of Stages. | Dibtangrg. |  | Remarie. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Inter- } \\ \text { mediate } \end{gathered}$ | Total. |  |
| 15 | Bun-t-Kotal-i-Kilik (14,600'). | 8 | 128 | At $\frac{1}{i}$ mile cross stream from Kilik by a rickety bridge; horses must ford. Then comes a short stifi ascent of $\frac{1}{2}$ a mile, after which the gradient is easy and gradual, but the road is very stony in places. The camping ground is bad; no firewoud and very little forage. |

The road generally from Hunza to the Kilik is fairly easy in winter, and even laden animals may be taken by it, but, us a rule, after the lst May, or even earlier, it is quite impracticable for horses or other animals.

J. F. MANIFOLD, Captain, R.A.,

Attaché, I. B.

# Route No. 1B. <br> Fhom Gilgit to Baróghil viá Yásín and Dariót Pass. Authority-Captain Barrow. 


nálá. The rest of the way the road lies close to the river, the hills closing in aud forming a defile. Though stony, the road is on the whole fairly good. At Hanzil the camping ground is hot and treeless, but the whter from streams is excellent. The village is a small one of 8 or 10 houses.


Immediately on leaving camp there is a steep narrow ascent which is very trying to laden animals. In fact for the first 5 miles it is bad throughout, being a succession of steep and rocky ascents and descents. At $5 \frac{1}{2}$ milps the road enters the bed of the river, of which several channels have to be forded, the water nearly $3^{\prime}$ deep, with a swift current.

On quitting this, the most difficult portion of the road commences, namely, the pari or cliff opposite Borgú. The road now becomes as bad as it can be. At 7 miles it bifurcates; the lower path is fit only for foot-men, and even for them is bad, as several cornices have to be pussed and ledges of rock clambered over as best one can. The upper road involves a terrible climb, but is passable by baggage nimals. The last mile into Sharot is easy through cultivation. Shade and water ample and good-the latter from the Sharot nálá. Sharot is a prosperous village of 40 houses.


Cross the Sharot nálá and at $\frac{1}{2}$ a mile pass the village fort of Shikniot, and at $\frac{3}{4}$ mile ford the Shikniot nálá. Then over a sloping plain for a mile or so. At $2 \frac{1}{2}$ miles the village of Gulpúr. The road aguin crosses a level steep of cultivated ground, and at 4 miles commences to wind along the cliffs opposite Cher Kala, the chief place in Purival. Except in one or two places this pari is an ensy Oine. At $5 \frac{1}{4}$ miles pass the large fort and village of Cher Kala, which is reached by a rope bridge. Here there is a Kashmír garrison of 100 sepoys. The last balf nile to camp is eavy. Dalnatí is a large open plain on the banks of the Dalnatístream. Water excellent. Forage and firewood plentiful.

Route No. 1B-continued.

| No. of Stages. | Names of Stages, | Distances. |  | Remarig. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Inter. mediate. | Total. |  |
| 4 | Singal (6,200') | 81 ${ }^{\frac{1}{2}}$ | 32 | Pass the 2 or 3 houses which form the hamlet of Dalnatí, and at $\frac{3}{4}$ mile cross the rapid Dalnatí stream by a bridge $30^{\prime}$ long by $4^{\prime}$ broad. Opposite the mouth of this stream is the small village of Hamchil. The road now crosses a stony plain for a mile or so; it then ascends a spur and wiuds along |
| the hillsides. At 4 miles pass Tapoke, on the opposite bank, a hrmlet of a dozen houses; at 5 miles |  |  |  |  |
| the road again descends to low ground and passes through the fields surrounding Gich ( 10 houses). |  |  |  |  |
| On leaving Gich there are two paths, the one by the river a very difficult foot-path, the other practicable for laden animals, but very rocky and involving an ascent of a thousand feet. At $6 \frac{1}{2}$ miles |  |  |  |  |
|  |  |  |  |  |  |  |
| descend into the valley. The remainder of the march is quite easy. Singal is a village with fort |  |  |  |  |
| surrounded by gardeus. Water and shade excellent. Forage procurable. |  |  |  |  |



Cross the Singal torrent by a bridge $\mathbf{3}^{\prime}$ wide. Road quite easy cver level ground as far as Gulmati, a hamlet of 20 houses 3 miles from Singal, opposite which is Bubar ( 25 houses). After passing through Gulmatí the road continues fairly easy for a couple of miles, the ground on the opposite bank being cultivated alnost continuously. At 5 miles pass Gújar ( 20 houses); shortly after this the road nscends $700^{\prime}$ to the platenu on whicl Gakúch is situated. The last 2 miles are level and easy, partly through cultivatiou. Gakúch is a large village with fort containing about 800 inhabitants. Water plentiful ; supplies procurable. The surrounding hills are quite bare, but the immediate neighbourhood of Gakúch is cultivated.

## Note on road from Gilgit to Roshan.

The valley through which the road passes is a narrow defle bonnded by arid and rocky mountains. In places fans of alluvial soil are formed at the mouths of streams; these are occupied by villages and are as a rule well cultivated and covered with a profusion of fruit trees, chiefly apricot, apple, and walnut. The rest of the country is entirely devoid of vegetation: suppliss, forage, and even firewood, are consequently only obtainable in moderate quantities.

The road throughout is a stony narrow pati, in places very bnd, particularly where spurs project towards the river, forming cliffs locally known as paris. At such places two paths usually exist: a lower one cut along the face of the cliff which is fit only for men on foot and is in many places dangerous even for them, very specially where projecting knobs of rock have to be passed; and an upper one which avoids the cliff by climbing up a thousand feet or so and crowniug the shoulder of the spur. This upper path is supposed to be practicable for laden mules. It is, however, most difficult and really fit only for coolie traffic. With laden mules or ponies accidents must occur.

We did the distance ( 40 miles) from Gilgit to Gakúch in 5 marches, and though these stages appear short, I do not see how they could be altered, as the road is very difficult. Three miles from (iilgit the valley narrows and becones more or less of a defile the rest of the way. Imagine the Khaibar pass between Lala Beg and Alí Masjíl, with a foamirg river 80 yards wide rushing down it , and you have some idea of the Puniál. There are half a dozon places where a few hundred men might stop an army.

| 6 | Hupar . . . |  |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |

On leaving Gakúch the road goes over stony, undulating slopes; but at $1 \frac{1}{2}$ miles it crosses a deep ravine, and at 2 miles passes the hamlet of Aish. At $2 \frac{3}{4}$ miles another deep ravine is crossed. Up to the sixth mile the rond lies along " broad shelf or plateau, about $1,200^{\prime}$ above the river, which is bere broad and lake-like, and dotled with islands. At 6 miles there is a very steep and difficult descent of $1,200^{\prime}$ to the river bank. Road now level. At $7 \frac{1}{2}$ miles cross a narrow torrent by a bridge. At $7 \frac{8}{4}$ miles the road bifurcates; the lower path is only fit for men on foot, and is in places very dangerous; clefis in the face of the rock have to be clambered up by means of notched posts. The path winds along the cliff at varying heights from the level of the river to 500' above. The other path is just practicable for laden ponies, but is very steep and rocky. It rises a good thousand feet above the river, and thus avoids the cliffs. This place is known as the Hupar pari. Rench camp at 9 miles. The camping ground is a level dusty strip along the river bauk. The heat in summer is iutense here, owing to the bare rocky mountains which hem it in. There is, however, a splendid stream of ice-cold water from the nouth-irest.

Route No. 1B-continued.

| No. of Stager. | Names of Stages. | Distances. |  | Remaris. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intermediate. | Total. |  |
| 7 | Roshan . | 12 | 61 | The road is fairly level throughout, running close alongside the river the whole way, and nowhere are there very high or steep ascents and descents, but the path is terribly rough and rocky, being over the débris of landslips for at least half the way. At 5 miles there is one short but rather bad rock-stair- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  | case. At $7 \frac{1}{2}$ miles puss village of Sama, on opposite bank : at 10 miles the hills on the right recede, and the road crosses a sloping stony plain. At 11 miles cross a rapid strenm in a deep ravine. The road then passes along a cliff, about $60^{\prime}$ above the river, which it crosses by a rope bridge. At 12 miles Roshan. The village is surrounded by cultivation and fruit trees. The fort is a picturesque pile of stones and boulders, built on a rock overhanging the river. A splendid supply of pure water from a stream just beyond the village.

8 | Jandiot or Jinjarot | 9 | 70 |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |

Road fairly good throughout. The hills recede somewhat, and the road goes for the most part over gently-sloping undulations. On leaving camp cross stream by a rickety bridge; this stream may, however, be forded, us it is only about 3 deep. At 5 miles Gupis, a village of 10 or 12 houses, surrounded by cultivation and fruit trees. The rest of the way the road, though easy, is very stony. at 7 miles pass the junction of the Yasín and Ghizar rivers, where there is a considerable widening of the river and many small islands. At $8 \frac{1}{2}$ miles the road ascends a spur, on which is the small village of Jandrot (8 houses).


Descend by a fair path for $1 \frac{1}{2}$ miles to the Ghizar river, which cross by a rope bridge. Horses are swum across. On the opposite bank is Khalta, a village of about 40 houses, amidst cultivation and fruit trees. From Khalta there is a steep and rocky ascent of about $1,100^{\prime}$, very difficult, but practicable for ponies. The path then becomes fairly level for a mile or so, and then there is a stiff descent of a thousand feet to the $Y$ asin river, which is crossed, at $5 \frac{3}{4}$ miles, by a rickety bridge 22 yards long. The last $4 \frac{1}{4}$ miles into Gendui is fuirly easy ard level, but stony; two or three smail strenms of good water crossed en route. Gendai is a village of 11 houses with a good deal of cultivation and fruit about it, Camp in the fields.


For $2 \frac{1}{2}$ miles over the rocky débris of successive landslips, passing at $1 \frac{1}{4}$ miles the hamlet of Nú on the opposite (right) bank of the river. At $2 \frac{1}{2}$ miles cross the Yásín river by a bridge about 20 yards long and $4^{\prime}$ wide. The road now enters cultivation, and for the rest of the way is a path winding through the fields. At $3 \frac{1}{2}$ miles pass through Dumán, a village containing about 50 houses, and at 6 miles reach Yásín fort. The valley from the bridge to Yásín is about $1 \frac{1}{4}$ miles in width, and is level and fertile. All the cultivation is on the right bank. Fruit trees are abundant, particularly apricot, apple, and walnut. Yásin fort is a square of about 100 yards side, in a very dilapidated condition.


At $\frac{1}{4}$ mile ford Nasbur river (there is a bridge about I mile up the river), ascend cliff on opposite bank, and over a barren desert plain (the Dashti-Táns), about a mile wide, for 2 or 3 miles. At $2 \frac{1}{2}$ miles pass ruins of an ancient fort. Traces of irrigation exist, and the plain was evidently once cultivated. On the opposite side of the valley is the village of Guhjalti. Descend to river, and at $3 \frac{1}{4}$ miles cross by bridge 20 yards long. At $4 \frac{1}{2}$ miles village of Sandi. Opposite Sandi the river bed widens to a thousand fards. For 1 mile, by narrow lanes, through village of Saudi and surrounding fields. At $5 \frac{1}{2}$ miles cross a stream (fordable), up which there is a road practicable for horses to Chatorkand in the Asbkúmnn valley. On the opposite bank of this stream is Manduri. Along river bank for a mile, then across a landslip, opposite the mouth of the Tui Mulla (distance $7 \boldsymbol{7}$ miles). Over sloping barren ground for $1 \frac{1}{2}$ miles. At $9 \frac{1}{4}$ miles cross to right bank of Yásín river by a bridge $4^{\prime}$ wide by $50^{\prime}$ long. Barkúlti fort forms a tête-du-pont to the bridge, the road actually pass-

## Route No. 1B—concluded.

ing through an outwork. The fort is a rectnngular building, 40 yards by 25,6 towers, the whole in very good order. Half a mile further on is Barkúlti village, the residence of Alf Mardán Ebáh, the ox Mír of Wakhán. A mile beyond the river passes through a gorge $20^{\prime}$ wide ; here there is a bridge. The rest of the way to Handúr is more or less throughout cultivation. Handúr is a fertile place with abundance of fruit. The Bargúlti fort is also known as Kala Mír Wali.


By a lane through fields. At 600 yards pass hamlet of Babrikot ( 3 houses), on opposite bank; at $\frac{3}{4}$ mile cross river by a bridge of 25 paces suan; over rough débris of landslips. At $3 \frac{1}{4}$ miles Ámulchat, cultivation and fruit trees. Cross stream from right. at 63 enter the Marang jungle, which is n low ewampy tract of dense undergrowth, with willows and birch, the path winding through it for about 3 miles. at $9 \frac{1}{2}$ miles ford Dudang Balsi stream from east, or cross by a bridge $\frac{1}{4}$ of a wile up-stream. At 10 miles pass through the fields of Durkót. At $10 \frac{1}{2}$ miles camp on north-west side of village. The valley from Handúr upwards is from 300 to 400 yards wide, hemmed in by bare, rocky, precipitous mountains, thousands of feet high. At Darkót the Yásín valley may be said to commeuce, as it stnods in an amphitheatre of mountains watered by three main streams which together form the Yásín. The village contains about 40 houses, with a good deal of cultivation and a profusion of willow trees. From Darkór, besides the Darkót pass to Baróghil, there is a route practicable for horses up Dadang Balsi aud over the mountains into the Ashkúman valley.

13 CAMP: 1 $\frac{1}{2}$ MILES Sodt ${ }^{2} \mid$ | $\begin{array}{c}\text { CAMP: } \\ \text { OF KOTAL } \\ \text { MILEB SOUTH } \\ \left(13,600^{\prime}\right) .\end{array}$ | $-\quad 7$ |
| :---: | :---: |

116
[ Up the stony bed of the Darkót Dara, in which there is much low jungle. Between the lst and 2nd mile cross two clagnels of chis river, each about 20 yards broad and $2^{\prime}$ or $3^{\prime}$ deep, difficult to ford on account of the current. At $2 \frac{1}{2}$ miles ascend for about $300^{\prime}$ to the crest of a spur which here closes the valley, the river being confined to a narrow impassable gorge between precipitous cliffs. This spur was once fortified, nnd is known as Ihrband. Descend a hundred feet or so and pass through a cultivated strip of land, with 3 or 4 liouses, known as Garkushi, a bándá of Darkót. At $3 \frac{3}{4}$ miles cross the Darkót stream, which is here only about $20^{\prime}$ wide, and not $2^{\prime}$ deep. The ascent to the Darkót pass may be now said to begin; about the 41 h mile are several clumps of birch and larch trees, and as forage too is plentiful, this spot is often used as a stage preparatory to crossing the pass. The path up is at first a very fair one, though steep, and as the hillside here is covered With earth, no cuoubt a good road conld be made, at $5 \frac{1}{2}$ miles bare rock takes the place of earth, and the road becomes very steep and bad. At 6 miles pass Gnrm Chashma, a hot apring $\frac{4}{4}$ mile to the left of the road. The road gets worse and worse as one ascends, and though laden animals do use it, it can scarcely be called a mule road. Camp on a ledge of rick and boulders at the edge of a glacier. As the ledge is only about $30^{\prime}$ wide aud encumbered with rocks, there is only room for a very small body of men. To bivouac is a necessity, as nowhere can space for a tent be found.

| Dasht-I-Baróghil <br> or Chatiboi <br> $\left(11,960^{\prime}\right)$. | $9^{*}$ |
| :---: | :---: |
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Cross a glacier, then along natural eunbankment of rocks and boulders, then over a snow-field to the crest of the pass, which is $15,000^{\prime}$ above the sea and $1 \frac{1}{2}$ miles from camp. From near the crest a road goes off to the right which leads by a circuitous path to Sarhad-i-Waklián. This is locally known as the Sowar Shai, and for the last few years this route has been used in preference to the Barógbil, on account of the broken bridge across the Yárkhún river. From the crest the road to Baróghil presents the appearauce of a smooth snow-field, about a mile wide, with an average gradient of $4^{\circ}$, and hemmed in by rocky mountains from three to seven thousand feet above it. After 2 or 3 miles of this snow field a glarier takes the place of the smooth snow, fissures appear and then deep crevasses, which at length compel one to leave the glacier and follow an extremely rough rocky path along the glacier embankment on the right or over the stony slopes at the foot of the mountains. At 8 miles the path enters the grassy slones of the tongue of land between the Chatiboi stream and Yárkhún river. This tongue is known as the Dashti-i-Baróghil, though the real Baróghil plain commences on the north side of the Yárkhún river. Water, firewood, and forage all good and abundant. The Dasht is a greut grazing ground.

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## Route No. 2.

## From Pesháfar to Doráh via Dír and Chitrál. Authorities-Routes in Asia; Barrow.

| No. of Stages. | Names of Stages. | Dibtances. |  | Rbuaris. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Jnter- } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 1 | Nagumán Rivier | 8 | 8 | Road made and good, passing immediately under the fort of Peshśwar, and at 3 miles crossing the Buhni, a small stream always fordable. A mile or so further on cross another small stresm by a fine $p a k k a$ bridge of three arches built by the Sikhs, and at $5 \frac{1}{2}$ miles, near to the village of |
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Khazána. Ford the Sháh Alam branch of the Kábal river, with generally 2 or 3 feet of water in it. At $8 \frac{3}{4}$ cross the Naghumán, or principal branch of the Kábal river, by a bridge of boats.


Road merely a country one, crossing innumernble water-cuts, very bad for guus. Country richly cultivated and covered with villages. At $1 \frac{1}{2}$ miles forl the Adozai branch of the Kábal river. At $8 \frac{1}{2}$ miles, after passing the villuges of Dubb, Sewari, Boks Jana, Hariána, Guggur, and Soakur, ford the Swat river opposite the village of Tarnao (this ford is practicable during 8 months of the year). At Turangzái forage and provisious abundunt. Water from a branch of the Swát river.

A large village, situated on the left bank of the Chalpáni nálá, from whence its inhabitants are supplied with water. The road from Turangzái is a brautiful one, traversing the uncultivated plain of Hashtnagar. At 2 miles from Turangzái the road crosses a deep ravine which has been made practicible for guns, and again, immediately before arriving at Jalala, the road for about $\frac{1}{\frac{1}{2}}$ mile winds down the bunk of the deep mountain torrent on which Jalála is situated. From Jalála the Rénízaí country is reached

$4 |$| Dargai | $\cdot$ | 14 |
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The road is good throughout, practicable for laden auimals. Country for 4 miles undulating, but after passing Shergarh (the lnst British village) it becomes hilly, broken, and raviny. Road very fair, crossing a difficult ravine with banks from 30 to 50 feet high. Immediately before reaching Shalkót, this ravine would require a great deal of labour to make it passable for guns. Six nálás crossed. Country hilly, broken, and raviny. lload tolerable.

$5 |$| Malakand Kotal | 9 | 57 |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  | From Dargai to the foot of the kotal is $4 \frac{1}{2}$ miles; the first $2 \frac{1}{2}$ of which are open, crossing one deep and a few small ravines. As the angle formed by the Dargai spur and the main range is neared, the road becomes commanded by the lower spurs on both sides, especially by two, one of which extends almost across the little valley. After passing these two spurs, the road runs into a little basin at the apex of the valley, and, passing a tank of water, turns short round to the left to ascend the kotal. So far the road somewhat resembles the approach to the Kohát pass from the Kohát side, thoush the greater portion of the latter is perhaps more cominanded. The ascents of the two kotals also resemble each other, except that the Malakand is considerably longer, and the road is only wide enough for the passage of $n$ pair of bullocks at a time. Horsemen pass over it, as do camels but traders generally make the loads very light before commenciug the ascent. On the crest of the kotal two huge masses of rock encroach considerably on the roadway. Beyond them is an open space, which affords encamping ground for 300 or 400 bullocks, ard close by is a small spring of water and a few Gújars huts. The hills right and left, though rugged and steep, are every where accessible to good lightinfantry, nnd there is a pathway which, leaviug the road abouta mile from the bottom of the kotal, leads right up the face of the hill to the huts at the spring. The main road is here and there commanded from spurs on both sides, but all these can be crowned without difficulty. It has been remarked that heavy guns might be placed on the low hills, so as to fire to and command the very top of it and the hill on the left, as the pass was accessible to good light infantry at many points to a distance of two miles to the left of the pass.

Route No. 2-continued.

| No, of Stinges. | Names of Stages. | Distances. |  | Remaris, |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\left\lvert\, \begin{gathered} \text { Inter- } \\ \text { mediate. } \end{gathered}\right.$ | Total. |  |
| 6 | KHAR |  |  | The descent from the kotal is neither so long nor |
|  |  | - | 63 | so difficult as the nscent. The road runs right down the face of the hill two thirds of the way |
|  |  |  |  | and, after a zigzag or two, again takes a straight |
|  |  |  |  | course. It is not commanded on either side, nnd | village of Khar is about 3 miles from the foot of the kotal. This is by far the best road into Swát, and the one chiefly used by traders from Pesháwar and the Kohát salt mines. It is also the only road fit for the passage of a body of troops with any baggage.


| 7 | aladand | $\underline{6}$ | 69 |
| :---: | :---: | :---: | :---: |
| 8 | UoH | 9 |  |
| 9 | Shamshifián | 15 |  |
| 10 | Mián Kala | 12 |  |
| 11 | Kaobat | 12 |  |
| 12 | Janbatai | 12 |  |
| 13 | Subbat | 12 |  |
| 14 | Dír | 12 |  |

country. Thence are roads leading to Chitrá

A village of 300 houses of stone and mud, about $1 \frac{1}{3}$ miles from the left bank of the Swát river, road to it good. Residence of the chief of the Ránizaí branch of the Yúsafzái clan.
The road goes straight for the Swát river, which is crossed on rafts. Uch or Uchchinai consists of 4 villages, one of which belongs exclusively to Saiads, and the other three exclusively to Patháns.
Cross an easy pass into Talash, then continue down its valley to Shamshikhán ou the bank of the Panjkóra.
Cross the Panjkora to Kotkai, then through a valley to Mían Kula. The town of Mián Kala has about 1,000 houses built of stone, cemented with mud. It is the largest town of Bajáur.
The road goes up the Jandul valley. This village (of 120 houses) is notorious for thieves.
Ascend to the Janbatai pass and then descend to the village. Both ascent and descent are very stiff ; but there are springs of water on the way. The north side of the pass is a dense pine forest.
The road goes down to the Baráwal valley ; half. way cross at Bánda the frontier of Dír. A village. Cross the Lír river at junction with Panjkora and continue up its left bank to Dír. Dír is a village of about 400 houses, and is situnted on the right bank of the river. A considerable fort of mud and stone stands on a mound and protects the village. Dír is one of the principal marts of the Kify the middle of August.
 Kála Nagar, a fort and village on opposite bank; also Badugal, a hamlet of Saiads on the hill just above the road to the right. At $9 \frac{1}{2}$ miles ford Beori Gol, a rapid stream about $20^{\prime}$ wide. From here to Darúsh the road is principally along the sandy bed of the river.

Route No. 2-continued.
No. of
Stages.
19 Gairat . $\quad$ Names of Stages.

Kaisu, projects into the river, the path over which is narrow and diticult for laden aniuals.
At 5 miles Kaisu, a fair-sized village, is reached. There is a foot-bridge across the river at this point. From here the road to Gairat is easy, with the exception of a difficult ascent for 100 yards. The village is small and situated on a promontory about 100 feet above the river. Opposite is the mouth of the Barir valley of Kaláshgúm.

which is $\frac{1}{2}$ a mile wide.

At $1 \frac{1}{2}$ miles a precipitous cliff abuts the river bed. 'This is usually turned by going along the pebbly bed of the river, but in suinimer the spur must be crossed by a steep path. Beyond this is Spálasht, a fort whose fields have lately been swept away by the encroachments of the river, the bed of

Opposite Aian the road leads along the face of the cliff. The path is very narrow and dnngerous for laden animals. The road again desceuds into cultivation, but after a short time rises about a hundred feet above the river, nud for the last two miles passes through fields to Broz, a village of 300 houses in all, with supplies plentiful.
 the Joghur stream is forded, and at $6 \frac{3}{4}$ miles the villinge of that name is reached. It contaius about 100 houses. Dosha Khél (7 $\frac{1}{2}$ miles) is a small hamlet just beyond.

The road now goes along the stecp hillside $200^{\circ}$ above the river. At 9 miles reach the fields of Daníl, and passing through by narrow lanes, the bidge at Chitrál is reached at $9 \frac{3}{4}$ miles. Camp close to the fort. Supplies are plentiful. The village contains about 100 houses.
 Up the Chitrál valley through the barren ground alongside the river. At about $2 \frac{1}{2}$ miles from Chitral bridge pass the junction of the Mastúj and Lúdkho rivers, just beyond which is a spur which offers a very strong defeusive position with reference to an advance by either river. At $3 \frac{1}{2}$ miles pass Sín (40 houses). At $7 \frac{1}{2}$ miles Sháli ( 12 houses). Between 8 and 10 miles pass the hamlets of Bartoli, Randúl, and Parcheli. At 11 miles the road avoids a bad cliff by crossing and re-crossing a branch of the river by two short bridges. At 12 miles cross the Lúdkho by a rickety pole-bridge, and at $12 \frac{1}{2}$ the Ujar Gol. Shoghot is a small village of 40 houses, opposite which, on the right bank of the Lúdkho, is Awi ( 20 houses). At Shoghot there is a fort about 40 yards square, with towers at the angles. The position is an excellent one for checking an advance from the Doráh. The road above Sín is in places very bad; animals have to be unladen on account of the narrowness of the path where cliffs abut on the river. The Lúdkho river is fordable except in sumwer. There is a bridge practicable for animals at Sín, and a font-bridge at Parcheli. The road throughout lies in a narrow defile bounded by precipitous moun'ains. At Shughot ample room to encamp; water good; supplies and firewood procurable.


The road goes alongside the river bed for 400 fards, then mounts the cliff on the riuht for several hundred feet by a very steep and difficnt path. The descent is worse, being carried down the face of a smonth cliff by a narrow cornice or pathwas supported by short struts unliden horges can,

## Route No. 2-continued.

however, be taken by it. It then passes along a steep shaly hillside. At $1 \frac{1}{4}$ mile reach the Arkaril river, abont 15 yards wide, and go up its left bank for 4 mile; cross over by a bridge $60^{\prime}$ long. Up the Arkari valley is the road to the Nuksán, Agram, and Khatinza passes. At $1 \frac{3}{4}$ miles a small hamlet of Andnrthi, the bendquarters of the Arkari district. At 2 miles ford the Lúdkho river or cross by a bad fuot-bridge. 'lihe road now follows the right bank, and in places is very bad indeed. At $2 \frac{1}{2}$ miles pass Ruji. At $6 \frac{1}{2}$ miles Mugh. At $8 \frac{1}{2}$ miles Muigan. These villages eurh contain 10 or 12 houses; all three are on the left bank. Just before reiching Drushp the road crosses the river by n rickety brilge about $60^{\prime}$ long and $3^{\prime}$ broad. Druslop contains about 60 bouses and an insignificant fort which is the residence of the Governor of Irijgám. Awple space for encumping. Watersupply good; supplies and firewood procurable.

$24 |$|  | Barzín ( $8,000^{\prime}$ ) | $\cdot$ | 7 |
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|  |  |  |  | A little more than a mile beyond Drushp are some hot springs, a few hundred yards to the right of the road, just beyond which is the village of Izh ( 30 houses), on both sides of the river. Izh, on the opposite bank, stands it the mouth of a fine valley, up which there is a route, practicable for horses, over the Shúi pass into Káfiristán. Between 2 or 3 miles pass through Barmanú and Jhita, then ford the river (there is a bridge for foot-passengers. At 4 miles there is a bad ascent and descent, where a rocky spur abuts on the river, opposite Rui ( 40 houses). At this point the road can be very effectually defended against an enemy coming from the Doráh. The road now enters the Parabek plain, which is nbout $\frac{1}{3}$ of a mile brond, and 2 or 3 long. At $5 \frac{1}{2}$ miles pass the fort of Parabek with Gistonu on the opposite bank. Through fields, passing through Gufti ( 15 houses) at 6 miles. Barzíu is a small village at the end of the Parabek plain.



Ford the river, and go up the right bank for $1 \frac{3}{4}$ miles. Ford the river again. At $2 \frac{3}{4}$ miles Darband, a worthless line of fortifications in an excessively bad position. At 4 miles recross to left bank. There is a foot-bridge at this point. Pass through A mírdil, a bamlet ou a hill, and at 6 mila seach Gabar, $a$ fort lately erectrd, in which about 30 families reside. Opposite this fort is a narrow valley, up which is a route to Káfiristán by the Zidig Kotal. Below Amírdil the valley is very stony, and destitute of herbage or trees. Above Gabar for $1 \frac{1}{3}$ miles the road is fairly level, nad passes through or alongside a jungle of willow and birch trees. Either lank of the river may be followed. At $8_{\frac{2}{2}}^{2}$ miles pass through Digiri, a Káfir settlement, and at 10 miles cross to left bank by fording, and asceua to the camping ground of Sbáh Salím, famous for its hot springs. Forage and firewood pleutiful. Supplies must be brought.

26 Lake Dufferin, or ${ }^{2}$ 82 Hadz.i-Dorãh. there is said to be a path turning the Doráh. The ascent now commences in earnest. It is not very steep, except here and there, and though the path is a rough one, it is perfectly practicable for laden animals. At 1 mile pass the camping ground of Kárauz, beyond which firewood is very scarce. At $1 \frac{1}{4}$ and $3 \frac{1}{4}$ miles respectively pass the mouths of the Artzu and Ustich valleys on the opposite side of the river. Up these two valleys there are footpathe to Alunad lewána in Káfiristán. At 6 miles reach the kotal ( $14,800^{\prime}$ ), the last 2 miles being very stony. In summer the pass is free from snow. The descent is very stony and troublesome, but the ground is open, and the gradients not too stecp for laden animals. At $1 \frac{1}{2}$ miles below the kotal cross a shallow torrent which flows down to the Hanz-i-Dorál. Half a mile beyond there is a very steep descent to the lake, which is about $1 \frac{1}{2}$ miles long, and nearly half a mile broad.

The Dorál, generally speaking, may, allowing for its elevation, be considered an easy route. For laden animals there are no difficulties to speak of west of Parabels, and between Chitrál and Parabek the difficultirs might casily be remedied with a little labour; the road throughont, to withun a mile or two of the pass, may be defined as a defile between high, bare, rocky mountains.

The Doráh is certainly the best known route across the Hindú Kush, as the value of the Baróghil is discounted by the difficulties of the Darkot. (Authority for route from Chitrál to Duráh, Captuin Barrow.)

Note, - The mission encamped close to Parabek Fort, but Barzin divides the distance better.
J. F. MANIFOLD, Capt., R.A.,

Attaché, I. B.

## Alternative Route.

From Pesháwar to Ashrath via Abazál.
Authority-Mr. McNair.

| No. of Stages. | Names of Stages. | Dibtanceg. |  | Rumabes. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Inter. mediate. | Total. |  |
| 1 | Kábal River (left bauk of). | $10 \text { 홉 }$ | ... | Encamp on the left bank of the Naghumán brauch of the Kábal river; supplies must be taken from Pesháwnr; water flentiful; country level, open, and cultivated; road very fair. Leave the trank rond by the fort. At $2 \frac{1}{2}$ miles cross the Badní canal (bridged), and at 4 miles the Sháh Alam (fordable) |

at 7 miles; the river is crossed at the end of the march.

| 2 | Stabradar | $8 \frac{1}{4}$ |
| :---: | :---: | :---: |
| 3 | abazai . | $7 \frac{1}{4}$ |
| 4 | Khairió . | 26 |
| 5 | Kotigram | 23 |

A fort built originally by the Sikhs; supplies procurable after due notice; water plentiful; country and road as in last stage; cross the Kábal river at $2 \frac{3}{4}$, and pass Uchwála at 5 miles.

A fort situated on the left bank of the Swát river; supplies must be collected; water plentiful; country cultivated; road good; pass Mutta at 4 miles, and cross the river ( 150 yards wide, left bank steep) at the end of the march.

The last village en route in British territory is Bairam Deri, distant 14 miles; the first half of this distance is over a bare plain, the remainder of the journey is over fertile ground. Supplies in plenty to be had from surrounding villages. Water good and ou surface, but fuel scarce.
Distance to Malakand kotal 5 miles, the first $3 \frac{1}{4}$ miles by left bank of a running stream. No cultivation beyond Khárkí. Wood and grass on the hills. The ascent to kotal is easy, and will nllow of laden canels. The top of the pass is very flat and well wooded ; in addition, a goodly supply of water is to be had. Traces of a made road executed (so it is said) by the Sikhs is still to be seen, but being a longer one is little, if at all, used even by traders. The descent of very nearly $\mathbf{3}$ miles into the Swát valley is over rough ground, but when once in the plains the going is easy. Coontry on both banks of river very fertile and well irrigated. The river is crossed opposite the large village of Chakdara : 7 miles beyond is Kotigram ; en route several villages.

| 6 |
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Fnur miles beyond Kotigram is the Laram pass. The ascent is easy and practicable for all beasts of burden. Water plentiful. Slopes of bill cultivated, with hamlets scattered about. Two largesized tunks at top of pass that hold water for nine montha in the year. The descent to Kala Rabát is in parts very steep, getting worse on nearing fort, which is built on a low mound on left bank of river, commanding a good position.

The descent is through fir and pine fo:ests. Water and grass plentiful. Some cultivation about.

Cross over the Panjkorn, and along an ensy and level route arrive at the large fort of Sházádgui, which is built at the sharp bend of river above mentioned, commanding a strong position. The valley is a narrow one, but richly cultivated. Sup$p^{\text {lics }}$ of grass and fucl sufficient for a large force.

## Alternative Route to Rute No. 2-concluded.

There is an alternate route from Chakdarn to Sházádgai, which avoids the Laram pass, hut a low kotal (Katgola) is crossed 6 miles due west from Unch, which is 4 miles from Chakdara. This alternate route is principally used by kafias.
 From Sháhzádgai to Kntal Baráwal route is along right bank of a running stream through rich cultivation, distant 12 miles. The uscent is easy for laden beasts. The northern face of range is well clad; !not so the southern. The descent is over 4 miles through dense fir and pine forest and brush.
wood. Soil rich. Water-supply plentiful. The village of Bándá is on right bank of stream, over which a frail bridge has been thrown ; the stream admits of fording right through the year.

$9 |$| DíR | $\cdot$ | $\cdot$ | 16 |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

About half-why is the fort of Chutiatan at junction 1292 $\frac{1}{\frac{1}{8}}$ of stream from Baráwal Bándá with Panjkıra. The path keeps to left bank of stream. After leaving the village of Sangrawal, which is 4 miles from Bándá, the country falls, forming a deep gorge for the stream to rush through, in places ns much as 20 feet deep. No cultivation between Bándá and Chatiatan, but plenty of grass and firewood. From Chutiatan to Dír the path is along cultivation, wheat and rice chiefly.

Dír is the name given to the fort, which is large and mud-built-it is used by the chief and his followers; wherens the village is known as Arian Kot, and is the headquarters of Shao Bábá. The population of fort and village exceeds 10,000 souls.


Path for nearly 1 mile goes by right bank of strean that takes its rise at Lowárai Kotal. The valley is a narrow one but fertile. When opposite the fort of Pana Kot, which is half-way, an ascent of about 300 feet is made, and a similar descent thence to Mírgáh, the going is easy.

About 5 miles from Mírgáh the Lowarai Kotal is reached ; elevation 10,450 '. 'The pass is open for laden animals for eight months in the year, commencing from the month of May.
The ascent is very easy and gradual, but the descentfor five miles and more is difficult, the stream having to be crossed and re-crossed several times. No cultivation between Mírgáh and Ashrath. The kotal is the worth boundary of the Dír territory.

During many winter months almost a gale blows up the valley. In Mny 1883, when I was going over the ground, it was then well under snow, and for 2 or 3 miles the way was strewn not only with branches, but with trunks of pine and deodar that had been uprouted.-(McNair.)

It is a stiff march from Mírgáh to Ashrath. W.ood and grass, but no cultivation.

> J. F. MANIFOLD, Capt., R.A.

Attaché, I.B.
Route No. 3.
From Jalálábád to Chitrál via Asmár. Authority-(Native).

| No. of | Names of Stages. | Distances. |  | Remaris. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Inter- | Total. |  |
| 1 | Shewá or Kewá | 14 | $\cdots$ | After $\frac{1}{2}$ mile cross the Kábal river by ferry-boats. Stream 200 paces across. For 4 miles rcad passes through populous district, then crosses a bure stony plain much infested by Shinwárí robbers. Strike the Chitiál river (here called the Kúnar) at Lambataka, $3 \frac{1}{2}$ niles beyond which is Shewá, a |

Route No. 3-continued.


| 4 | Pashat or New | 15 |
| :---: | :---: | :---: |
| 6 | Sáriáni | 7 |
| 6 | Maraora - . | 12 |

53 $\frac{1}{2}$
oultivad pistrict along live cultivated district along left bank of the river. Pass the villages of Kunár, Ali Dost Kuligrám, Shankar, Shahdalam, and Barabat. Pishat is about same size as Zor Kunár, and the residen e of the Pádsháh.

Road stony and infested by robbers; passes small villages of Janga, Lamba-taka, and Donai. Sarkáni has some 300 houses, and from it, as well as from Kunár and Pashat, there are roads over the Lills to Bajaur.

Road through uninhabited waste on left bank. A $72 \frac{1}{2}$ village of 200 houses, the frontier village of Jalálábéd district. Shortly before reaching Maraora pass ou opposite (right) bank, village of Chigar Sarai, where a large stream, the Peach, joins the Chitrál. The Peach (or Kattar) comes from Chitrál. The Peach (or Kattar) comes from
an affluent from the north also called Kattar, after Káfiristán. A few miles up this stream is an affluent from the north also called Kattar, after
a town of that mome inhabited by Siah Káfirs, who were, however, in 1841 , overrun by the people of Bajaur, Asmár, \&c., and forced on pain of death to become Muhamadans. They are now called Shckhs or sometimes Nimchas, keep on good terms with both their own people and surrounding Muhmadans, and generally form the medium of communication between the two.


Rond along left bank of stream, bad and stony, with many ups and downs. Pass en route the Bajaur villages of Shigal and Shartan ( 80 houses). Asmár is a fort with a villinge of some 200 houses and the residence of the Khán of Asmár. The march is described as "long and dificult." Asmár is an in- dependent state and its ruler on very friendly terms with the chiefs of Dír and Chitrál.

There are two routes, one along each bank of the Chitrál river; that along the right bauk is much the easier, and is even in its present state perhaps practicuble for ladenanimals, but it is never used on account of Káfir raiders. The road along the left bank in its present state is fit for led horses, but not fit for laden ones; it might, however, be easily and quickly made so.

The stages might be either-


## Roule No. 3-concluded.

As the road would require making, the shorter stages would be the better and are accordingly given below.

$8 |$|  | Snn |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

At 2 $\frac{1}{2}$ miles pass Shangúr ( 60 houses) about a mile to right of road on hill slopes, and at $2 \frac{3}{4} \mathrm{mil}$ ford a stream up which there is a road to Bar Baráwal ; at 4 miles Shálí ( 60 houses), the last Asmár village ; opposite it is a rope bridge leading tc Dobaila ( 40 houses) on opposite bank of river. Just nbeut Shálí there is nnother road to Bar Barawal. At 8 miles pass Bargám ( 40 houses) on opposite bank, the first village in Chitrál. At 10 miles there is n bad pari about 500 yards long. At $10 \frac{1}{2}$ miles pass Sanúk, a small hamlet on opposite bunk. San contains about 100 houses. From here a rond to Bar Baráwal.
$9\left|\begin{array}{l}\text { Camp } \\ \begin{array}{c}\text { (3 miles south of } \\ \text { noi or Arnawai.) }\end{array}\end{array}\right|-9$
114
On leaving San, cross strenm, up which is the aforementioned road. At 6 miles cross a nálá by a foot-bridge; up this there is a good road to Bar Baráwal which is fit for laden horses and is never closed by snow. At 7 miles Nara or Nars:t ( 50 houses), just above which, to the right, is the deserted fort of Shálí Kot; 2 miles further on, there is a fiue, level, grassy maidán, which makes a splendid place for a caup.

in a road to Panarkot. At 4 miles pass the mouth of the Basbgal Gol Gangarbat (containa 30 houses).

On leaving camp for 2 miles there is a bad pari where hurses must be led. At 2 miles pass Pashangar ( 10 houses) and Barkot ( 20 houses) on opposite bank. At 3 miles cross stream to Harnoi (handir) $\mathbf{1 8 0}$ houses, opposite which there is a footbridge across the main river. From Haruoi there

11


At 1 mile there is very bad bit where horses must be led. At $4 \frac{1}{2}$ miles ford a nálá up which there is a road to Dír, by which horses can be taken, but which is closed by snow in winter. On the north bank of this nálá is Gid ( 60 houses) (the Clistrális call it) Dahimal. Half a mile beyond Gid the road becomes a succession of small paris very difficult for horses. At $7 \frac{1}{2}$ miles ford the Chashtangas nálá. Beyond this the hills recede a little, and from here to the Lowarístream the valley on the left bank is known as Moghaldam. Half.way between the two streams there is a good spot for oncamping; forage and firewood obtainable. The 'Lowárí strean is $1 \frac{1}{2}$ miles further on ; it is erossed by a foot-bridge at Mírkaní.


Route No． 4.
Pesháwar to Kábal vid the Khaibar，Jalálábád，and Lataband． Authorities－Youna；Dutton ；Carthew ；Connolly；Official Records．

|  | Names of Stages． | Distancr． |  | Rtmaris． |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Stage． | Total． |  |
|  |  | Miles． | miles． |  |
|  | （1）JamRíd ． | 9 | 9 | A fort situated on a slight eminence $3 \frac{1}{2}$ miles from the Shádi Bhagiár entrance of the Khaibar pass， Besides the fort there is a serai，a post office， and bazar；supplies procurable and water plenti－ ful．Conntry on leaving Pesláwar is cultivated as far as Hari Sing＇s Búrj（police station and post |
|  |  |  | far tl | e road is a double one，the two lines ruuning parallel |
| one | nother and a few ya | apart； | both ar | bridged，but one only is m－talled．Beyond Hari |
| ing the | road is a broad，fir | ack，cl | ared of | boulders，which crosses a stony，treeless，undulating |


By the Shádi Bhngiár entrance to pass．The old route vid Kadam is now scarcely ever used．

At $\frac{1}{2}$ mile pass village of Jám；from bere，for $2 \frac{1}{2}$ miles，low hills on the left command road at close range．At 3 miles rond descends into the Shádi Bliagiár nálá；at 3à miles real entrance to the pass．Immediately in front，on a central hill，a sinall fort to hild 25 men was built in 1880．Road circles round this hill，following the bed of Blaqgiár nálá nmong hills 200 or 300 feet high．
At $4 \frac{3}{2}$ miles the road leaves the nálá and begins ascent to the Sháhgai heişhts by Makeson＇s rond（ 2 miles），the gradient of which is rather steep for carts．A new road was laid out with a better gradient in 1880，but is out of repair．

At $5 \frac{3}{4}$ miles Foit Maude（garrison 50 men），situated on a hill above left of road．Pesháwar， Jamrúd，and Fort Áli Masjíd are all visible from this fort，which also commands the road at various points along the incline．No supplies；water from a small well on the road or from a spring in the Chingai nálá．Fort Maude was used as a signalling station in 1878－80．

At $6 \frac{3}{4}$ miles summit of Sháhgai heights，on which are several commanding positions；from here the fort of Ali Masjid is visible over two intervening spurs，on which latter barracks were built．At this part of the pass the higher hills fall back and the valley is filled with a confused mass of lower hills（of which these heights form part），with the Kl．aibar strean winding between them．
At $7 \frac{1}{4}$ miles camping ground of Sháhgai and Fort Abdul Rahmán（for 100 men）．No supplies；water from Khnibar stream below or from the Sháhgrai nálá．This fort stands about 400 yards from the road，commanding the valley and road beyond．

From here the road winds down round several lower spurs to the left bank of the stream， which it reaches at $8 \frac{1}{4}$ miles，and follows to Ali Masjíd，closely commanded by the hills on tither side of the stream．At 9 miles a cliff on the right allows just room for the road between it and the stream，and here a bar has been fixed to block the road．

Boyond is the camping ground，forming an amphitheatre．Commanded on all side；by lofty hills；the fort occupies a hill in the centre of the valley to the west；to the east the ridge now occupied by the remains of barracks；to the north the precipituus slopes of Rhotís，and to the south various small hills，some of which command the fort itself： on these latter several detached towers have been built，ench for 10 mcn ．
Few supplies；water good and plentiful from the Khaibar stream，but should be drawn above comping ground．Road good the whole way．

Route No. 4-continued.

for guns: stream always fordable at these places, if necessary.
The rond continues for the next 4 miles along the narrow valley of the Khaibar through lofty, bare, precipitous hills, rounding numerous small spurs, each of which command it for some distance in either direction. At $1 \frac{1}{2}$ miles the Tortang valley issues on the right; room to camp for one regiment; good water and wood. The stream here issues from the side of the bill; no water beyond this up to Landi Khána.

At 2 miles Khata Kushta; a few hats and room to camp; water here in rains only. In 1878.80 a sigualling post was established on a hill above, which communicated with Landí Kotal and Alí Masjíd.
At $4 \frac{1}{2}$ miles sunall village, Wali Khél. The valley begins to widen and there are some signs of cultivation. No water in the dry season. At $5 \frac{1}{4}$ miles Ishpola tope; from here for more than a mile extend on both sides of the road the villages of Ishpola, Niki Khél, and Sultán Khél, all belonging to the Zakha Khéls, the most troublesome tribe in the pass; they consist of about 40 walled enclosures with towers; numerous nálás would afford cover to an enemy. The valley here is nearly a mile wide, with a good deal of cultivation; no water, at all events in the dry season, though there are said to be springs in the adjacent hills at times; for this renson these villages are mostly deserted in dry weather. From $7 \frac{1}{2}$ to 9 miles the road follows a succession of nalás, the banks of which shat out all view on either side. At 3 miles pass Lálábeg, a small village similur to those above mentioned. The only route by which raiders c:m attack this part of the road is the path leading from Bázár which joins the Khaibar opposite the Gurgara tower. The path throagh Sapri from Jamúd joins the Khaibar at Khata Kushta.

At 10 miles Landí Kotal; supplies scanty; water from Landí Khána stream. The road up to this point is rough but good, and not likely to be much affected by rain. From here the descent to Laudí Khána begins. The road, a very good one, winds down by an easy gradient, flrst circling the hill on which Landi Kotal cawp was pitched, and nfterwards along the hills on the right, ont of the face of which it is cut. Below to the left at $11 \frac{1}{2}$ miles is a deep precipitous gorge, wheuce the water-supply for Landí Kotal is drawn.

Half-way down the hill is a spur called the Michní Kandáo, which commands a raiding route from Bázár.

At $12 \frac{1}{2}$ miles pass Fort Tytler, a strong post for 25 men, which is separated from the road by a deep ravine and occupies an isolated spur in centre of valley. This fort commands the whole of this descent, also Landí Khána and the road and valley for a mile beyond it.

At 13 miles bottom of incline, and $13 \frac{1}{\frac{1}{b}}$ miles Landí Khána camping ground. The camping ground is sinall, situnted a few feet above level of strean. There is also a small fort with a common stone wall. No suppliss; plenty of good water. Drinking-water should be takeu from a spring in the hills close by, as that of the stream is polluted by transport anim:ils.


The road rough but good, follows the narrow valley, which latter gradually widens; high, bare, precipitous hills on either side, with frequent spurs which command the road.
At 1 mile the stream sinks into the sand. No water from here to Dáká.
At 2 miles a small Jezailehi post in a stone sangar.
At $3 \frac{1}{4}$ miles Paindah Khák (a post of Sangu Khél), the most dangernus part of this march. Frequent raids occurred bere from a path leading through a gap in the higher hills on the left: to the vilhage of Darband, and thence over an open plain to Peshbolak in Ningrahar. South of Darband we have the Sitsolí pass leading into the Bázár valley. The plain between Sitsobi and Dar-

## Route No. 4-continued.

band has been known for many years as the regular menting-place of the great robber tribes-the Znkha Khél and the Mirjan Kliél-and the bud characters of the Khaibar Afrídís and the Ningrahár Shinwáris. These robbers meet here sometimes to fight each other, but more often to unite, occupy Darband Sar and the other hills near Paindah Khák, and then to make a sudd"n dash on any luckless travellers or caravans passing atong the main road. The name "Darband Sar" was given to the hill in question owing to its proximity to the village of Darband. The hill, however, has no name amongst the tribes living near it, and this name is now only entered for the sake of distinction. The point, however, is well known. The hill stands out prominently immediately above Paindah Khák to the west of the Darband pass, and completely commands the surrounding country. I may mention that in the spring of 1879 our convoys used to be fired on almust daily when passing Paindah Khák. At last, a careinl reconnaissance of the place slowed us the value of this hill-top. A company of Gúrkhas was posted there during the duy, and all nomoyance ceased almost immediately. One reason for this being such a favourite place for the rolbers to haunt is probably the fact than there is a small spring called Geirukkion ahout half-way up the Darband pass on the west side. This is the only water procurable, at all events during a dry senson, between Landí Khána and Haft-Cháh; and though the supply is bad and very scanty, it proved enough to be of great use to the Gúrkhas, and was no doubt of equal value to the robbers.

At 5 miles Haft-Chál, a small stone fort for 50 men on top of a conical hill in centre of volley; a small supply of water from a spring in the hills 800 yards to the north

At $5 \frac{1}{2}$ miles the hills contract again; the rond runs through agap in them, about 100 yards wide, and at $6 \frac{1}{4}$ comes out on a wide stony plain, arross which it runs for 3 miles : two small isolated hills a mile to left front, here offer a commanding position.

At 9 miles village of Dáká; a sumıner camp of Kuchis with a few ruined walls. Here the bills approach close on left of road; the River Kábal being a quarter of a wile to the right, flowing between flit, sundy banks.

At 10 miles Dáká fort: a large square fort, about 500 yards by 400 yards, enclosed hy a plain mud wall 15 feet high, with four round bastione on each face. It stands close 10 left bank of Rábal river; the town of Lalpúra being on the opposite bank, distant nbout 1,300 yards from north east of the fort. The lower spurs of the hills on the north-west and nouth-west entirely command the interior within 400 yards range. Good water from the river; supplies obtainable. There is a ferry with one boat.

The garrison of Dáká at the end of the war was usually 1 Company British Infantry.
1 Battalion Native
1 Squadron " Cavalry.
2 Guns.
There is a walled enclosure on the south side of the fort, which during the war served as a commissariat gard.

Dáká proved most unhealtby to our troops. It stands at an elevation of $1,400^{\prime}$.

en route.
From $3 \frac{1}{4}$ to 4 miles the rond runs through lnw sand-hills, which command it on either side, as does also a large isolated hill further to the left.

At 4 miles pass Girdi, a village of about 100 houses, affording a few supplies. Two small isolated hills west of village completely overlork it.

At $4 \frac{1}{2}$ miles the hills approach again on the left, and the rond runs for $\frac{1}{2}$ a mile through a spur commanded wn both sides by low hills. This spur runs down to the river, but could be avoided in dry seasons by keeping to low ground ly river.

The road continues for 3 miles along the foot of the hills to the left, which are high and bare, a. well-cultivnted plain lying to the right, and crosses another spur at $6 \frac{3}{4}$ niles; the hill on the right here is high and steep, with a stone wall at top, but is avoidable like the former ones, though the low ground is apt to be flooded for irrigation.

At 7 miles ground to right swampy and also parts of the road.
At $7 \frac{3}{4}$ miles H:zárnao, a large open village of aboat 400 houses; plenty of supplies; water from wells and river. The road runs for a quarter of a mile through the village, which lies immediately at the foot of the steep slopes of the bill on the left.

## Route No. 4-continued.

Issuing from Hazárnao, the road crosses the stony bed of a dry stream, follows nuder the old bank of the river to 9 miles, und then ascends to the wide plain of Ningrahar, the hills to the left falling back entirely. At $9 \frac{1}{4}$ miles a pond of good water. At 10 miles village of Basáwal (about 200 houses, with a fair amount of supplies) ; also $\frac{1}{4}$ mile to left of road a larye isolated hill. Small streans of good water cross road at $9 \frac{1}{2}, 10 \frac{4}{4}$ and $10 \frac{1}{2}$ miles. At $10 \frac{3}{4}$ miles, cross a larger stream easily fordable, and at 11 miles fort of Baváwn. A small mud fort, consisting of a square redoubt of about 80 yards side (walls 12 feet high) and an ontwork much larger, with small ditch and walls alout 6 feet high; the circuit of the whole being about 600 yards. Any amount of supplies from villages of Peshbolák and surrounding district. Very good water from stream, 50 yards below fort.

Rond good the whole way ; rongh the first 7 miles, alterwards very good. For alterantive routo from Busáwal to Jaláábad, vide Route No. 4A.


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The rond leads across the level plain ; the towered villages of Peshbolák being visible in the distance, about 4 miles to the left, and extending for severnl miles. At $1 \frac{1}{2}$ miles road reaches foot of Maskub hill, wh:ch it follows for $\frac{3}{4}$ mile. At $2 \frac{1}{4}$ miles a small stream of water. From here for 4 miles the road crosses a dry sandy plain, passing at 4 miles a swall old fort half in ruius standing in plain $\frac{1}{2}$

## mile to left of road.

At $5 \frac{1}{2}$ miles cross a small nálá, with ateep banks extending for a long distance on either side, which would be an obstacle to guns or cavalry; nt 6 miles another similar one.

At $6 \frac{1}{2}$ miles Batikót, n large village with nbout 50 walled nad towered enclosures, affording plenty of supplies. Village extends for $\frac{1}{2}$ mile along left of road; ground all round cultivated; a small stream of good water at $6 \frac{3}{4}$ miles.

At $7 \frac{1}{4}$ miles two small sand-hills on right and left of road command it and the plain in cither direction for several miles (and also Batikót), affording with swaller hillocks an excellent position for artillery.

The road continues across the stony plain, and at $9 \frac{1}{2}$ miles Barikáb fort. A sunall mud fort, surrounded with a plain wud wall; supplies from Batikót and Chardeh. Water from a small stream close to fort.

Road stony first $2 \frac{1}{2}$ miles, then heary sand up to Batikót, and then stony and rough up to Barḱba fort; not likely to be much affected by rain.


The road leads across the same stony plain for 5 miles, commanded for the last 2 by a low range of hills on the right at distance of about $\frac{1}{2}$ mile. At 4 miles low hills in front and on left flank also command it at distance of about a mile.
At 5 miles begins Choragalí pass. The road descends into the dry bed of a stream, which it follows, comuletely commanded on all sides by low rounded hills. It continues for $5 \frac{1}{2}$ miles of the same character, crossing a low kotal (Sask Dewal) at $6 \frac{1}{2}$ miles from Baríkáb, and turning to the north, round the font of the Girdikus peak, issues at Alí Boghan on the open ground near the right bank of the Kábal river at $10 \frac{1}{2}$ miles, where a suall, isolated, conical hill commands tho exit.

At $12 \frac{1}{2}$ miles road descends to the marshy bed of the Chupriar stream (about 300 raris brond, sandy buttom), with a small strenm of good water ronning through the centre, which is easily fordable, though it might present difficulty after heavy rain: remains of an old fort on the east bnak. From bere the roid continues between sandy hillocks along the top of the old bank of the river, which lies below to the right.

At 13 a miles several low hills, $\frac{1}{2}$ mile to the left above a village (Kárez Shúkur Khán), give a good position for guns.

The road continues across nn undulating sandy plain until, at 17 miles, new fort of Jalálábád.
Road rough but good the first 10 miles, then sundy. Heavy sand the last 5 miles. No water from Barikáb to the Chupriar stream.

Fort Sale is 1 mile short of the city of Jalálábád. Elevation 1,950 feet. Cnuping ground south of the fort good, but no shade. Good water from the river and from a spring on the river bauls. Supplies obtainable. at Wazírlagh, beyond the city and 2 miles from the fort, there is shady camping ground for $2,000 \mathrm{men}$.

The city itself is an irregular quadrilateral with n perimeter of $2,100 \mathrm{yn}$ rds.
The summer population does not exceed 2,000. During the war of $1878-80$ it was alway the beadquarters of a strong brigade, if not of a division.

Route No. 4-continued.


## Remaeib,

id wide plain, at first sandy and afterwards stony; at $2 \frac{1}{2}$ miles from fort pass some gardens surrounded by long low walls; at $3 \frac{3}{4}$ miles $a$ smill stream of good water.

At $4 \frac{1}{2}$ miles the road begins skirting the foot of a range of low stony hills on the left, which afford a good position for guns to command the road eastward; the Gujak stream here lies im. mediately on the ight; the ground on opposite bank is entirely cultivated.

At $5 \frac{1}{2}$ miles the road descends and follows the sandy bed of the stream for a mile.
From $6 \frac{1}{2}$ to 11 miles the route continues of the same character, viz., a low range of stony hills on the left at $\frac{1}{2}$ mile distance, and on the right the stream, beyond which is a highly cultivated plain, studded with villages aud gardens (Chárbágh, Malabágh, Sultánpur, and others).

At 11 miles the hills on the left fall back on the Gujak stream and die away, and the road enters on a wide stony plai,! stretching for several miles.

At $12 \frac{1}{4}$ miles camping ground of Rozábád, and at $12 \frac{3}{4}$ miles fort of Rozábád. The latter lies about half a mile off the main road to the right and close to the bank of the Surkliab stream; it is a strong, well-built native fort, capable of coutaining a garrison of 200 men; supplies of all sorts very plentiful; water-tunks, for a lurge supply of water, are filled by a cut from the stream.

The rond, otherwise good, is a heavy one throughout; the first 3 miles are through benvy sand, then stony and rough for $2 \frac{1}{2}$ miles, and from $6 \frac{1}{2}$ to 11 miles again through heavy saud.


The road leaves Rozábád in a north- westerly direc. tion along a stony plain, which on the track has been cleared from stones. At 4 miles the road passes close to F'atehábád, a large populous village ; a small stream crossing it on both sides of the village. At $4 \frac{3}{4}$ miles the Kuja nálá, a broad stony bed of a strenm, loses itself in the Surkháb. The rond is a gradual ascent the whole way from Rozábád, and is througbout of the character described nbove. Fort Battye is a smalı post, badly situnted for defence, being commanded by hills on the west at about 500 yards distance or less. The post is an enclosed stone serai with a hornwork for cattle. Water close by ; supplies procurable. The normal garrison during the war was 100 rifles and 40 sabres.
 balt. From this point a country path turns off to Nimla Bágh, a very fine old garden with some celebrated cypress trees in it; and though the path becomes very rough after leaving Nimla, Safed Sang can be reached by it. The Nimla valley is very fertile, and dotted with numerous walled villages. From the stream mentioued above, the regular road nscends the whole way to Safed Sang, which lies a mile east of Gandamak. The road being a good one, and the gradients eased off, tbe ascent is not felt as much as might be expected. The post at Sated Sang is situnted above the right bank of the Murki Khel river, nud consists of a furt, which encloses the commissnriat and ordnance depôts. Height about 4,500 feet. Supplies at times obtianable; water-supply good and ample. Climate cool in summer, and very cold in winter.

Route No. 4-continued.

|  | Names of Stages. | Distafce. |  | Remarig. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Stage. | Total. |  |
|  |  | Miles. | Miles. |  |
|  | (11) Pezwán | 113 ${ }^{\text {昌 }}$ |  | From camp the road, which is a good one and perfectly practicuble for carts, descends to the |
|  |  |  | 120 | perfectly practicuble for carts, descends to the Murki Khél strean, which is crossed by an old | creases considerably in the summer, where it is forlable, but liable to sudden floods from the melting snow. At about 1 mile the Chashi and Nian Rúd streams cross the road, and joining flow in a northerly direction into the Surkháb river. At $\frac{3}{4}$ mile the road to Gandamak branches off from the main roud on to a large stony plain From here the road to Kábal passes nlong open country to the Khatai stream, after which it winds between low hills. at $4 \frac{1}{2}$ miles a conical bill, called the 44 th Hill, is passed, which is celebrated as being the place where the remnnots of our army in the first Afghán war made their last stanl, and were destroyed. A cairn of white stones has been erceted on the summit to mark the spot. At 6 miles the Batola strenm crosses the road; descent easy. This place is considered by the convoys as half-way to Pezwán. For the next mile and a half there is a gradual ascent, and thence to the Surkháb river the uescent is gradual nud easy, but the road not so good as heretofore. The Surkháb (or red water) river, which is reached at 9 miles, is crossed by an old masonry brilge which was repaired during the war; and from $9 \frac{3}{4}$ miles the road gradually ascends to Pezwán. The encamping ground is in a bollow and commanded by surrounding ridges ar short ranges. A small strean flows past thewest side of the position, but the best water-supply is frow a spring at the head of a ravine, north-west of the camp. Supplies are obtainable with difficulty. From the camp a path over the hills leads in a westerly direction into the Hisárak valley about three quarters of an hour's march; height 4,760 feet. From Pezwán, signilling communication with Gaudamak and Jagdalak can be maintained.



On leaving Pezwán the road immediately ascends at a gradient of about 1 in 60 until at $1 \frac{1}{4}$ miles the top of Pezwán Kotal is reached; height 4,900 feet. From this point the rond descends to the Zanzillai nálá, which is reached at $2 \frac{1}{4}$ miles, and continues to follow the course of this nálá, winding first in a westerly, then in a northerly direction to Kani Chowki, stony and rough, distance $5 \frac{3}{4}$ miles. Here there is a small level bit of cultivation on the right, and the road, still of the same character, continues to follow the course of the nálá for about three quarters of a mile, when the ascent to Jugdalak Kotal commences. The ridge is reached at $8 \frac{1}{4}$ milus, and is 6,150 feet high. Here there is a small fort which was usually garrisoned by 200 British infantry during the war. About 1,500 y:rds off in 1 north-easterly direction is Pudding Hill, the top of which dominates the whole of the Jagdalak pass. Frow the kotal the road descends at a steep grarlient, winding through a narrow pass, varying in width from 100 to 200 feet, until close to Jagdalak it opens out into a stony hollow, intersected by the Jagdalak stream. The Jagdalak post, which is 5,350 feet ligh, is a walled enclosure situated on an uneven ridge about $1 \frac{1}{2}$ furlongs from the main rond, which wiuds round it towards Seh Bábá. Water plentiful; supplies procurable with difficulty. About $\frac{3}{4}$ mile from Jagdalak on the east of the main road is the entrance to the celebrated defile known as the Pari Dara pass, which is about $2 \frac{3}{4}$ miles in leneth. Another mountain path passing through a gorge, opposite to Jagdalak, leads to the ruby mines.
 a very steep fall in a north-east direction. This strean is said to be liable to rushes of water when the snow is :uelting, but the fall is so great that they are soon over, and only $a$ sligitt trickling stream remains. At $5 \frac{3}{4}$ miles the route through the Pari Dara pass joins into the main rond, and from this point, which is called Sang Todn, a path passing over the Dabali Kotal, und running through the Laghmán valley, leads to Jrlálábád. From here the road, open on both sides, leads arross a stony plain interspersed with ravines. At $7 \frac{1}{4}$ miles Kata Sang is reached, a small level picce of cultivation with a chowki. The new road, as now existing, although it makes this march

Route No. 4-concluded.
rather longer than the old one, maintains the sume enay gradient to the top of Kata Sang Tangí, and from thence descends gently to Seh Bábá, passing the Kuchi camp of Barikháb at $10 \frac{3}{\frac{3}{i}}$ miles, where there is a small strean. Seh Bábá is a small post on the right bouk of the Terín river; water good and pleatiful ; supplies nbtained with dificulty from 'Terín and a village about 8 miles distant called Serobi. From Seh Bábá there is a route to Kábal viâ Tezín.
 On leaving camp the road crosses bed of river, when a gradual ascent immeriately commences and continues $f$ or 10 miles, with intervals of nearly level ground, where it follows a contour round a hill; it then begins with the same gradient to descend to camp it Lataband. At first the old and new ronds cross and recross, but at the chowki of Donaghai, about 2 miles from Seh Bábá, where the old road diverging leads on to the summit of the Lataband pass, a height of 7,950 feet, the new road bears entirely to the right, escapes the kotal altogether, and winds round each successive hill, never exceeding a height of 7,000 feet. The new road, although making the march from Seh Bábá much longer, is perfectly pracricable for the transport of all arms and military stores. Water from two or three springs is obtainable, and the road is good throughout.

The post at Lataband has been made by the British, and consists of a bastion-shaped stone wall with ditch on the outside, and a strongly built keep. The water-supply is pientifui and is brought right into the fort. Supplies are procurable with difficulty. From Lataband helio. graphic communication with Sherpur can be maintained.


The road from camp is broad and good with a gradual ascent fit for wheeled traffic. At $2 \frac{1}{2}$ miles there is a small native fort, which used to be held by sixty rifles from the Lataband garrison. At $3 \frac{1}{2}$ iniles a small streum is crossed. The road for the first 6 miles winds along through low hills ; another small stream at $4 \frac{1}{4}$ miles.
The old rond, which is rough, stony, and in some parts steep, crosses and re-crosses the new road several times; it is shorter, and though fit for mule carringe, is not fit for wheels. The latter half of the march is across a stony plain, until nearing Bútkhák, when the country becomes cultivated, with villages on both sides; at 11 miles cross the dry hed of a streain. 'he post at Rútkhák consists of two native forts, a mud wall forming a square and enclosing the whole. The village of Bútkhák is within 15 yards of the west face. Water plentiful, as also supplies, which are easily procurable. The elevation of Bútkhák is about $6,000^{\prime}$.


The rond from camp follows a north-westerly direction, is perfectly level, with a good many villages and cultivation. At $3 \frac{1}{4}$ miles is the site of Gene. ral C. Gough's camp on 23rd December 1879 ; here there is a ruined mud enclosure. At 4i miles the Logar river, over which there is an old masonry bridge. On the right bank a small fort, occupied usually by 20 sabres. The river is about 100 feet broad, and in the summer months is shallow, owing to the irrrigation which is carried on over the neighbouring country in the full season. There is a ford abuut $1 \frac{1}{4}$ miles down the river; ; at 5 miles there are three bridged nálás, and the road winds abnut rather more. At $7 \frac{1}{2}$ miles, old raccourse and the late Amír Sher Alís rifle ranges. At 8 miles an avenue of poplars commences, and the remainder of the road leads perfectly straight up to the gate of the Bálá Hissár, the fort of Siáh Sang on low hill commanding the city, $\frac{1}{4}$ mile from Bálá Hissár on right of the road. From Bálá Hissár to Sherpur cantonment is about $1 \frac{3}{4}$ miles, for the most part a shady road.

E. G. BARROW, Capt., Deputy Assistant Quarter Master General.

## Route No. 4A.

Basámal to Jalálábád viá Lachípur.
Authorities-Captain Carthew and I. B. C.

|  | Stage or halting-place. | Distance, in Miles. |  | Description, \&c. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intermediate. | Total. |  |
|  | (1) Lachípur . . | 123 ${ }^{\frac{3}{4}}$ | ..' | With the exception of four small rocks from 2 to 3 miles distant from Basáwal and near the road the country is open tbroughout on the left-hand side, and for $1 \frac{1}{2}$ wiles on the right, when rocky hills are met, which shirt the road for another $1 \frac{1}{2}$ miles. They then gradually open for $\frac{3}{4}$ of a mile, | when they end. There is now seen at a little distance another range, which eventually meets the road at $\frac{3}{4}$ of a mile from Chárdeh 'lop. The country from Basáwal is stony for the first lialf, and sandy for remainder of the way to Chárdeh Top. At $2 \frac{1}{4}$ miles road to left to Pésh Bolák. At $4 \frac{1}{4}$ miles, and to the right, is a new road, which is available for traffic by other than wheeled conveyances, It leads to Ambar Klána, which is abont $\frac{1}{2}$ mile distant. At this point is a stream of water which is very clear and good, but is in the bot weather very shallow. The road for most part of the way is heavs when cut up carts, but is otherwise good.

Chárdeh, ar ruined Bhuddist tope, situated on a hill fortified in 1880, and held by 150 infantry At foot of hills enclosure for 60 cavalry. Camping ground good. Water obtnimable from kárez and from Kábal river, 1 mile south: Wood and grass casily obtainable. Fodder also with warning. Vulley across river very fertile, Distance 6 miles from Basáwal.

At $7 \frac{1}{2}$ miles naĺa 15 yards broad, banks $20^{\prime}$ high, bottom sandy, depth of water 6 inches. Road descends through cutting in banks, over wooden bridge, and re-ascends, gradient steep. Fall of nálá easterly. At $7 \frac{3}{4}$ miles two large villages, Chárdeh and Gháziábąd, populous and walled, situated 500 yards to east of road. At 8 miles Tirahi Chárcieh nálá, breadth 100 yards, banks shelving, about $6^{\prime}$ high, bottom sand and gravel. Road descends by gentle gradient into bed of málá, and re-ascends by similar gentle gradient. Very little water in hot season. At 9 miles a ravine 30 yards broad, banks abrupt, $9^{\prime}$ high. No water in hot season. Road descends into ravine, carried across an enbankment, and re-ascends; gradient steep. Swamp on east of road, 500 yards distant, conmences. At $9 \frac{1}{4}$ miles small walled village of Mashwani, 300 yards to east of road.

At 11 miles a nálá 80 yards in brendth; banks slope gently, $6^{\prime}$ high ; bottom sand and gravel. Road descends into bed of nálá; gradient gentle. A little water in nálá, fall easterly to Kábal river.

At $11 \frac{3}{4}$ miles a small nálá, banks $15^{\prime}$ high, steep and rugged, bottom sandy, water 6 inches deep. Rond descends ly two steep cuttings into bed of nálá ; crosses and re-ascends by two cut-tings-one steep ( $\frac{1}{2}$ ), the other gentle. Fall on nálá east into swamp 200 jards off road. This swamp ends here.

At $12 \frac{1}{4}$ miles hills averaging $200^{\prime}$ to $600^{\prime}$ high, rugged and steep. Road partially metalled runs at their base, past abandoned Sapper fort and small village of Lachípur to within 400 yards of post and fort of Lachípur. which lies in a sandy plain. This fort was made for 150 infintry and 64 cavalry. The camping ground is between the fort and river. Forage pleutiful; water from liver.

Country level and cultivated; soil alluvial, hardened to a crust, on which all arms can move. Nálás can in general be easily crossed or turned at their mouths near Kábal river, which averages 1 to 2 miles from road. Wuter easily oltainable from nálá and irrigation channels the whole way. Nálás stated by country pe:rple to become impassable for two days at a time, if heavy raius occur in the Safed Koh. Road much cut up by traffic and deep in dust; otherwise good.

|  | (2) Alí Boghín |  |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |

$22 \frac{1}{2}$
The road for $2 \frac{1}{2}$ miles afler leaving Larhípur passes nloug the hillside, following the course of the river. At about $2 \frac{3}{4}$ miles it debonches into the Girdi Kas plain. Water from the river plenlififl and good. At $3 \frac{1}{2}$ miles reach Giirdi Kas. Suppliws can be obtained if a day or twos' notice is givell.
Road fairly good, but heavy, especially across the plain. Fór about $\frac{3}{4}$ nile the road pisses over the plain, when it meets the liill coming duwn to the river, and follows line of the strean for about $4 \frac{3}{4}$ miles, when it comes out on to the Alí Bogbán phin, Supplies only obtainable if notice

## Route No. 4A-continued.

is given some days beforehand. Water good and plentiful from river. Rond fairly good, though heavy in places.

| (3) Fort Sale, JalílÁBÉD. | 77 | $29 \frac{7}{B}$ | At 1 mile choss nálá (dry except after rain) to the village of Alf Boghán. lkoad henvy and over broken ground. At 2 miles join former road via Choragoli and Barikáb, which goes off to the left. At $3 \frac{1}{3}$ miles cross Cbapriar river (wide bed with little water during dry season). Here a road to the left |
| :---: | :---: | :---: | :---: | leads to the left bank of the Chapriar, and viâ Hada to the Agam pass into Kuram. At $5 \hat{f}$ milea cross a nálá (dry except after rain). Beyond this the raad diviles. A new road to the right leals through cultivation, ard is free from sand. It is used by the dâk tonga. The old road keeps outside the cultivation; it is sandy. The road throughout is ummetalled and unbridged, is at times on clay, and then frm; at timos on sand, and then very heavy for wheeled traffic. An alternntive route from the village of Alí Boghán, passahle for all but wheeled traffic, leads by the riveri bank over low, grassy, and firm ground for 4 miles, when it joius the dâk tonga road above mentioned.

F'or remarks regarding Jalálábad, vide Route No. 4.

E. G. BARROW, Capt.,<br>Deputy Assistant Quarter Master General.

Route No. 5.
From Kábal to Bámián viáa Chárirár and the Shibar Kotal. Authorities-Routes in Afghánistín ; Peacocke’s Diary; Daffadár Amir Khán.


## Route No. 5-continued.

except in the first 50 yards, where it ascends through a 10 , wide cutting through a projecting reef of ruck, gradient about $\frac{1}{4}$. At $7 \frac{1}{2}$ miles the valley makes a sharp bend to the left, and is now called Bágh-i Aoghán. At about $8 \frac{1}{2}$ miles there is an easy ascent up hillside, and descent beyond at $\frac{1}{8}$ fur 200 yards. This can be avoided by crossing and re-crossing river, here $1 \frac{1}{2}$ fuet deep, botion sound gravel. The rond goes up an easy ascent (except 50 yards at $\frac{1}{5}$ ), and runs for 500 yards along the hillside at $75^{\prime}$ to $100^{\prime}$ above river. It is in muny places only $8^{\prime}$ wide. At 9 miles Dara Chirtak jains on the left. It is a narrow rocky ravine, with a difficult footpath up it, leading ncross the Kot:al i-Chirtals on the Paghmán range to Chárikár. Just beyoud this, the road aguin descends, and runs over level ground at the river-side to $10 \frac{1}{8}$ miles, where it crosses to the right bank by the bridge of Bágh-i Anghái.

This bridge is similar to the 'Tútau Dara bridge, except that the span is 33 '. Will carry field guns and laden camels; is sound, but very springy.

Heuce a bad track, barely practicable for single horsemen, coutinues aloug left bank (old rond).

The road now runs to $11 \frac{1}{g}$ miles along hill side, or over small narrow patches of stony dámán at the mouth of lateral ravines. 'These latter afford convenient sidings, $\frac{1}{2}$ to $\frac{3}{4}$ mile apart. Then the road runs mong the foot of the high rocky hill to $12 \frac{1}{4}$ miles, rising at times $50^{\prime}$ above river. Several sharp turns, and one short steep pinch (ascent nud descent) at for 50 yards. The valley now opens ont somewhat, varying tron $\frac{1}{4}$ to $\frac{1}{\frac{1}{2}}$ mile in width. At about 15 miles an ascent at $\frac{1}{6}$ for 80 yards, followed by easy descent. At about $14 \frac{1}{2}$ miles ascent of $\frac{1}{6}$ for 200 yards, followed by similar descent ; road 18 ' wide. At $15 \frac{3}{2}$ miles Dara Kaoshán joins on the right, up which the road to Khinján viâ the Kotal-i-Kaosháa runs. Fron 16 to $16 \frac{1}{2}$ miles the road has been built up of stones and brushwood along the foot of a high rocky cliff. Work substantial; grod gun-rodd. In dry scason the river bed, here level and gravelly, is used as the road. Thence to Búrj-i-Ghuljau road good, up river bank.

During this stage, troops would be mostly confined to the road, which most of the way overhangs the river. Careful driving would be required. Búrj i-Ghulján is a small Shiuwári hamlet. Level camping ground in open cultivation. Fuel, cumel grazing, and grass scarce throughout the Ghorband valley. (Elevation about $5,860^{\prime}$ )

| Síajegrd |  | - |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  | Road up the right bank, valiey about $\frac{1}{2}$ mile wide. At $\frac{1}{2}$ mile Dara Istánali, joins on left. Path up it, over Kotal-i-Istámah, to Chárikár, impracticable for laden animals. At $] \frac{3}{8}$ miles a good camping ground ou the chaman on river bank, to which the roid ascends by a long sl' pe covered with trees. Valley here open out to about 2 miles wide, with cultivation and villages, called Khákshall. At about 3s miles the Dira Sinjit joins, up which a road runs to the Kotal-i-sinjit on the Paghmán range ; said to be difficult, but practicable for laden camels. Then the valley contracts, and there is an ascent of ${ }^{2}$ fir 75 yard over the neck of a bluff forming the left of the tangi. This is called the 'Tangí Klaakshall, and is 200 yards wide. The road now runs nlong the foot of the high gravelly cliff on the left, overbanging the river bed $20^{\prime}$ below, and is good and level, $18^{\prime}$ wide. The river trough gradually expands, eventually attaining a width of 2 miles. At $5 \frac{7}{6}$ miles Kliák-i-Sanga, a group of villages. Some half mile beyond this the road ascends from the trough of the river, gadient ${ }^{1}$ for 100 yards, and $\frac{1}{1 \frac{1}{0}}$ for 400 yards. At $7 \frac{3}{4}$ miles, a good position to close the valley facing west, along the right bank of the Shutarshalır nálá (vide Peacocke's Diary, p. 420). Here the Shutarshahr ravine joins on the left, and from its mouth a flat terrace $80^{\prime}$ high, with sides scarped at $45^{\circ}$, projects right across the valley. The road crosses this terrace, with the river sunk $150^{\prime}$ at its right in a trough half a mile wide, descending by easy ramp beyond. At $9 \frac{3}{8}$ miles pass Kalı Chaman Násir Klán, where is good camping ground. At $10 \frac{\frac{3}{d}}{}$ miles Darázgird, a group of fur small forts ou left bank. Villes here 2 miles wide, with gardens and trees; river bed gravel, 400 to 800 yards across.

At Sláhgird join the Wázghar Dara on the right, and the Fandukistán on the left. Up the latter a road leads to the Kotal Istálif, said to be diticult, but practicable for lightly laden camels.

Good camping ground on right bank beyond villige; supplies procurable. Four fort villages on left bank, aud village of Chahár Burjak on right bauk. Muiu valley 5 to 6 miles wide opposite above named daras. (Elevation about 6, $280^{\circ}$.)

6

| Kala Shain Nazar | $13 \frac{1}{2}$ |
| :--- | :--- |
|  |  |

Road ascends gradually over open slopes for $\frac{6}{8}$ mile, whence it ruus acriss level dasht for a mile, passing Kala Kalá $\cdot$ hah. Then a descent at $\frac{1}{6}$ and $\frac{1}{8}$ for 200 yards. The $\AA$ Ab-i-Koishliki (strenm) is forded at $1 \frac{2}{8}$ miles, and the mouth of the Dara Koísliki passed at $2 \frac{1}{2}$ milees. Branch road un this

## Route No. 5-continued.

another to left for Pársá. Valley here 1 mile wide, studded with houses and gardens. Then an easy ascent at $\frac{1}{15}$ and $\frac{1}{12}$ for 250 yards, whence road runs over gravel slopes $150^{\prime}$ abuve river and is $20^{\prime}$ wide to $2 \frac{3}{4}$ miles, when there is a descent at $\frac{1}{f}$ for 100 yards. Rond now winds for $1 \frac{1}{2}$ miles round the foot of a precipitous hill, and is $15^{\prime}$ wide, then a desceut for 50 yaris at $\frac{1}{y}$ to the small village of Deh-i-Rangán, at $4 \frac{4}{4}$ miles. Valley $\frac{1}{2}$ mile wide, but broken into stecep slopes and teracres. At Del-i-Rangán cross to left bank by wooden bridge of two spans of $15^{\prime}$ and $2 z^{\prime}$. Roadway $14^{\prime}$ in the clear, strong enough for field-guns. River fordable (October). Approach on left bank roomy.

Here the made roud ceases. Road from Gori rig the Chahárdar pass joine here.
From $4 \frac{3}{4}$ to 6 miles road runs along a sloping hillside, and is a series of yoord parallel camel tracks. To make gun road would take 600 men 2 days. In dry season, river bed g od rond. New road here in process of construction (October 1886). At $4 \frac{2}{8}$ miles Dara Jái Dukhtar joins on right; villuge of same name at its month. A road runs up it to the Chaharilar pass. Fron junction of this dara, main valley contracts, and to 6 miles is 200 yards wide (cilled Tangi Júi Dukhtar) and entirely occupied by river bed. At 6 miles Kúl-i- Khurd, a small ravine on left. From 6 各 to 7 miles road along river side, and in flood season a road would have to be made throurb fields. Thence to Chubárdelı (elevation about 6,470' , at $7 \frac{1}{5}$ wiles, road level between walls, $12^{\prime}$ wide. Good ford at 7 miles.

Here Dara Pársá joins left, steep and narrow, but a good camel-road is said to lead up it to Kotal-i-Káh for Kábal.

Hence road ascends $\frac{1}{6}$ for 500 yards, and is very rocky and stong, with several cramped zigzaga. . Impracticable for guns, passable for the other arms. Gun road would take 200 men 4 days to make. Then for $\frac{3}{4}$ mile across flat terrace which projects across the valley, forcing the river into a narrow gorge. Hence a hilly road, practicable for all except guns, rans along hillsides above main road, rejoining the latter at the Farinjal lend mines. Main road descends from terrace at $\frac{1}{6}$ for 300 yards; width $155^{\prime}$, practicuble for guns. It then runs over low level ground to $10 \frac{1}{4}$ miles, and thence along the river bed for a mile. In flood season walled village lanes would have to be followed for the latter portion, and would require wideuing for guns. Here Farinjal village stands on rising ground on the right with extentive cultivation, valley a mile wide. From this point the road becones generally bad and remains so for $6 \frac{1}{2}$ miles. To make th:s passable for guns would take 500 men at least 2 weeks. The new $30^{\prime}$ road has been commenced at two points in this portion (October 1886). From $11 \frac{1}{4}$ to $12 \frac{1}{4}$ miles road runs round the foot of another terrace $70^{\prime}$ high, which projects across the valley, affording a good position, suitable for two brigades, to close the valley. Road rough and rocky; would take 400 men 3 days to clear for guns. At $12 \frac{4}{4}$ miles valley widens to $\frac{1}{3}$ mile, and Dara Farinjill joins right; by it a road croses to the Surklál) valley, said to be easy on the south side, but very difficult on the north. Thence rond is good and easy for guns over sloping dasht. At 13 miles the Farinjal lead mines are pussed el se above road.

Kala Sháh Nazar stands on an isolated rock left of road. Good camping ground.

| 7 | Bin-i-Sehwak |
| :---: | :---: |

Road good for 1 mile. Then valley opens out to 1 mile wide. At $1 \frac{1}{4}$ miles road very bad fir 100 yards-only a camel track. climining along the face of a high rocky cliff, $15^{\prime}$ to $20^{\prime}$ above river. which is $8^{\prime}$ deep. Blasting would be requirelsay one company sappers 4 days. At 1 音 miles again bad and rocky for a furlong, impassable for guns; allow 300 men 5 days to improve for guns. Then for $\frac{1}{4}$ mile the low-level road has lieen washed away, and there is only a rough camel track along the hillside $100^{\prime}$ above river. This bit would take 400 men 5 days. Both could be avoided by bridging and rebridging the river, right bank being open. Thence to Kala Doáb Sheikh Alí Loling ( $2 \frac{1}{2}$ miles) road is good Here Loling river issues from a deen rucky grrge on left. Up it runs a good camel-rond, which divides into three branches, going to Dahán-i-Turkoman, Kotandar, and Pársá, respectively. The main valley now begins to narrow. At $3 \frac{1}{2}$ miles the month of Dara Mazána is passed (right), and at 4 miles Dara Behúda joins (right), with a small hamlet at its mouth. Road here runs along the side of a high slope, and for 100 yards would have to be widened $3^{\prime}$ for guns: allow 100 men 1 day. The valley now narrows to 150 yards and the 'lumgi-Khák-i-Gulám Alí begins. At $4 \cdot \frac{z}{8}$ miles the tangí turns sharp to the right, and the road has be n carried away for 200 yards. There is a good camel-track, but a gun-rond would have to be built up from the river fed $10^{\prime}$ below : allow 300 mea 4 days. Could be avoided by crossing river twice; banks ( 4 ' high) would have to be ramped.

The road now generally improves, and the tangi widens to 200 to 300 yards for a miie. At $5 \frac{1}{2}$ miles the Dara Tuori joins (right) and the road across its mouth is rocky for 200 yards: allow 100 men 1 day for guns. A terrace $70^{\prime}$ high projects across the valles at $5 \frac{1}{7}$ miles. forming a good pnsition for two buttalions to bar the road. Tangi here 80 yards wide; rad stony, winding rumed end of terrace, fit for guns except at $5 \frac{\frac{7}{4}}{4}$ and $6 \frac{3}{4}$ miles, where the reaiaining wall has fallen: allow 50 men 2 dnys. At $6 \frac{7}{6}$ miles the tangi ends, and the road runs along level grassy chaman called

## Route No. 5-enntinued.

Gnzár, dotted with honses and walled gardens. The valley here bends to the right, and expands to $\frac{3}{4}$ mile. At 7 miles Dara Rabát joins right; road up it to Kotul-i-Zák. At 7 $\frac{3}{4}$ miles Dara Jaugalak (ilso right); a wide fertile valley; road up it to the same kotal. At $8 \frac{1}{2}$ miles the vulley ngnin contracts to about 150 yards; road still good; gange working at the new road here (October 1886). At 10 miles Darn Shingarián joins right; road up it to Sái Kázi, where it divides, going to Kotal.i. Tunkhana, and Kotal-i-Zák respectively. At $10 \frac{3}{8}$ miles valley opens to $1 \frac{1}{2}$ miles wide; and at $11 \frac{1}{8}$ miles Knlu Kázi Nawi is passed.

Bín-i-Sehwak is a small fort village. Good camping ground. (Elevation about 7,340'.)


Road up the valley good to $4 \frac{3}{4}$ miles, and fit for guns, except at points noted below. At 1 mile pass Dara Nirkh, and at $2 \frac{1}{2}$ miles Dara Jarf both on left; large well-cultiruted valleys, with roads up them to the Nirkh Kotal for Kárezins. Nirkh road passable for cumels. At $3 \frac{1}{2}$ miles a group of small kishláks called Bed.
At $1 \frac{1}{4}$ wiles road partly fallen and ruined by being used as a júi for 300 yards ; can be avoided by crossing and re-crossing river.

At $1 \frac{3}{4}$ miles road carried away for 300 yards : 200 men 3 days.
From $3 \frac{1}{2}$ to $4 \frac{1}{2}$ miles, generaliy bad and broken: 300 men $5^{\prime}$ days.
Kálú Kháne is reached at $4 \frac{3}{4}$ miles. A cave with a spring in overhanging cliff at rondside. Koad here blocked by boulders. For this, and a stony bit a little beyond, 300 men 3 days. Valley 500 yards wide below Kálú Khána. At $5 \frac{1}{4}$ miles road crosses the Sabz Kotal, over a flat spur $70^{\prime}$ high which projects from the hills on right, confining river to a bed 20 yards wide. Passage of kotal easy for guns, but at foot of descent road has been blocked by a full of rock from the hill. To clear this for guns, 50 men 2 days. At $5 \frac{1}{2}$ miles road becomes generally bad and broken for $\frac{1}{4}$ mile; valley 150 sards wide, road 70 above bed: 300 men 5 days for guns. At $6 \frac{3}{8}$ miles, road again broken and bad for about 300 yards, but the fields are available for guns, \&c. Beyond this the valley opens out again, and the road runs at a lower level. At $7 \frac{1}{2}$ miles Dara Kajak joins left; road up it to Sagpar Kotal much used by local camel kafilas going to Kábal. At $8 \frac{1}{4}$ miles Daru Botián joins right. Large valley 200 yards wide. Road up it to Khárzár Kotal on the Band-iWarsandán, fit only for pack-animals. Main vally here is $6 \cup 0$ yards wide, bed level; road remains good to $8^{\frac{3}{3}}$ miles. Then road for $\frac{1}{2}$ mile is difficult, along foot of inillside overhanging the stream : 200 men 2 days. At $9 \frac{1}{4}$ miles road enters a narrow gorge, following left bank of stream for $\frac{1}{4}$ mile, and is a mere camel-track, very stony, and at one point obstructed by large boulders. There is a suddeu rise of 50 feet in the valley, down which the stream falls in a channel 20 yards wide. To make a gun-road up this gully would take 300 men 4 days. This is the Tangí 'laidu Kúl, and is the most difficult bit on the stage. Then the valley again opens out to 400 yards, and the road is good, but at $9 \frac{3}{4}$ miles again contracts to 150 yards between high rocky cliffs; road again bad. At $9 \frac{7}{s}$ miles pass Bín-i.Garmáo, a hot spring, where valley again becomes 300 to 400 yards wide. Koad remains bad for $\frac{1}{2}$ mile, passing through fields, and cut up by a $j u i$ : for guns, 100 men 2 days. From $10 \frac{3}{8}$ to $11 \frac{7}{8}$ miles road good, though stony, and almost level; practicable for guns; $10^{\prime}$ to $12^{\prime}$ wide. Several kishláks and smal! fort-villages are passed. At $10 \frac{4}{4}$ miles a larye valley called Bedkúl joins left. Road up it to Kotal-i-Zírak for Kala Hissár in Besúd ; difficult, but practicable for laden camels. At $11 \frac{3}{8}$ miles Dara Ghorbandak, a small ravine, joins left, by which an alternative road goes to Díwál Bolák over the Shibar watershed. This route is used in heavy snow, in preference to the main road. At $11 \frac{\pi}{\theta}$ miles Kala Pai Kotal is reached. Here cultivation ends. Guod camping ground about the forts. From here to Pai Kotal at $12 \frac{1}{8}$ miles the road is stony, and cut up by a stream and jui : 50 men 1 day for guns. It lies along the right side of a waterlugged chaman; but a good dry track for guns would be found on the left side. Valley bere is 200 yards wide, with low rocky hills on either side.

Pai Kotal $\left(8,422^{\prime}\right)$ is the head of the Ghorband valley, and the beginning of the ascent to the Shibar Kotal. The Ghorband valley above this point is called Dard Sangandao, and, coming from Koh-i Jaolangáh, issues through a narow rocky gorge near Pai Kotal. Up it a road runs to either Kutal-i-Khárzár, or Kıtal-i-Sangandao (vide Peacocke's Diary, page 4i0).

From Pai Kotal the road ascends for 60 yards in short zig-zags at $\frac{1}{6}$, which would require inprovement for guns. Then for 400 yards is a good gan road, gentle gradient. Beyond this, cranped zigzags at $\frac{1}{4}$ for 50 yards, and straight nscent at $\frac{1}{6}$ and for 500 yards. Road good, except for steepness, and 10 feet wide except at zigzags. Guus could be got up or down with dray-ropes. To make good for guns, 300 men 4 diys. From $12 \frac{5}{5}$ to 13 miles road good and level, 15 ' wide. Then for 300 yards there is an ascent of $\frac{1}{10}$ and $\frac{1}{8}$ diagonally up a slope. There are a number of parallel camel tracks, but at different levels, and could not be used by guns. Soil clay: 200 mea 2 duys. Thence to 14 miles is a gentle ascent over undulating dasht, when the Shibar Kotal ( $9,799^{\prime}$ ) is reached. It is a mere swell in the dasht, here 3 miles wide. Fron thie kotal over undulating dasht; $30^{\prime}$ road completed here and gangs commencing work west from Díwál Bolák (October 1886).

## Route No. 5-continued.

Throughout this stage there was at one time a made road $10^{\prime}$ to $15^{\prime}$ wide, most of which is atill flt for guns. Even at most of the bad places noted, guns could, if necessary, make their wny past in the fields. A'mir's new $30^{\prime}$ road under construction (October 1886). Total estimute of labour for good military road over this stage, 2,300 men 4 days, or 1,500 men a week. Troops could camp at almost any point. Supplies, grain, grass, bhisa, and garden produce procurable throughout. Fuel scarce, camel-grazing scauty, but said to be !good up lateral valleys. (Elevation, by boiling point, $9,348^{\prime}$.)
$9 \mid$ Bolola • $\cdot\left|\frac{10}{}\right| 113 \frac{1}{2}$

Road over undulating dasht for $2 \mathbf{4}$ miles, the last $\pm$ mile of which is a diagonal descent at $\frac{1}{8}$ into the Shibar valley und would require cross-levelling for guns. Here the Dara Múshák (from the northeast) and Dara Kúchangi (from the south-enst) meet, forming the Shibar valley, bere 150 yards wide. An alternative road runs from Diwál Bolák down the former, and is passable for guns, but longer than main road. At half mile is a good position to bar the road (Vide Peacocke's Diary, page 408.) At 3 miles pass Kala Sáklni. Load down south side of valley, which is : bout 300 yards wide, but is of little importance, as the level cultivation affords good going. at $5 \frac{1}{b}$ miles road passes through a deep rocky gorge 40 yards wide for $\frac{3}{8}$ mile, the exit of which is blocked by . boulders. 'To clear for guns, 50 men 3 days. Gorge could be held as a position. (Ibid., page 407.) From $5 \frac{1}{2}$ to $7 \frac{1}{4}$ miles road down n gorge 70 yards wide between continuous cliffe $200^{\prime}$ to $400^{\prime}$ high, good and easy for guns. At 7 miles pass mouth of Dara Birgalinh (right). at 74 miles the cliffs close in, forming the Tangí Sang Nawishtn. Here $\frac{1}{4}$ mile is bad. The dara is 30 yards wide between towering clifss, and there is an abrupt drop in its bed down gigantic boulders. To make gun-road would take a company of sappers two weeks. "A gang of the Amír's workmen at present engaged in blasting a new gun-road have destroyed the old path. The official in charge expects to have it ready in three weeks." (Peacocke, October, 1886.)

From here to Bulola rond along foot of hillside, would require widening on an averuge $3^{\prime}$ throughout. Valley at once widens to 200 yards, and to 400 yards at Buloln, but being cultivated in terraces could not be used as a roadway. To make good road from the junction of Dara Birgalich to Thngí Kamandi ( $1 \frac{1}{2}$ miles beyond Bulola), exclusive of Tangí Sang Nawishta, would take 500 men 4 days. In addition, the following would be required, viz. :-


At $7 \frac{8}{8}$ miles, houses and trees of Bulola commence. At $9 \frac{1}{4}$ miles Dara Jola joins left, up which runs an alternative road joining the main road further on. (Vide Peacocke's Diary, pages 402, 406.) Good camping ground for several divisions down the valley to Tangi Kanandi. No grass or camel-grazing. No fuel, ex'ept standing fruit trees. A sinall anount of supplies procurable (Elev. about 7,910'.)

Kala Topchi . $\quad |$| 11 |
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Rond good for the first mile, when it bends left up the Irák valley, and would require widening for guns for 100 yards. (Height of this point 7,600') The Dara Iráts is 75 yards wide, rugged granite cliffs on each side. Red level, but strewn with large boulders. Pissable for guns to Tangi Kamandi at
$1 \frac{1}{2}$ miles. The tang\& is $10^{\prime}$ wide between rock cliffs. The road ( $10^{\prime}$ widr) climbs the right-hand cliffs at a gradient of $\frac{1}{6}$, and is very rock $y$ at the summit. Descent steep and dangerous. "Workmen were engaged here, . . . and this difficulty may be nssumed now to have disappeared." (Peacocke.) Above the tangi the valley opens out, and is 400 ynids broad at the 3rd mile. The gradient is gentle, und a new $30^{\prime}$ road bas been completed to the Dara Kashka, at $3 \frac{1}{2}$ miles. The road turns to the right up the Darn Kashka, and there is an eisy ascent up the smooth gravel bed to the Knshka kotal at 5 miles. For the first $\frac{1}{2}$ mile the dara is in places only 20 jards wide, and some boulders would hive to be cleared away. At the kotal it opens out into an undulating dasht; altitude 8,903'. (As to defensibility of Kala Bulola and Kashka Kotal, vide Peacocke's Diary, page 404.) Here the road from Kala Irák to Bámián joins.

The descent from the kotal is moderate, and the road is made and good. It is about a mile in length. At the botton a nálá is crossed, the ascent from which is about 50 yards of easy rise. Theu over a gravelly plateau for about $\frac{8}{4}$ mile, road good, after which a descent for about 200 yards by good made rond to the Paimúri Dura, opposite the ruins of Zoluák, where the Bá:mián valley is enteren (ahout 7 miles).

## Route No. 5-concluded.

From Zohak (Elev. nbout 7,800') rond is easy and good for guns. At 94 iniles pass the ruins of Chaháriagh on right, nud cross river Bámián to left iank. Ford easy and shallow. At $9 \frac{3}{4}$ miles pass Kala Toghni. At $10 \frac{1}{8}$ miles, road, hitherto undulating, becomes level.

Good camping ground, grass, and supplies. 'Two forts of Tájiks.
 through the tangi. Helow the tangi the valley miles pass Kala Abdul Rahím; at 37 miles Dara Sámúara (left); at 4 a miles Kala Ahmad leg; at $4 \frac{1}{2}$ miles Kala Mír Muhanmad (deserted); at 5ites miles Kala Muhaminad Azím; at $5 \frac{7}{8}$ miles Kala Kázi ; and at $6 \frac{3}{8}$ miles a second Kala Kázi. At this point a nálá joins left, called Dara Kukrak. At $7 \frac{1}{8}$ miles pass Kala Joghír Khél, and at $\frac{1}{2}$ mile to left Kala Muhammad Alí. At $7 \frac{7}{8}$ miles the ruins of Ghulghulla stand on a mound to left, and close by are three small forts called Kaln Júi Sháhr. At $8 \frac{1}{4}$ miles n ziárat with clumps of chinár trees. At 83 miles a nálá called Khojn Ghár joins right, and on left a large ravine called Dara Faoládi.

At Bámián the valley is about 1 mile wide, with vertical cliffs $30^{\prime}$ high on each side. On the left from the head of the cliffs stretches an open dámán for about 4 miles to the south to the fort of the mountains. On the right the cliffs merge into the steep slopes of the Koh-i-Gandak. Bed of valley smooth and cultivated. The river is $30^{\prime}$ to $40^{\prime}$ wide, $1^{\prime}$ to $2^{\prime}$ deep, with a swift current, easily crossed. There is no town; ouly forts (high-walled villages) scattered up and down the valley. The people are nearly all Tájiks. (Elevation 8,100.)

Note.-The Shibar road is never closed by anow for more than three or four days at a time nfter a fresh fall, until the snow hardens. Suow begins to fall in the beginning of December. At Bulola snow rarely falls deeper than 8 inches, and, as a rule, does not liedonger than 3 days. Above the Tangí Sang Nawishta it gets heavier, and sometimes lies 4' to $5^{\prime}$ deep on the Shibar Kotal. At Pai Kotal it seldom lies deeper than 2'. With trifling exceptions traffic crosses by this route all through the winter.

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## Route No. 5A.

## Chárikár to Khinján viá the Kaoshán Pass. Authority.-Maitland (October 1886).



## Route No. 5A-continued.

bnulders, or runs ciose along the rough banks by the edge of fields through which a better road might be made. It crosses the stream twenty-seven timea.

At $2 \frac{1}{2}$ miles the path takes to the strean-bed, and at 2 多 iniles crosses the stream three times. At $2 \frac{3}{3}$ miles the defile becomes narrower, the hills higher, and the rond worse. In the next $\frac{1}{\frac{1}{8} \text { mile }}$ the strean is again crossed three times, and the path then goes up the Kol-i-Yer dara to the right, over stones and boulders, crossing the stream twice. Then rixing rather stceply it crosses over the spur to the Kaoshán dara, and follows the course of the latter along the hillsides, which slope steeply to the strean. The portion between $2 \frac{1}{2}$ and $3 \frac{1}{\frac{1}{2}}$ miles is the roughest and least improvnble part of the stage.

The path is now rocky for half a mile, when it improves, continuing along the billsides to about fi3 $\frac{3}{4}$ miles, passing the fort of Mushtán, and the village and orchards of Tájika. It then descends and follows the stream-bed to $7 \frac{1}{4}$ miles, crossing five times. The glen hereabouts is some 200 yards wide, but at $7 \frac{3}{8}$ miles it contracts, and for the rest of the stage averages about 50 yards in width. After the last crossing the path ascends and runs along the hillside on the left bank at an elevation of aonut $100^{\prime}$ above the stream for more than a mile, passing the orchards of Zangal. This portion is fairly wide and good, with retaining-walls where necessary.

Again descending, tle path follows the stream bed to $8 \frac{7}{8}$ miles, crossing twice. It then runs along the banks, crossing twice, to 9 s miles, and is generally rough and stony. Two hamlets are pissid. From 9 gises the hill sides on the right bank are arain followed to 10 miles, passing Dahán-i-Husen hamlet, and then the bouldery stream-bed, crossing seven times in the last mile.

Restricted camping ground on terraced fields on the left bank. Hills accessible for iufantry, rising about $2,500^{\prime}$ above the glen. Inhabitants Şinwárís. Elevation 7,495'.

$2 |$| MaIDÁN-T-KHÉNí |  | 7 |
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The path runs up the left bank between fields and stream. The glen is here 60 to 70 yards wide. The stream is soon crossed, and there is a steep little ascent to the hill side opposite, which is followed for a short distance. The strenin is crossed four times between $\frac{3}{8}$ and $1 \frac{1}{\frac{1}{1}}$ miles; glen in this part confined. The path is then good, though stony, through fields to $2 \frac{1}{4}$ miles, when it again crosses and is bad for $\frac{4}{4}$ mile. Then to 3 miles is better, when the stream-bed is followed to $3 \frac{1}{\frac{1}{2}}$ miles, and the track is rough and bad.

From $3 \frac{1}{2}$ to about $5 \frac{3}{4}$ miles the side slopes of the dara are again followed, the stream being twice crossed, with a steep roughish descent and ascent at the second crossing. The mouth of the Atasher ravine is crossed at $3 \frac{3}{4}$ miles.

The path then runs along the left bank, and is good for the rest of the stage. The stream of the Yakhnno dara is crossed at $6 \frac{8}{8}$ miles.

At Maidán-i-Khúní there is little camping space, but a brigade could bivouac. No wood, and very little grase. Elevation 11, 830'.

The upper portion of the Kaoshán dara is stony and desolate, with craggy heights on either side, those on the left being generally less rocky and more accessible than those on the right.


The path continues good along the left bank to 1 mile, when it crosses the stream. The glen is here wide and is joined by the Changalawez dara, up which there is a track to the Walián route. A little further on is the Shaojai (night-place) where travellers stay the night, before crossing the kotal. The head of the dara is now neared, and at about $1 \frac{1}{2}$ miles a rapid ascent commences, the path winding up at a gradient of about $\frac{1}{20}$ to 2 miles, when it becomes somewhat less steep for balf a mile. The ascent is then gentle and path good, reaching the head of the dara at 3妾 miles.

The path then ascends over a broad, steeply-sloping dámán for half a mile, when the ascent to the kotal commences by a long steep zigzag with two short breaks on natural platforms, the centre portion being the worst. The ascent is then gentle for a few hundred yards, followed by a short, steep, roughish bit leading up to the kotal at 5 miles.

The actual kotal is a bank of stones, partly artificial, through a narrow gap in which the path passes. Around are craggy heights more or less covered with snow. The glens on either side of the kotal curve so as to prevent an extended view down the pass. Eievation 14,320'.

The descent is at first gentle, and path good, but steep, rough zigzags soon begin and last for about half a mile, when there is a short level. From $5 \frac{3}{4}$ to $6 \frac{9}{4}$ miles (foot of kotal) the descent is again steep, partly by zigzags, partly straight down stony slopes over which the path is cleared to a width of $2^{\prime}$.

A little further the dara begins. The bills on the left are generally accessible, those on the right craggy and impracticable. At $7 \frac{1}{2}$ miles the stream, still very small, is crossed, und at 8 miles is the northern Shaojai. The descent, hitherto considerable, becomes gentler.

## Route No. 5A-continued.

At 9 miles, on a spot called Tukht-i-Bádsháh, is space for a camp. The bottom of the glen is half turf and half boulders, and the road fair to $10 \frac{3}{8}$ miles, whence it is rough and bad to $10 \frac{3}{4}$ miles. Thence to caup is fair, though stony.

Troops could bivouac along the stream, and tents be pitched in places. Boulder-covered hills, nccessible and not very high, enclose the dara. No wood, and little grass, Elevation $11,185^{\prime}$.

4 Gorsometa

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The path soon descends a bouldery slope, crossing the stream at $\frac{1}{4}$ mile. The stream is said to be unfordable in summer, when káflas cross by the bridge at Do Shákh lower down. At $\frac{1}{2}$ mile is a bad bouldery bit, whence to about 3 miles the path is stony, but good for camels, along a débris bank, with one steep fall at about $2 \frac{1}{2}$ miles, and a narrow winding descent to the stream at the end. The hills on either side are cruggy, but appear accessible (seen through mist). The glen is bare and very sting, and the mountnin slopes fulling directly to the stream leave no level ground. At 1 音 miles a small patch of turf on both banks, where a suall force might bivouac, but there is no wood.

The path now ( 3 miles) follows the bottom of the dara, and is generally rough among boulders to $4 \frac{7}{8}$ milea, crossing the Kara-i-Tágb strenm at $3 \frac{1}{3}$ miles, and with a bad ravine-crossing at $4 \frac{1}{8}$ miles. It is then good to $6 \frac{1}{8}$ miles, when there is a steepish bit for 200 yards, after which it is generally pretty good for the remainder of the stage. To $6_{8}^{\frac{1}{8}}$ miles a gradual descent along an open plateau, when the Ao-i-Barík glen and Do Shákh (no bouses) are passed. Thence along hillside at an elevation of $200^{\prime}$ to $300^{\prime}$ above stream, descending to cross a ravine at $7 \frac{1}{4}$ miles, with a descent beyond at $\frac{1}{10}$ to $7 \frac{1}{2}$ miles. The glen is here open, and there is room to camp on terraced ground, but wood and grass are scanty. At about 8 miles a roughish ascent, followed by a descent to the stream, whence the path gradually descends keeping on the hill-side, the last half mile being rather strny.

Camping space on terraced fields for 1 or 2 battalions. A larger force would have to bivouac along the stream. There is also room on the opposite bank. Water and wood nbundant, and a little grass. The surrounding hills are high and bold but not precipitous, rising some 4,000' on either side. Elevation 7,000'.


Descending to the glen bottom, the path runs along the base of the hills and is fairly good, crossing the mouth of the Amang dara (roughish bit) at $\frac{3}{4}$ miles, and passing the Gorsokhta ravine (iight) at $1_{1}^{2}$ miles, up which a puth leads to the Bájgáh glen. Thence to $1 \frac{3}{4}$ miles it follows the hill-side, with a
bad bit for a few bundred yards at $1 \frac{1}{4}$ miles.
At $1 \frac{3}{4}$ miles the path returns to the bottom of the glen (full of boulders, but path good for pack-animals) and follows it, with one or two deviations, to the Malkháu ravine at $2 \frac{1}{3}$ miles, whence it runs through boulder-strewn fields to the Pul-i-Malkbán at $2 \frac{2}{8}$ miles. Crossing the bridge and following the hill-side for a short distnnce, it again takes to the glen bottom to $3 \frac{3}{8}$ miles, when Takbta Sang hamlet is passed. The path then lenves the stream to the right, and runs along the base of the hills to $3 \frac{3}{3}$ miles, when it ascends and follows the hill-side at a slight elevation, again desceuding to oross the Pul-i-Husen at about 4 miles (rondway of bridge very bad).

The bottom of the glen is followed for the next mile, path good umong boulders. The defile here is about 150 yards wide; hills tolerably accessible. Orchards now begin, and at 5 miles Dahán i-Bagh-i-Bai (oue house) is passed. The path then ascends nt $\frac{1}{4}$ or $\frac{1}{6}$ and follows the hillside, out of which it is cut to a width of $4^{\prime}$ to $5^{\prime}$ with some steepish gradients ( $\frac{1}{8}$ or $\frac{1}{6}$ ) at a height of about, $100^{\prime}$. At $5 \frac{1}{4}$ miles it descends and is good nlong the left bank, over fine gravel, to about $6 \frac{1}{b}$ miles, when the Pul-i-Stáh Sang is crossed. Span of bridge nbout $20^{\prime}$; piers rough stone brushwood; roadway bad.

Having crossed, the path follows the stream-bed for $\mathbf{1 5 0}$ yards, and then runs undulating along the bill-sides at a slight elevation, passing the wooded Chandarán ravine at about 6 gi miles. It then runs along the bank between low walls, soon becoming wide and good, though stony, to about $7 \frac{1}{8}$ miles, where a toll place is passed, the path pussing through a gap in a wall which extends across the defile. Here is a rough bouldery bit at the mouth of a ravine.

The defile is narrow, flled with orchards, enclosed by high rocky hills accessible but difficult. The road is fair, at first along the hill-side, then over open dámán, and through orchards, to $8 \frac{1}{1}$ miles. It then runs generally under low stony spurs, which gradually become less rocky, and is mostly good for the rest of the stage.

At Khinjan the sides of the dara slope downwards to the stream, and there is no level groand. 'The bottom of the gleu is full of orchards, in which troups might bivouac. Elevation 3,230.

## Route No. 5A-concluded.

The Kaoshán route may be considered practicable (in its present state) for a brigade of infantry and one mountain battery, with only ammunition mules. To make a military rond would be a work of great difficulty, even putting wheels out of the question. The pass is completely open for 3 to $3 \frac{1}{2}$ months, but is more or less practicable for about 7 months in the year. It is closed about 20 days before the Chahárdar.

## Table of Mean Gradients.


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Route No. 5B.
f'rom the Ghorband Valley to the Suribáb Valley, viá the Chahárdar Pass.
Authorities-Holdich; Drummond (October 1886).

| No. of Stages. | Names of Stages. | $\begin{aligned} & \text { Distancis in } \\ & \text { Miles. } \end{aligned}$ |  | Remabig. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{\|c} \text { Inter- } \\ \text { mediate. } \end{array}$ | Total. |  |
| 1 | def Tangí | 9 | 9 | The road to the Chahárdar Pass leaves the Ghorband valleg at Deh-i-Rangán, whence it leads up the Dara Kipchák (or Kanchák). The Ghorband river is here crossed by a wooden bridge (vide Route. No. 5). The Amír is making a new road over this pass, which, in October 1886, had been | completed as far as Chaháruar. It is a plain highway, $15^{\prime}$ to $20^{\prime}$ wide, simply cut out of the hillside and cleared of stones. Here and there it is supported $\mathrm{t} y$ a revetinent of boulders. In some places the gradients are exceedingly steep, and would be almost impracticable for wheeled artillery, but for anything short of wheels it must be described as an excellent road.

At Deh-i-Rangán there is room for a brigade to encamp ou cultivated uudulations about the village. Firewood, water, and supplies abuudant.

Leaving Deh-i-Rangán the road for the first mile follows the right bank of the stream, over open ground. Then the stream is crossed by a wooden bridge, and between this point and Deh Tungi the road crosses and re-crosses three times by similar bridges, all of one span, narrow, and generally of weak construction. In one or two instances the plniking forming the roadway is uncovered. The valley is extremely picturesque, and well cultivated and wooded, and many villages are passed which, merging one into another, form an almost continuous chain of habitations.

Deh Tangí comprises a fort perched on the hill-side on the right bank of the stream. The camping ground is narrow and inconvenient, but a large force could be encamped by extending it indefinitely along the valley, which is here narrow. Firewood and water nbundant. Supplies from neighbouring villages.


Road good up the right bank through cultivation for about 2 miles. Then the stream is clossed by a wooden bridge, cultivation ceases, and the left buuk is followed for a mile, rond good and level. The road now re-crosses the stream and leaves ir, ascending a spur by very steep zigzags. This rigzag might no doubt be easily improved and the gradient lessened, but the existing road is excellent. From the top the road follows the direction of the stream, but at a considerably higher level, for about 5 miles ( $8 \frac{子}{子}$ miles from Deh Tangí), when the pass called by us Chahárdar, but

## Route No. 5B-continued.

locnlly known as the Hindú Kush pass is reached. (Elevation 13,900') At about $5 \frac{1}{2}$ miles Chihil Dukhtarán is passed, where there is room for halting ground or smull camp.

The country about the puss is described by Major Holdich as "a series of nearly level valleys, which present all the well-known characteristics of the higher passes of the Himalaya. They ure barren and stony, with low swerping spurs formed from the débris of the massive granite peaks and 'argulles' on either hand, quite bare of vegetation, except where, bordering the strenm, there are a few yards of spongy turf. Close around the pass are four or five smbll deep green lakelets. The Hindú Kush is not a flat-topped range, but its highest curves are singularly gentle, and its most prominent peaks uppear to be almost invariably found, not on the main watershed, but on the giant spurs thyown off the north and south."

The descent from the kotal is gradual and easy, the road running along the gentle side-slopes of the valley for about 4 miles. Two small water-courses are then crossed, aud the road winds round the base of $n$ granite hill, following the line of a small strenm, and then descends rather steeply for a quarter of a mile, when it crosses the Cbapdara stream, which here joins from the south-east (about 14 miles). There is no bridge, but the crossing is easy. Elevation of this point $11,000^{\prime}$. The remaining 2 miles are along the right bank of the Chapdara stream, descent gentle and fairly free from stones.

Camping space for a considerable force by extending along the valley from a short distance below the crossing of the Chapdara stream. It is very bleak, and exposed to cutting winds which sweep down the p:ss. No firewood, grazing, or supplies.


Rond generally good, gradient gentle, down the right bank of the stream, which flows in a singularly straight course. This portion of the road, being liable to landslips, would require constant supervision to keup it in order. At about 1 mils a gigantic mass of granite fallen from the hillside blocks the road, and a mile farther on a large stone has come down. About half a mile from Chabárdar a small landslip has covered the road with boulders and débris. The road is generally fairly level, except where here and there small side water-courses are crossed, the descents and escents of which are steep but short.

At Chahárdar three streams meet: the Snozak from the north, the Talkhián from the east, and the Chapdara (or Ab-i-Safed) from the south. Below the junction the stream is called Síáh Munda, which flows west into the Surkháb.

Here the Amír's new rond ceases (October 1886). It will cross the Talkhián by a bridge of about $40^{\prime}$ sfan, ned $21^{\prime}$ roadway. The abutments (of stone and stakes) were ready, and the roadway carried down to the approaches. The strean was, in October, $1^{\prime}$ to $3^{\prime}$ deep, bottom stony, current swift.
'Tbere is no village at Chahárdar, and the level space available for camping is stony and somewhat, restricted. About $80^{\prime}$ above the stream there is a space on the flat plateau which lies at the foot of the Hindú Kush spurs bordering the nálá, and in the fork formed by the junction of the Chnpdara and Talkhián there is room for one regiment. Altogether there is ample room for a biigade. (Elevation 6,600').


Between Chahárdar und the Surkháb valley a second ridge has to be crossed, formed by a long and lofty spur of the Hindú Kush, which appears to break off from the main watershed about 10 miles north-east of the Chahárdar Kotal, sweeping round to the north and west. This spur is crossed by three passes-viz., the Soazak on the east, the Fasak about 4 miles further west, and the Katu about 1 mile west of the fasak. The road to the two last named is the same for about 5 miles frum Chuhárdar; the Soazak road diverges at the latter place. From the Katu on the west to the Saozak on the east, a pathway runs along the ridge, giving lateral communication bitween the three passes.

Route by the Fasak Pass.-After crossing the Síáh Munda strenin the rond ascends the ragza (or high flat-topped bank which usually skirts Afgháu rivers), on the right bank of the stream which flows from the Kotal-i-Fasak, and follows its edge through granite boulders for some distance. Then descending it crosses the stream, and climbs by hlmost precipitous zigzags cut out of insecure grevelly soil, to the top of a spur some $400^{\prime}$ above the stream, called the Kotal-ilargáh (about 1 mile). It then skirts the slippery hill-side, but is firm and free from obstructions, for about 400 yards, when it again descends, but less steeply, to the stream. The rond now runs over slippery rocks and boulders for a few hundred yards, passing through a tangi down which the stream falls in a small cascade. Then there is another steep zigzag as the road rises to cross the end of a spur, This is a strong position, and there are evidences of its having

## Route No. 5B-continued.

been recently occupied, a sanga in good preservation still existing. Descending hence, the road pusses a small patch of cultivation belonging to the insignificunt hamlet of Chashma Mátáb, aud enters another short tangi, through which it is fairly good, but steep. Then, at about 5 miles, is a steep ascent flanking a drop in the strenm-bed, which is so steep as to be almost a series of cascades. Here the road to the Kotal-i-Katu branches (see below), and a track (said to be practicable for lightly laden mules) leads west up a ravine, and then down the Tála valley (in which the Síal Munda flows) to the Surkháb. From this point the road is bad and steep, to $6 \frac{1}{2}$ miles, passing over slippery rocks and through a narrow gorge flanked by inaccessible cliffs. Thence to 7 miles when the kotal is reached, the ascent is gentle, and the road very good up a grassy valley. Kotal-i-Fasak is a saddle about 200 yards in length, lying north and south between two long ridges, whose general direction is east and west. The crest of the northern ridge is about $200^{\prime}$, and that of the southern from $300^{\prime}$ to $500^{\prime}$ above the saddle. It is a strong position, which a couple of companies could hold against almost any force until turned. (Elevation $10,200^{\prime}$.) The descent for the first mile is fnirly level and easy, but over loose limestone rock that requires revetting. Then for about $l^{\frac{1}{2}}$ miles the road is cut out of the soft slopes of detritus at the foot of precipitous limestone cliffs, sometimes at a very steep gradient, generally insecure as to foothold, and in places showing a tendency to landslip. During this portion the torrent is far below the track to the left. Then there is a very steep descent to the strean-level by sharp zigzags, and sometimes over beds of slippery limestone, which would present insurm cuntable difficulties to laden camels. Afghán camels go over it, but with very light londs. This is the most difficult part. of the whole route. For the next mile (i.e., about 11 miles) the road is straigbt, fairly free from obstructions, and becomes gradually less steep. Here a small deserted stone hamlet is passed, called Surkh Patáo, which may be said to mark the end of the pass. The track, now quite practicable for laden camels, continues to follow the course of the stream, called Kalmarghá, but becomes more and more stony and obstructed by boulders as it descends. At $13 \frac{1}{\frac{1}{3}}$ miles the Talaktu dara joins ou the left, down which lies the road from the Kotal-i-Katu. At 15 miles the juniper trees, which are generally dotted about the steep and often inaccessible hills on either side, close in so as to form a small forest. Here is the Ziárat-i. Bíbígul.

The camping ground consists of strips of fairly level ground on either side of the stream, and some $8^{\prime}$ to $10^{\prime}$ above it. There is room altogether for about a brigade. Water good and plentiful, Grewood abundant, supplies nil. (Elevation 5,220'.)

Route by the Katu Pass.-From the point above mentioned, about 5 miles from Chahárdar where the Katu road branches off from the main road, the ascent to the Kotal-i-Katu appears to be about equal in length and difficulty to that of the Fasak. The descent on the north side also presen:s equal, if not greater, difficulties, and appears to be considered iwpracticable for laden mules. Horsemen could, however, go over it.


The best rond is down the dara bed, which is practicable for cumels, but liable to be obstructed by boulders. At $3 \frac{1}{2}$ miles is the village of Iskár under a long spur which projects across the valley from the western watershed. The road, which requires widening, crosses this spur by a low and easy kotal, thus avoiding the circuitous course of the stream. Another path which, leaving Silr-i-Iskár ascends the hill to the left and runs at a high level, excessively steep in places, everywhere narrow, and quite inpracticnble for any baggage animals, joins the main track on the kotal. From the kotal the road descends somewhat steeply, and for the remainder of the distance follows the dara, which averages about 200 yards in width, flanked by easy slopes of snndy clay, above which are rcunded clay and sandstone hills. The bed is not steep, but is strewn with boulders which are liable to change position during floods. It affords an easy rond for anything except wheels. Camp on the left bank of the Surkháb, which is crossed by a ford 75 yards wide, $2^{\prime}$ deep, bottom firm and gravelly. The current is swift, and the river would be impassable in flood. Camping space for a briga le. Water from the Surkháb, or (better) from a rivulet which runs down the Dahán-i-Káián dara.

Route by the Saozak Pass.-The ascent to the kotal (about 6 miles from Chahárdar) is exceedingly difficult for camels. Thence the track follows the Khwájn Záid dara, which joins the Khiniján river at Chakmak Shekh, about 13 miles east of Dahán-i-Iskâr and 11 miles west of Khinján. This dara being longer and debouching at a higher level than the Iskár, the descent from the Soozak kotal is more geutle than that from the Fasak.

Owing to the difficulty of the ascent from Chahardar to the kotal, this route is probably in no way preferable as a camel route to that by the Fasak. Great difficulties were experienced by the trausport of the Comuission (which followed this route), and it would clearly not be correct

## Route No. 5B—concluded.

to report it as practicable for camel transport under the ordinary conditions of a moving force in the field.

## Table of Mean Gradients on the Chahárdar-Fasak road.

| Deh-i-Rangán to Deh Tangi |  |  | Mean gradient | 1 in 22 |
| :---: | :---: | :---: | :---: | :---: |
| Def Tangi to Ohahárdar Kotal |  |  | ditto | 1 in $8 \cdot 3$ |
| Chamardar Kotal to Chapdara S | ream |  | ditto | 1 in 10 |
| Chapdara Stream to Chahárdar |  |  | ditto | 1 in $14 \cdot 4$ |
| Chahírdar to Kotal-i-Fasak | - |  | ditto | 1 in $10 \cdot 8$ |
| Kotal-i-Fasar to Bedak |  |  | ditto | 1 in $9 \cdot 5$ |
| Bedak to Dahán-i-Iskár | - • |  | ditto | 1 in 18 |

Note.-It is said that about 20 years ago Sirdár Muhamad Khán brought guns over the Chahárdar pass on camels. This route is habitually used by camel káfilas from the end of May to the middle of October, during which period the pass may be said to be open.
W. P. BLOOD, Lieut., R. I. Fusiliers,

Altaché, I. B.

## Route No. 6.

## From K〔bal to Bámián viâ the Unái and Irák Passes.

Authorities-Routes in Asia, Src. II; Routes in Afgeánistán; Daffadár
Amir Khán; Daffadár Muyamad akhbár Khán; Daffadar Shams-uddín Khín. Route of Force under General Ross, 1880.

| No. of Stages. | Names of Stages. | Dietances in Miles. |  | Remebis. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intermediate. | Total. |  |
| 1 | KALA-I-KízI | 10 | $\cdots$ | Along a broad, good road, fringed with willow and mulioerry trees for about 3 miles. Here road passes through a defile between two hills. Thence through gardens and fields of wheat, tobacco, and Indian-corn, intersected by water-courses brought from the Kábal river. |
|  |  |  |  |  |
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|  |  |  |  |  |

A small fortified village, with vegetated plots and gardens round it. Near it is a high bare hill. Valley here 7 to 10 miles broad. The cultivated valley of Chahárdeh extends to the east. Sapplies plentiful; water from an irrigation channel.


Road gnod all the way, and passable for wheeled artillery with sliglit improvement. For 4 miles it runs due west, and then bends south-west. At $2 \frac{1}{2}$ miles a small stream is crossed, near which there is good camping ground, and at 7 miles the juuction of the Cbangor and Arghandeh streams is crossed. Here the Bámián road leaves the Ghazní road, the latter turning south to the Kotal-i-Takht, the former ruuning west to village of Bálá Arghandeh.
ample camping ground east of the village. Country open, level, and cultivated, and excellent water obtainable from a ravine close by. (Elev. 7,200'.)

slippery, and 1t miles in length. The rond

Leaving the Arghandeh valley the road enters a defile, which gradually narrows, and the Kotal iSafed Khak is ascended by a not very narrow, but rather steep and alippery, path, worn in limestone rock. The kotal is reached at about 4 miles, elevation about $8,000^{\prime}$. The descent is also steep and
could with little difficulty be rendered passable for

## Route No. 6-continued.

neld-guns, or the pass might be avoided by following the Ghazní road to Páen Maidán, and then marching up the Kabal river ("ide Route No. 21), but the latter portion of this road would require quite as much improvement as the Kotal-i. Safed Klák itself, and a considerable detour would also be involved. From the foot of the deacent the road runs west, inclining sometimes slightly north, sometimes south, through a hillocky locality, intersected by hill-streams, and covered with gravel and coarse pebbles.

All supplies ample. At Kot Ashru the Maidán valley is 4 to 5 miles brond, and, followiug the course of the Kábal river, inclines to the south-east; it then runs round the Safed Khák, which lies due east of the village of Kot Ashru and forms, as it were, one numernus village. The gardens of this valley ne really woods. It is reckoned almost the chief granary of Kábal. The population is estimated at close on 100,000 . Míany afgbáus live here, but there are also Tájiks and Hazáras.
$\left.4\left|\begin{array}{ll} & \text { Jalrez }\end{array}\right|-\left|\frac{(?) 10}{}\right| 37 \frac{1}{2} \right\rvert\,$

Road generilly rough and stong, follows left bank of Kábal river, through well-cultivated valley. At Jálrez the valley widens, forming an extensive bay to the right or north. This bay is irrigated hy a good-sized stream, which falls into the Kábal river. Cultivntion extends from the river to the foot of the mountains on either side. It is a mass of fields, forts, and gardens. Beans, peas, Indian-corn, and rice are largely cultivated. Supplies procurable. Grass rather scarce. Elevation about 7,000'.


Road up the river for about 9 miles through cultivation. Crosses river three times, by substantial wooden bridgea. Vnlleg coutracted in places. Road very rough, stony, and narrow. For the last mile or more, road lenves the river to the right, and passes through heaps of shingle and
sharp gravel in which pack-animals sink deeply.
A village occupied by Afgháns and Hazáras, one of the sources of the Kábal river. Grass scarce.
5 UnÁr Kotal (Foot of.) (?)9 $\mid$
$56 \frac{4}{2}$
Road for 6 miles very fair, occasionally running along the slopes of hills. Severn] villages are passen, with cultivation, and the stream is crossed several times by fords, and once by a wooden bidge. The last 3 miles very stony, with two steep but short ascents int end of stage. The ascent throughout is considerable, and the valley narrows very much.

Camp at foot of pass. Water procurable; grass long and bad.
$6\left|\begin{array}{ll}\text { Gardan Diwar } & \cdot \mid(?) 12 \\ - & \\ \end{array}\right|$

Road up the defile, which gradually narrows. As the kotal is neared, the ascent becomes very slippery, and rather stcep. The road is obstructed in places by stones and blocks of granite that fall from above. The Unái pass consists of a very brond mountain terrace, intersccted by ravines in a meridional direction. It is the watershed between the Helmand and Kábal rivers. Height estimated at $11,000^{\prime}$. Crossing the kotal, there is a steep but not long descent, and the rond then descends in a westerly direction, over a tract presenting a wide slope facing westward. At intervals it is broken by aeep and steep ravines, the descents and ascents of which are very slippery. At the bottoms of these ravines, which extend from south to north, there are generally strenms flowing in the direction of the River Helmand. The first ravine is crossed at the foot of the steep descent from the kotal. After crossing these ravines, the large village of Urt (about 5 miles) is passed on the right, situated on an elevated undulating plateau. Passing Urt, the road goes down an open mountain hollow ; then an ascent, followed by a short but rather steep descent. Rord covered with stones and boulders. In places patches of cultivation on either side. Road then descends over an open space, and at about $8 \frac{1}{2}$ miles turus to the north, and for 2 miles follows a narrow defile to the bank of the Helmand. The left bank is then followed for $1 \frac{1}{2}$ miles, when the river is crossed by a wood and stone bridge $6^{\prime}$ wide in great disrepair and quite impassable (Sept. 1886). About 40 yards up stream is a safe shullow ford with pebbly bottom.

At Gardan Diwár the Ab.i-Giljatai falls into the Helmand. North of the point of junction are perpendicular clitts, to the east fields of wheat and barley, and south of it, on an eminence several hundred feet high, the fort of Gardan Diwár. It is held by on Afghán garrison and supplied with water by au aqueduct drawn from the Áb-i-Giljatai, at Gardan Diwar the Ab-i-Giljatai is

## Route No. 6-continued.

slanned by a wooden bridge (in 1878 reported to be old and wenk), but can also be forded, Hlthough it has a breadth of $140^{\prime}$ and a rapid current. The River Helmand brings down a very considerable mass of water, its breadth bere being from 70 to 115 yards, and its depth from $3^{\prime}$ to $5^{\prime}$. Supplies, water, and forage plentiful. Elevation of fort, about $10,000^{\prime}$; of valley, about $9,000^{\prime}$.

7 |  | Kala-I-KiArzAr | $\cdot 11$ | $79 \frac{1}{3}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

Road up the valley of Siáh Sang, down which a small rapid stream runs. Crosses stream several times; water up to horses' knees in places. Sometimes a smonthly polished road, like an artificially. made parement, extending along the bank of the stream. A wall of rock stretches across the defile in one place, leaving such a narrow passage that the road ascends hill to left. Guns require drag-ropes. At about 7 miles pass Siáh Kala, a small villnge. At about 10 miles the village of Giljatai is passed some distance to left of road. Here the Áb-i-Khárzár and Ab-i-Giljatai join, and below this point the stream bears the latter name. To the south-west of Giljatai exteuds a rather broad mountain plain, which ends on the south in the lofty peak of Koh-i.Bábá, covered with perpetual snow. Hence the road follows the bauk of the Ab-i-Khárzár, and is indifferent; sometimes on high ground, which is stony and intersected with nálés; sometimes in the valley, which is boggy.

Daffadár Shams-ud-dín Khán says, with reference to this stage, that the Amír's officinls, whenever they encountered any serious engineering difficulties, have made no attempt to make the road, and at such points passengers have to take to the river-bed. It seems probable that considerable labour would be required to make this road practicable for wheeled artillery.

Room to camp in the dara above village. A few supplies. Water and grass plentiful. Fuel scarce. Barley and lucerne cultivated. In early August the barley is only just in ear; lucerne cut once a year. A Hazára fort; elevation about $11,000^{\prime}$.

## Another account.

Daffadár Muhamad akhbár Khán gives the following account of this stage :-
Gardan Diwár to Khárzár (11 miles?) - Rond up the Dahán-i-Síah Sang, a defile averaging 15 yards in width, between cliffs $100^{\prime}$ to $150^{\prime}$ high and inaccessible. The road is good, having been cleared of stones, along left bank of stream, which is about $6^{\prime \prime}$ deep, for 3 miles. Here is a big stone over which camels and horsemen can go, but guns are taken round, crossing the stream twice, which has a gravelly bottom.

From here the defile is 20 to 25 yards wide, and the cliffs are low and broken. Road good. It continues thus for $4 \frac{1}{2}$ miles, when it widens to the left. Here is cultivation, and the village of Siálı Sang ( $7 \frac{1}{2}$ miles). The rond then rises on to a small plateau, and is level far $\frac{1}{4}$ mile, when there is a descent for 100 yards to the tagáo, up which the road now leads. After $\frac{1}{4}$ mile is a beud to the right, and $\frac{9}{4}$ mile further on Khárzár is reached. The roal is good all the way.

At Khárzár the road branches. The left branch goes to the Kotil-i.Hájígak (vide Route No. 6A.) ; the right to the Irák kotal. The latter is the main rond. A bout 3 miles below Kliárzár on the Gardan Diwár road, a road branches westward, which goes over the Kotal-i-Khafáar, joining the Hájígak road at Kaln Sar-i-Chel (vide Route No. GA). "This road is said to be very good and easy on both sides of the actual kotal, but the immediate ascent and descent of the kotal are difficult for laden baggage animals."-(IJaffadár Amír Khán.)

miles the dara bends to the left and is 50 to 60 yards wide. Up it to the kotal there is a grod made road $10^{\prime}$ wide, but the last mile of the ascent is steep, - so much so as to be difficult for camels.

Route No. 6-concluded.
The soil is soft, and there are no stones. From this point a narrow hilly path, fit for baggage animals, goes round by Khesh (to the east), joining the main road at the kotal. Elevation of kotal about, $13,000^{\prime}$. Crossing it the descent for $\frac{3}{4}$ mile is steep and rocky. There is a pathway practicable for camels, but a road would have to be made for guns. Rond then enters a nálá, and descends it with a lofty mountain ridge on each hand. Road now becomes easy, and at $8 \frac{1}{1}$ miles becomes fit for guns.

At $8 \frac{7}{3}$ miles a rocky difficult bit occurs in the dara, and the path is forced to asrend the hillside. It again descends into the dara at $9 \frac{1}{8}$ miles. For this portion there is only an inferior camel-track; road would have to be made for guns. Then for $1 \frac{1}{2}$ miles road good down the dara. at $10 \frac{5}{8}$ miles there is a steep rocky drop in the valley bed, and from its foot ( $10 \frac{7}{8}$ miles) rond becomes very bad, being steep and rocky, to $11 \frac{7}{8}$ miles. Only a bad camel-track : gun-road would require considerable labour. At $11 \frac{7}{b}$ miles the valley opens out, enclosing a small grassy chaman, and a ravine with a brook joius on the right. Travellers usually halt here. Beyond this point there is a stream in the valley.

At $12 \frac{3}{1}$ iniles valley again contracts to $30^{\prime}$ to $40^{\prime}$ between lofty cliffs, and bed becomes rocky to $12 \frac{7}{8}$ miles. The path is practicable for camels. The valley then again opens out and rond becomes easy and good. At $13 \frac{3}{\text { g }}$ miles a sharp descent in the valley bed to $13 \frac{7}{8}$ miles ; path fit for camels. Here is the cave village of Khuda Bakhsh. Road now becomes good and fit for wheels.
 Mulla Mohíb cave village, whence a road branches to the right over the Kotal-i-Khushkak to Jola. At $14 \frac{8}{8}$ miles pass Kala Madad. At 15 miles valley contracts for 100 yards to a brendth of 50 yards, when it agniu opens out. Rond easy. At $15 \frac{3}{3}$ miles pass Kala Saiad Hassan Sláh, where the valley further widens and is well cultivated, with gardens and trees.
at Kala lrák (or Kala Mírzá Mír) the Dara Jandargal joins left, with a bad foot-path down it, lending from Kálú. There is good camping ground. Grass and water. Supplies procurable.
(Note.-According to "Routes in Asir," it would appear that this stage might be broken by camping at south foot of pass (about 5 miles), and on the chaman above mentioned, at $11 \frac{7}{8}$ miles.)


Road down the right-hand side of the dara, passing the ziárat of Khwája Chahiltán at $\frac{1}{4}$ mile. At $\frac{3}{4}$ mile cross the shallow stream, and continue down its left bank. At $1 \frac{1}{2}$ miles the valley opens out to 800 yards wide and is cultivated. Room to encamp here. There are two forts in this part of the valley, which is known as Shínía Irák and 60 or 70 houses inhabited by Sáiads. Road still down the wide valley to 24 miles, when the road from the Kotal-i-Shibar to Irák comes in from the right. At this point the road leaves the valley, and ascends the hills on the left.

The ascent is steep, but the road is made and yood, and the soil is soft and free from stones. No difficulty for camels. At 3 miles the top is reached, and thence to 44 miles the rond, which is level and good, lies over a platenu about 300 yards wide. At $4 \frac{1}{2}$ miles the Kotal-i-Kashka is reached, where the Shibar roud joins. For remainder of stage, vide Route No. 5, Stage 10.


Vide Route No. 5, Stuge 11.
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Attaché, I. B.

## Route No. 6A.

Kala-i-Khárzár to Bámián viâ the Hájígak Pass.
Authority-Daffadár Amír Khán.

| No, ofStages. | Names of Stages. | Digtances in Mileg. |  | Remabys. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Inter. } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 1 | Gdmbat . | 83 ${ }^{3}$ |  | Good road for baggage animals, and easy for gans, except for $1 \frac{1}{2}$ miles on each side of the top of the kotal, where guns would have to be aided by dragropes owing to the steepness of the gradients. These steep portions are over open roomy slopes, and no difficulty would be found in making zigzugs |

## Route No. 6A-concluded.

to reduce the gradient. Soil, clay and loose rock, easily worked. Hill-sides destitute of trean or vegetation, except grass.

For $\frac{1}{b}$ miles gradient extremely gentle, road broad and easy for wheels up the bed of Hajigak nálá. At $\frac{1}{1}$ mile pass village Diwál (right). A $1 \frac{1}{b}$ miles the nálá is crossed, and steep ascent begins. Road otherwise good for baggage animals. at $1 \frac{3}{4}$ miles pass village Hájígak, $\frac{3}{4}$ mile to right. At 21 miles the summit is reached. "The ridge forming the kotal is a fairly broad and gently-rounded saddle, and there is a good extent of level and smooth ground on each side of the rond where it crosses the crest. The slopes on each side of the descent on the north of the kotal are moderate and open, and can be traversed by infantry and cavalry with ense on both sides of the road. Soil, clay mixed with rock."-(Daffıdár Amir Rhán.) The height of the kotal is variously stated at from $11,700^{\prime}$ to $12,400^{\prime}$.

Crossing the kotal, the descent is steep, over open clay slopes, to $3 \frac{7}{8}$ miles; thence the remainder of the stage is easy for guns, gradient gentle. At this point village of Zer-i-kotal-i-Hájigak is passed (right).

From here to Gumbat the da:a is called Kálú, and contains 115 families of Deraghán Hazáras, who reside all the year. At $4 \frac{1}{2}$ miles pass village Zowál (right) and Naorak (left); ut $4 \frac{8}{8}$ miles Síní and Siáh Khák; at 4t miles, Kala Sar-i-Dasht. At $5 \frac{1}{\frac{1}{8}}$ miles cross the Suri-i-Dasht stream by a wooden foot-bridge. The stream lies in a ravine which would require some little ramping at sides for guns. From this point the road is almost level. At $5 \frac{3}{4}$ miles pass Sar-i-Chel, and the road over Kotal-i-Khafzár joins. ( Fide Route No. 5, stage 7.) Here'Kala Zer-i-Mazár is on left. At $5 \frac{1}{8}$ miles Dara Jaokúl joins (right) and Kala Kohi and Snfaábád lie to left. at 6 miles pass Kala Dasht; at $6 \frac{4}{4}$ miles Kala Patahak and Kala Núr Alí; and at $6 \frac{1}{2}$ miles Kala Dahán-i-Gharghara. Here a rocky dara of that name joins left. At 6 量 miles Kol-i-Najak ravine joins (right), $\ddagger$ mile up which is village of same name. At $6 \frac{3}{4}$ miles pass village Shash Búrja. at $6 \frac{7}{8} \frac{2}{2}$ miles Deh Walak ravine joins left. At $7 \frac{3}{g}$ miles pass Kala Beg Muhammad. At $8 \frac{1}{6}$ miles Sadbar ravine joins (left), with road down it from Ahingarán near Bámián by the Kotal-i-Subah. This road is good as far as visible, but nothing known of it beyond. At 8 音 miles pass Kala Kháki.

Gumbat is a group of three villages on side of valley; 30 fpmiles of Deraghán Hazáras. Here bed of valley and portions of hill-side are cultivated. Fairly good camping ground all along the road from Dahán-i-Gharghara.

2

| Kala Topchí | $\quad 10$ | $18 \frac{3}{4}$ |  |
| :--- | :--- | :--- | :--- |
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From Gumbat there are two roads. One runs down the Dara Paimúri (which is the continuation of the Dara Kálú) by Zohák to Kala Topchí. This a very difficult road, in many places only a mountain path, and in its present condition quite impassable for animals. It has, however, the advantage of descending the whole way, there being no kotal to cross, and for this reason it would probably afford the best line for the construction of a military rond were such a project contemplated. The distance by it is $13 \frac{1}{2}$ miles. For detailed description, vide Daffadár a mír Khán's report.

Of the main rond no detailed description is avaiiable. It appears to be well suited for baggage aninals, but in places too steep for guns. From Gumbat there is a rather steep ascent for 3 miles to the Kotal-i-Panjpilán. Crossing the kotal there is a very steep descent for 2 miles; road good, but much too steep for guns. For the last 5 miles roud descends the Dara Topchí, passing Kala Panjpiláu ( 5 miles), and Kula Kál ( $6 \frac{1}{2}$ miles). Owing to the extreme steepurss of the ascent rod descent of the Kota-i-Panjpilán, this road cannot be reported practicable for a force accompanied by camel transport.

At Kala Topehí good camping ground, grass, and supplies. Two forts of 25 families of 'rájiks on left bank of River Bémián.

Note.-The Hájígak lotal is closed for ordinary traffic by snow for January, February, and March. At Zohák they generally get $3^{\prime}$ of snow, while up the Kálú valley and on the top of the kotal snow lies in drifts $10^{\prime}$ to $12^{\prime}$ deep.
"The slopes of the kotal could be well swept by rifle fire from the crest. In any attempt to hold the kotal by troops, except as a delaying or rear-guard position, it would apparently be requisite to also hold the Khafzar kotal on the weat and the Irák on the east. There is no direct communication between this kotal and the Irák lootal, except back through Khárzár. "-(Daffadár Amir Khán's Report.)

W. P. BLOOD, Lieut., R. I. Fus.,<br>Altaché, I. B.

## Route No. 7.

## Flom Конát to Kábal viá Shutargardan and Logar Valley.

Authorities-Major Creagh, V.C.; and Lieutenant Hamilton, V.C.

| $\begin{gathered} \text { No. of } \\ \text { Stures } \end{gathered}$ | Names of Stages. | Distances in Milies. |  | Rbuarif. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\left\lvert\, \begin{gathered} \text { Inter- } \\ \text { mediate. } \end{gathered}\right.$ | Total. |  |
| 1 | Sherkót | $11 \frac{3}{4}$ | $\cdots$ | A sinall kacha-built saráa, 50 jards square, walls $10^{\prime}$ high, commanded by a ridge on the west. Camping ground north-east of sarái is confined and will hold only one regiment. A narrow step of $\mu$ round north-west of sarai, will hold three regiments; but it requires to be cleared of brushwood. |
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There is good shelter by day in wooded valley between sarai and Sherkót village. Troops could camp under trees when the valley is not under cultivation. Water is good and plentiful from river and from small canal south of sarái. Fair grazing ground for camels, which should be accompanied by a guard. Supplies procurable in moderate quantities. If required for any considerable number of troops, due notice should be given to the Deputy Commissioner of Kohát. After rain, forage is pleutiful, otherwise it is scarce. At $3 \frac{1}{2}$ miles is Muhammadzái, population 1,185, north of road: $\frac{3}{4}$ mile north of which is the small frontier fort of the same name, which commands the Ublán pass into the Bazóti hills and T'íré. The approach to this pass is stony, and the last $\frac{1}{4}$ mile of ascent to its summit is said to be extremely difficult. It is practicable for baggage animals. The Kohát Toi is fordable except after heavy rain, when it is impassable for a time.

At $6 \frac{1}{2}$ miles Nnsrár-khél, population 554, on south of road and on left bauk of Kohát Toi. At 9 miles Chikarkot, the population of which numbers 250, is situated at the junction of Láddo and Kohát Toi, and is on the left bank of the latter river. The country up to this is open and cultivated. The bills on the north now close in, and the road crossing the Láddo stream enters a well-wooded valley (sissoo, mulberry, and camel-thorn). At $9 \frac{1}{2}$ miles a ridge, $250^{\prime}$ high, is ascended, and at 10 miles on its summit is the Spinwérai pass, so called from the conspicuous white temple there which can be seen for miles round. The Punjábis call the place Cbitti-Deri, i.e., white ridge. at 10 miles Sherkót village, population 562 . It has two wells. No trees are allowed to be cut bere, as they belong to the ziárat of Shaikh Alaf. The road now descends, and re-entering the wooded valley leads through it to the camping ground. Rond good; crosses numerous bridged irrigation channels. In wet weather the country round Sherkót becomes very marshy, and troops would have to confine themselves to the road. The Láddo is generally dry; alter heavy rain in hills would be impassable for a few hours.


On north of road a small kacha-bnilt sarái, 50 yards square, wall $10^{\prime}$ high. An oblong cattle enclosure, 90 yards by 30 yards, on opposite side of road, with two towers which flank east and west walls of saraí. Canining ground north of sarái is confined and commanded by low bills on three sides; will hold only one regiment. It is capable of being enlarged a little to north-west by clearing brushwood and stones.

Village of Ibráhínzái, population 603, 500 yards south of sarái on right bauk of Kohát Toi ; is commanded by a hillock on the north-east on the same bank of river, and by a rocky ridge to the north-west. Supplies as at the last stage. Water good aud plentiful from river, and well south of village. Fair grazing for camels, which should be accompanied by a guard, on both banks of river. Forage scarce, but after rain can be obtained towards Hangú and KhwájaKhidar.

At $\frac{3}{4}$ mile cross dry bed of Láddo, large village of Kuz (lower) Ustarzái on right bank of river south of road; population 1,270 . At $1 \frac{1}{\frac{1}{2}}$ miles road winds round to the north, along foot of rocky ridge. On south of road a low-lying, flat, well-cultivated valley, with village of Bar (upper) Ustarzái in its centre; population 847.

At $3 \frac{1}{4}$ miles a camel and cart-rond leads up bed of Kohát Toi to Khwája-Khidar.
The mail-cart roud winds up a spur from a ridge $600^{\prime}$ high, and tbence down to Khwája Khidar, $4 \frac{1}{2}$ wiles.

## Route No. 7-continued.

At Khwajn-Khiddar, distnnt from Koliát $16 \frac{1}{4}$ miles, there is a police post, rest-house, with $\boldsymbol{k}$ ánsáma, sarái, and post office. The thaná is fortified and situated on the left bank of the Kolaát Toi. It is commanded on the north nt 150 yards by a bigh rocky hill. Camping ground west of tháná, 200 yards by 100 yards, suituble for cnvalry and artillery. A regiment of iufantry could camp under trees enst of tháná. Good grazing for camels; guard necessary. After jain dhúb grass obtainable. Supplies nil; water good nud plentiful from river and from a spring on riper's left bank, 100 jards belnw the tháná. The Kohát Toi bed narrows considerably here, the river flowing through a confined rocky gorge. The hamlet of Towzára lies on opposite side (bank) of the river; population 158.

At $5 \frac{2}{2}$ miles cross Gburbin stream, just above its junction with the Kolát Tói village of Raisán, south of road on right bank of Ghurbin; population 330 This village is surrounded with cultivation. At $8 \frac{1}{2}$ miles road ascends a low kotal and thence descends to lbráhínzái. This road is good throughout. At $4 \frac{1}{4}$ miles, just before reaching Khwája-Khiddar, it passes along the face of a precipice just above the Kohát 'Toi. Carts and guns would with difficulty puss each other at this point, which requires widening and clearing of stones; a stout railing should also be beilt on the outside.

Road for this stage passes tbrough hilly country covered with dense scrub jungle and difficult for military operntions. On south of rond, and between it and the river, there is some cultivation. a direct road leads from Kohát to Ibráhímzái, passing through the villages of Bur and Jábi, The Ghurbín is fordable, except after heavy rain, when it would be impassable for a short time.
 high, cattle-yard attached, with two towers at its corners, which flank it and the sarai, which is situated $\frac{1}{2}$ mile south of the road and on left bank of Kohát Toi. There is a police post on the road. The large village of Tógh, population 2,008, is on the right bank of river situated on rising ground, commanded by low iills to the north and east. They are, however, a long way off. There is a great denl of cultivation round it, much of which is irrigated. The camping ground is to the north of the village between the sarái and police post. It is level, and large euough for a brigade. Water good aud plentiful from river.

There are two wells near the sarái, but the water from them is not good. Fair grazing for camels, which should be accompanied by a guard, in hills across river. After rain good dhúb grass is procurable. Supplies procurable, except for a large force, when they wonld be gat by civil authorities. Road now follows left bank of Kohát 'Toi close under a precipitous rocky ridge on north. At $1 \frac{1}{2}$ miles Bubár Méla, population 166, on left bank of river, surrounded by cultivation. Road now leaves Kohát Toi valley and strikes diagonally across an open branch valley from north-west. At 3 miles it passes close under a rocky ridge (south of road) and continues along it for a mile. Un the south of the road are some hamlets occupied by Orakzáis. A path leads from these hamlets into the Orakzái hills. At 4 miles the rond, passing through a narrow gorge, re-enters the Kohat Toi valley, which is here well cultivated, and from 1 to $1 \frac{1}{2}$ miles wide. at $4 \frac{1}{2}$ miles cross nálá by sunken bridge. Hainlet of Karkishál south of road.

At $5 \frac{1}{2}$ miles Hangú, $26 \frac{1}{4}$ miles from Konhát. There are here a dâk bungalow, post office, tháná, and sarái; also a temporary telegraph office. Tlie population is abuut 2,455 , and the elevation above the sea $2,600^{\prime}$. Here vine, peach, and mulberry trees are numerous. Hangú is the principal village of the Miranzái valley, and the residence of the Khán, who is also talnsildar and head of the Samal faction. It is a place of no strength, bring situated close under steep hills on the north and west. This place is said to be very feverish owing to the great anount of irrigated cultivation in its neighbourhood. There are two celebrated ziárats here. Good camping ground for two regiments east of dâk bungalow. Water good and plentiful from numerous spriugs; supplies procurable; grazing for camels north of village. After rain good f rage obtainable. There is a ruad from Haugú to the Orakzái hills among the Samal inhabitants, over which the Khán possesses great influence. At $6 \frac{1}{4}$ miles a path strike's off north-west to Darband, an independent village of the Malla-Khél Orakzais. The road now leaves the high hills on the north and enters an open undulating valley, about 2 miles wide, covered with brushwood jungle, with here and there a little cultivation. At $7 \frac{1}{2}$ miles a well. At $8 \frac{1}{2}$ miles Ismáil-Banda police post. Sumall village of Bogáthu, population 281, is $\frac{3}{c}$ mile south ol road on right bank of Kolát Toi. Ismáil Banda, 1 mile north of road.

At $10 \frac{1}{4}$ miles Lower Kotkái village, population 173, on left bank of Kohát Toi. At $10 \frac{2}{3}$ miles Kotkái police post and village of Upper Kotkái, prpulation 125, on right bank of Kohát Toi.

At $10 \frac{3}{3}$ miles, unbridged nálá liable to freshets from raiu iu the Orakzái hills, easy gradients. At $11 \frac{1}{4}$ miles, dry unbridged nálá with easy ascent and descent. At $12 \frac{1}{4}$ miles, Bar Abás Khél, population 353, on right bank of Kohát Toi. At $12 \frac{1}{4}$ miles, Tógh Department Public Works sarái. On approaching Tógh the country opens out into a level plain. Road throughout this stage good. Genernl direction up to Hangú east nnd west, from Hingú on south-west. The last 2 miles of this stage is clay soil; likely to become heavy after rain.

Route No, 7-continued.

| $\begin{gathered} \text { No. } \\ \text { of } \\ \text { ofages. } \end{gathered}$ | Names of Stager. | Dirtances in Milis. |  | Remabie. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intermediate. | Total. |  |
| 4 | Sarozaí (Elev. 2,970 ${ }^{\prime}$ ) | 114 | 44. ${ }^{3}$ | A large stone built village, population 889, on left bank of Kák nálá, which is a tributary of the Shali. The sarái and oattle-yard join on to the village. The village, which is on an offishoot vi Nariáb, is situated on rising ground. Camping ground good north-east of village; will hold |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  | three repiments. Water good from springs in hill side south of village about $1 \frac{1}{2}$ miles. The Kák stream is subject to freshets.

Dak bungalow at foot of bluff, $\frac{1}{2}$ mile south-east of village; on this bluff a fortified bungalow is being built. Fair grazing for camels, which should have a guard on hills south of village. Supplies and forage as at previous stage. At 2 miles dry unbridged nálá. at $2 \frac{1}{2}$ miles dismantled police station of Mozam-Taláo, where water is scarce, but procurable from a small tank where it is muddy. At 3 miles a path leads to large village of Mad-Khoja (Muhamad Khója), 2 miles south of road and situated on right bank of Kohát Toi on the side of a hill. The population of this villnge is 2,075 . There is a great deal of cultivation to the north of this village, which is a bamlet of Kai. The inhabitants collect water in tanks which becume dry in the hot weather, when it is scarce. At 5 miles cross the Kohát Toi, here dry, on the right bank of which is an abandoned labour sarâi. Hills on the south close into within 100 yards. At $5 \frac{3}{4}$ miles Kái police post, and large viliage of Kái, 1 mile to north of road ; population 2,111. This village is situated in a very strong position at the end of a low ridge of stony hills, and it is surrounded by a wall not loopholed and in bad repair. The land between Kái aud the hills on the south is under cultivation.

At 64 miles cross the watershed between tributary streams of Kohát Toi and Kuram river. Good grazing for cattle on open plain after rain. At 7 miles is a pond.

Road now passes through low-lying clay ground for $\frac{1}{2}$ mile, and then skirts a low ridge on north. Between $7 \frac{1}{2}$ and 8 miles a small winding n\&lá is crossed four times; no bridge, but gradients easy. At $8 \frac{1}{4}$ miles, country undulating and covered with dwarf-palm jungle on both sides of road. At $9 \frac{1}{4}$ miles hamlet of Srazmaka on right bank of Kák. At 10 miles cross a small nálá, a tributary of Kák. Roą good for this stage. Between 7th and 9 th miles liable to be heavy after rain, soil being clay. Paths lead from Sarózái to Nariáb 5 miles, and to Tóráwári $6 \frac{1}{\mathbf{z}}$ miles. Population of Nariáb 2,545; of Tóráwárí about 1,562.

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| Gandiaor | $\bullet$ |  | 84 |
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A strong masonry fortified police tháná situated on bigh ground, 400 yards nortb of Shali stream. It contains a post office and rest-house. Sará and camping ground on main road, a short distance north of tháná : are of the same construotion as those at former stages. A Public Works Department sarái is attached to camping ground north-east of sarái ; camping ground for two regiments, capable of eulargement to north by clearing brushwood. Water good from river and from spring norlh of tháná. Good grass obtainable here and nt Doába after rain. Supplies as before.

Road leads frum here to Darsamand (distant $1 \frac{1}{\frac{2}{2}}$ miles, population 2,387), and through it to Tóráwárí, distant $6 \frac{1}{2}$ miles. From latter village a káfila route leads through Zaimúkht country to Balésh-Khél in Kúram valley.

At 1 mile road from Kái joins in.
A.t $2 \frac{1}{2}$ miles cross Kák nálá. At 3 miles strongly-built village, Doába, population 503, situated in a level open plain. There is a fortified Jepartment Public Works bungalow east of village. From Doába a good road leads to Tóráwárí, distant 5 miles. This road would be very heavy after rain or much traffic.

At $3 \neq$ miles cross Stárlgada nálá, just above its junction with the Kák, these two streams joining from the Shali. The Stárlgada stream is subject to freshets, when it is impassable for a short time ; nearly always fordable.

At $6 \frac{1}{2}$ miles cross Khwar nálá (dry), which runs down from Tóráwárí. It is crossed just above its junction with the Shali, left bank $18^{\prime}$ and steep, but good ramp for road, right bank low, nálá bed 150 yards wide and rough and stony.

At $7 \frac{3}{4}$ miles a small police post on a mound on the left bank of a bridged nálǵ. Country open and undulating, dwarf-palm jungle on both sides of road, with patches of cultivatios chiefly on the south. Road good throughout. Soil stony, in parts clay.

Route No. 7-continued.

| $\begin{gathered} \text { No. } \\ \text { of } \\ \text { Stages. } \end{gathered}$ | Names of Stages. | DigtanctisMiles. |  |
| :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Inter. } \\ \text { mediate. } \end{gathered}$ | Total. |
| 6 | ThaL (Camp) . | 74 |  |

## Rimabie.

 The Sangróba is generally dry after heavy rain, sometimes impassable for 3 or 4 hours. It is about 2,690 feet above sea-level. The village of Thal, population 1,968, is on the opposite bank of this nálá, and $1 \frac{1}{2}$ miles lower down it than the camp. In the village of Thal is e sarái and police station. Supplies procurable. Water good and plentiful from the following sources : (1st) spring mile east of village; (2nd) spring on left bank of Sangróba just above Thal village; (3rd) from Kuram and Shali rivers. The Kúram is generally fordable; it rises considerably in May, when snow melts on the Safíd Kóh and Shutargardan, and after heavy rains, which generally occur in the Upper Kúram valley in June and July, it is bridged near Kapíńnga, but the bridge is generally carried away in rains aud hot weather. Grass very scarce. Grass-cutters must go out towards Grandior and Doába for it. There is ample ground tor encamping a large number of troops here, the following sites being the best :-(1st)) ground for a brigade south of camp on plateau;
( $2 n d$ ) on same plateau camping ground for a brigade east of camp;
(3rd) camping ground for a brigade on right bank of Sangróba above Thal village.
The village of Thal, as already stated, is $1 \frac{1}{2}$ miles lower down the Sangróba than the camp, and on that stream's left bank, and about 2 or 3 miles from the east foot of the Kharimúk hill. It is surrounded by a good stone wall with two gateways. There is a portion of the village about 60 yards frum the main village on the high bank of the Sangróba. This bank is being gradually washed way, so in all likelihood the hamlet will ere long disappear.

On a hill on the opposite bank of the Kúram river to Thal is a tomb called Pir-Sábuk, about which the inhabitants say they know nothing, it having been built before their time. It is in good repair and does not look to be very old. A road by the right bank of the Kúram river leads up to Kúran fort via Kapínga, Hazár-Pir, und Iarwázgái pass.

It is not now used, but it was the road taken by Sir F. Roberts in 1878 on the Afghan War commencing. Another ronds leads from Thal to Banú, distant 42 miles, through the Turí-KhélWaziri country, via Shámil river, or, as it is called by the natives, Khétú. This road is practicable for all arms, but difficult for guns on wheels. The Kúram river is nearly always fordable, but the following are the best fords to cross by :-

1st.-From Thal village, just below the water-mills to south of Pir-Sábuk's tomb above noticed.
$2 n d$.-About 200 jards below the bridge, where the stream opens out aud runs through several channels.
$3 \cdot d .-$ From below isolated rocky hill, south of Thal, to 100 yards below a conspicuous white mound on right bank, crossing the river diagonally.

4th.-Crossing the Shali proceed down its left bank for about 2 miles and cross direct to Biland-Khél. On 28th July 1880 the water in none of these fords was deeper than 2 feet.

The land round Thal is very productive, growing large quantities of wheat, bájra, jowár, barley, and cotton; most of this is irrigated, but about one quarter is unirrigated. On the opprsite bank of the Kúram, and about 4 miles lower down than Thal, is the large village of Biland-Khúl, population about 3,000 . Thieves who raid the camp are said to be harboured by the inhabitants.

At 2 furlongs cross a narrow nálá known as Ghwálo; steep banks being scarped, gradients easy for carts. At 1 mile Taru-khél on south of road and on right bank of Shali, surrounded by cultivation. At 1 mile 6 furlongs, Mámú nhlá, shallow nod stony ; village of Mámú, an offshoot of Darsamand, population 200, on left bank south of road. Road now skirts low hills on north, covered with dwarf-palm jungle; at 3 miles stony bed of Shali joined hereby a tributary from Mámú ; a police post and square stone tower on right bank of Shali command its bed, along which road continues for next $\frac{3}{4}$ mile.

At $3 \frac{3}{4}$ miles leave bed of Shali by somewhat steep ascent, difficult for carts, but it can be traversed without accident.

At $4 t$ miles two roads lead up to the Machoba plateau. Easterly road is the cart-road, and about $\frac{1}{2}$ mile longer than the westerly one, the last 150 yards of which is a very steep ascent. At the junction of these two roads the Thal-Shali water-channel is again crossed.

At 5 miles both roads unite on platenu (Machób••). There is a fortified sarai and post here,

Route No. 7-continued.
and 200 yards to its north, on the northern edge of the plateau overlooking Sangróba nhla, is the hamlet of Habíb Bánda, from which a path leads up the Sangroba nhtif to Zaimúkht country and joins the Tóráwéri kafila road at the village of Chinarak.

For next $2 \frac{4}{4}$ miles road follows northern edge of Machóba plateau to Thal camp, situated on its eastern extremity. Throughout this stage the country is hilly and covered with dwarf-palm and camel-thorn jungle. The soil is very stony. Road good throughout.

From Kohát to Thal the road is good, practicable for all arms and for country carts. The general direction from Kóhat to Ustarjái east, from that to Thal south-east. A Government tonga dâk and bullock train run between Kohát and Thal.-(Creagh.)

7

$|$| Chapri (2,270') | $\cdot$ |
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A fortified post and sarái on line of communications, Kúram Force, on left bank of Kúram river. Camping ground for two regiments on north-west and two regiments north of the post. Low hills approach to within 150 to 350 yards of the post, and would have to be held by picquets at night when camping grounds are used. Supplies from Thal. Water from river. Good grass procurable after rain. At other times, and especially in winter, grass is very scarce. Fair grazing for camels in lills on right bank of river. Grazing guard necessary. Firewood scarce.

On leaving Thal, cross stony bed of the Sangróba nálá, about 250 yards wide. After heavy rain in the Zaimúkht hills it is impassable for 3 or 4 hours. At $\frac{3}{4}$ mile cross deep nálá by nasonry bridge. A shallow stream of good water trickles through it. Leave Thal village 200 yards south.

At $1 \frac{1}{4}$ miles cross two nálás-the first unbridged; the second is crossed by a low bridge unsafe for guns. Ramps could easily be made for guns just above the bridge.

At $1 \frac{1}{4}$ miles old camping ground ov high ground overlooking bed of the Kúram. It is commanded by hills on the north. Three regiments could encamp here. Low-lying rice-fields below the camping ground extend to river bank for 400 yards.

At 2 miles take the upper road; slight ascent for a short distance. The lower road leads to Kapíńnga post ; on right bank Kúram. In cold season river crossed by a trestle bridge; at other times by two fords-(1) 200 yards below bridge-water when river not in flood $2 \frac{1}{2}^{\prime}$ deep; (2) 150 yards above bridge-water $\mathbf{2}^{\prime}$ deep. From Kapínga a road leads to Kúram up the right bank of the river-vid Hazár Pír and Darwázgai pass.

At $2 \frac{1}{4}$ miles cross deep narrow nálá, running down from the Kádi Múkh mountain. It is liable to freshets after rain. Masonry bridge across it. The old road to Chapri branches off here to the north.

At 2 miles 3 furlongs cross a small nálá by masonry bridge. At $2 \frac{1}{2}$ miles road leaves river bank, and turns north, to avoid a steep bluff overbanging the river and the bridge. An old ruined fort on top of this bluff. At $2 \frac{3}{4}$ miles road rejoins river bank, and follows up it for the rest of the march; direction north-west. It leads along the base of the Torghar hill, which rises from $600^{\prime}$ to $800^{\prime}$ above it. The Kúram river lies $250^{\prime}$ below the road; banks precipitous; river-bed about 600 yards wide and stony.

At 3 miles 3 furlongs small fortified post of Kapíngga, situated on cliff on right bank of the Kúram. Distance across about 650 yards. A path leads from this post into Wazírí country through Maidán.

At 4 miles 2 furlongs a $K$ hatak road-post, and another at $4 \frac{1}{1}$ miles.
Below the road, on river bank, a camping ground for one regiment and its baggage animals. The road at this point is narrow; guns and carts could not pass each other. After heavy rains it is also much cut up by small landslips, which render it temporarily impassable for wheeled carriage and guns. A broad stony nálá joins the Kúram here on the right bank. A little water in it (in August).

At 6 miles 2 furlongs a zig-zag path leads up to the top of the Torghar hill, on the summit of which there is camping ground for 500 men, who would have to get water from the river, along left bank of which a narrow strip of rice cultivation extends for half mile.

At 6 miles $\frac{1}{2}$ furlong river leads through a narrow rocky gorge, bed 80 yards wide. The rocky hills on the right bank approach to within 250 yards of the road, which now leads for a short distance along the face of a cliff. Guns and carts could not pass each other at this point.

At 7 miles 1 furlong the old road via the Káfir kotal joins in from the north-east. Cross nálá from Káfir kotal, gradients easy, the entrance to which is guarded by several Khatak posts. There is an unfinished trestle bridge across this nálá. The bed is stony and covered with dwarfpalm jungle. The river now bends west-north-west and continues so to Chapri, the road continuing up its left bank, with low hills on the north commanding it.

At 7 miles 3 furlongs good camping ground for six regiments on both sides of the road. Low hills on north should be held by picquets at night. If troops are encamped south of the road, low "sangas" might be built on that side of the tents to protect the men from fire from the right bank of the river, the hills on that bank being within 450 yards range of the road.

## Route No. 7-continued.

At 7 thiles cross stony nálá; gradients eảsy ; bridge broken; camp for two regiments on right bank, south of road. The same remarks as above apply as regards picquets, \&c.

At 8 miles 2 furlongs cross stony nálá; easy gradients. A Khatak post on its left bank.
At 8 miles 5 furlongs oross a small deep nálá by a wooden bridge, which requires itrengthening if guns are to cross it.
N.B.-The Kúram river is fordable throughout its course, except after heavy rain, when it often rises suddenly 4 or 5 feet above its usual depth (which is $2_{2}^{1}$ ). In May and June it is also much awollen from snows melting on the Safed Kóh range.

8

$|$| MANDOBI $\left(2,870^{\prime}\right)$ | $\cdot$ | $4 \frac{1}{4}$ |
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A stone-built fortified post and sarái on a small plateau about 100 yards from the left bank of the Kúram. Camping ground for two regiments north and north-east of the post. Spurs from a high rocky peak, which rise to a height of 1,000 north of post, approach to within 100 to 350 yards of it, and would have to be held by picquets at night if troops were encamped here.

The small stone-built village of Mandori is about 250 yards west of the post on the river bank. A narrow strip of cultivation lies between it and the river. A portion of the village is on a rocky spur, some $100^{\prime}$ higher than the post. Small quantities of rice, straw, bhúsa, and firewood obtainable from village. Bulk of supplies from Thal. Grass procurable after rain; in winter soarce. Water from springs in river-bed ; fair grazing for camels in hills on right bank. Guard necessary.

On leaving Chapri, cross a small nálá. The road continues north-west throughout the march up the left bank of the Kúram, and is commanded by low hills on the north about $300^{\prime}$ high. At $\frac{1}{\frac{1}{2}}$ mile cross narrow deep nálá; gradients easy. At 1 mile a Khatak post. A narrow strip of rice oultivation on the left bank of the river for the next $\frac{1}{2}$ mile.

At $1 \frac{1}{2}$ miles slight ascent for 153 yards. At one mile 7 furlongs cross a nálá from the Orakzái hills. Dwarf-palm jungle on both banks. It is watched by a Khatak post; gradients easy. At 2 miles slight ascent from the nálá for $\frac{1}{2}$ mile. There are two roads-the lower has the easier gradients, and is the wider road, but not quite finished. A short cut up the river-bed avoids this ascent. A branch stream of the river has to be forded. It would not be passable when river is in flood.

At 24 miles Ahmedisháma, a fortified post on the right bank about 450 yards distant, 50 yards equare, $10^{\prime}$ command ; camping ground for a brigade south-west of the post.

At 3 miles a Khatak post. Average breadth of road here only $11 \frac{1}{4}^{\prime}$; descent gradual.
At $3 \frac{1}{4}$ miles cross a nálá at the foot of the descent. The short cut up river-bed joins in here. From nálá a gradual ascent to a low kotal. There are two roads. That on the south is the better, it being wider and the gradients easier. Gradual descent to Mandori. Maize and rice cultivation to south of road.

| 9AlIz\&I (Elevation <br> $3,070^{\prime} ;$ temporary <br> Post Office).  |  |  |  |  |  |
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A fortified post and saraii, situated about 350 yards from the left bank of the Kúam, on a sloping plain ; clay soil, cut up by ravines.
Camping ground for one battery, or one cavalry, or two infantry regiments, on long narrow strip between east face of post and raviny ground ; hill on south within rifle range of camp. Camping ground for two regiments 200 yards not th west of post, close to the most easterly of the Alizái villages.

This ground could not be used in wet weather, it being low and soil clayey. A regiment of infantry could encamp on a low rocky spur, 1 mile up the road, towards Shinak and south of it. There are five villages of Alizfi. A belt of cultivation, 300 yards wide, extends between them and the river bank. Rice and lndian-curn at this season (August) ; the former being now cut. Supplies of rice, rice-straw, white bhisa, cattle, fowls, milk, and firew od procurable in fair quantities from Alizái and from the villages of Boghzái on opposite bank; other supplies from Thal. Good water from springs, in deep nálá, 200 yards south of post ; supply insufficient for a large force. River-water 400 yards distant. Grass scarce, except after rain. Fair camel-grazing about 2 miles north-east in low hills. Grazing guard necessary. The road leads through the lower part of the village of Mandori, and continues level for $1 \frac{1}{4}$ miles, direction north-west. Another road winds up to the north over a low kotal, and, passing round the upper portion of the village, rejoins the main road a short distance beyond the village. For the first mile, the road hugs the high rocky hill on the north-east, a narrow belt of rice cultivation lying between it and the river; gurs or carts could not pass each other here. At 1 mile cross irrigation channel, $4^{\prime}$ wide, by wooden bridge. At $1 \Varangle$ miles a slight ascent up to a low kotal, road turuing slightly north. A branch road is being made following the river bank, which will avoid the kotal and be quite level. Hills rise to about $300^{\prime}$ on either side of the kotal, and are held by Khatak posts. Descent from kotat steep for curte.

## Route No. 7-continued.

A $1 \frac{1}{\frac{1}{1}}$ miles oross a narrow nálá; gradients easy, for the rest of the march the road continues north-west, skirting low hills covered with small bushes, and keeping about from 200 to 400 pards from the river bank, along which occasional patches of rice cultivation are met with.

River-bed from $\frac{1}{2}$ to $\frac{3}{4}$ mile wide and stony.
At 2 miles 1 furlong cross a stony nálá from the Orakzái hills. Small village of Bádsháh-kót on opposite bank about $\frac{1}{2}$ mile distant, with a narrow strip of cultivation adjoining it. A path leads from it across the Shab Kúh hills into Khost. After leaving the nálá there are two roads-first up river-bed, passing below a conglomerate cliff, $80^{\prime}$ high; second winds up a gradual ascent, and passes over the top of the cliff. First is the shortest and is perfectly level, and can always be used, except after very heavy rain, or when the river is in high flood from melting snows. Where these roads branch off, there is camping space for two regiments. Dwarf-palm jungle requires a little clearing. Hills would have to be held by picquets.

At $2 \frac{3}{3}$ miles the road ascends for 2 furlongs over another cliff. It is steep and narrow for carts, and has no railing or protection on the cliff side. Guns would have to be taken over very enrefully. A branch road, wider and with easier gradients, is almost completed. It is the lower of the two. At 3 miles 1 furlong foot of descent. The road now continues level for most of the way.

At $3 \frac{3}{2}$ miles camping ground for two regiments. Low hill on north should at night be held by picquets.
at 3 miles 7 furlongs cross a shallow stony nálá, banks covered with palm-jungle, on right bank. Camping ground for one regiment at 4 d miles. Rice cultivation along left bank of river, and between it and the road ; it continues up to Alizái. River bank precipitous and 15 ' high.

At 5 miles 1 furlong pass through a grove of palm, sissoo, and oamel-thorn trees. Village of Jelamai, ahout $\frac{1}{3}$ mile from right bank of river, surrounded with cultivation, $1 \frac{1}{\frac{1}{2}}$ miles distant. At 5 miles 6 furlongs cross shallow stony nàlá.

At 6 miles a small village (one of the Boghzai villages) on opposite bank of river, with oultivation on either side of it. At $6 \frac{1}{4}$ miles a zigzag leads over cliff; gradients easy. A short cut avoiding this ascent leads up the river-bed, and crosses a shallow branch stream. It would be neurly always passable for all arms. Camels are generally taken by this path.

At 6 miles 5 furlongs cross a narrow deep nálá, just above its junction with the Kúram. It is being bridged; a few springs higher up its bed supply Alizái post.

$10 |$| Shinai $\left(3,390^{\prime}\right)$ | $-\quad 6 \frac{1}{4}$ |
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87 ${ }^{8}$
A stone-built fortified post and saraii on plateau, 1 mile from the left bank of the Kúram, about $300^{\prime}$ above it. Camping ground for two regiments, south and south-east of post on the plateau, and for four regiments in narrow ralley north-east of post, on either side of main road to Kúram. Camping ground for large force $1 \frac{1}{4}$ miles north of post on broad plateau, and for one infantry regiment on plateat 300 yards north of post.

Supplies (vide Alizaii) procurable from two small villages of Shinak, immediately below the post and north-west of it; nlso from the villages near Hazár Pír Ziárat on the opposite bank; other supplies from Balesh Khél depôt. Water from spring, 250 yards north-west, near the nearest village of Shinak, and from river $\frac{1}{4}$ mile distant. Grass plentiful after rain; at other times scarce. No grazing for camels.

A stream from the Darwázgai pass joins Kúram on right bank near H"zár Pír Ziárat. A road leads up it through the Darwázgai pass to Kúram (two marches) ; easy gradients.

A path also leads from Hazár tír, due west by Jágí Maidán, iuto Khost.
For first $\frac{1}{3}$ mile from Alizái proceed north-north-west aoross a sloping plain out up by shallow ravines; soil clay; then skirt low hills, $100^{\prime}$ high, on north and north-east.

At 1 mile pass through a outting in a low spur from these hills. The five villages of Alízai extend up to this spur, and between them and the river bank is $\frac{1}{2}$ mile of cultivation. Villayes of Boghzai and Amza Khél lie on opposite bank. For the next 3 $\frac{1}{\frac{1}{3}}$ miles coutinue north-west, skirtiug low hills on the east These are offshoots from spurs of the Zaimúkht mountains, which are about 5 miles distant, and some $3,000^{\prime}$ higher tban the river-bed. Between the road and the river there is continuous cultivation, rice and maize, from \& to mile wide. River bank precipitons, $10^{\prime}$ to $12^{\prime}$ high.

At $1 \frac{\text { à }}{}$ miles cross stony nálá, 50 yards wide ; gradients ensy; probably temporarily impassable after heavy rain in hills. On its right bank, west of ro d, small village Sáiad Khán (Banyakb). Village of Munda (Wáli) Kala on opposite bank.

At $2 \frac{1}{3}$ miles bridge across irrigation channel broken. Road for short distance passes over low-lying ground liable to be flooded after rain.

At 3 miles cross stony nálá, 60 yards wide ; easy gradients, liable to freshets. Village of Samand Kala (Moro Khél) 100 yards from its right bunk and west of road; and on high steep left bank of a smaller nálá a village, stone-built, wall $\Psi^{\prime}$ high round it, and one tower. six or seven villages of Ballí Amín extend for 2 miles up right bank of the Kúram, in midst of rich cultivation, a narrow belt along river bank. These villages are of fair size, and have high mud

## Route No. 7-continued.

walls round them and lofty towers. From Balli Amín a path leads over a low kotal southwest into Kbost.

At $3 \Varangle$ miles small fortified village of Yarra (Moro Khel) west of road, and close to it.
At 4 miles 3 furlongs road leaves river, and proceeds north for next 2 miles up a narrow valley, about $\frac{1}{\frac{1}{2}}$ mile wide. It follows up the left bank of a stony nálá, 100 yards wide, steep banks, $8^{\prime}$ high. Low hills continue parallel to the road on either side, some $200^{\prime} \mathrm{high}$, stong and covered with brushwood and dwarf-palm jungle (especially on east).

At 4 miles 6 furloogs pass small village of Rawali (Zaimúkht), 300 yards west of road, at the end of a spur overlooking the Kúram river. Hazár Pír Ziárat on opposite bank.

Opposite Rawali, on both sides of the road, there is camping goound for three regiments; water from river $\frac{1}{2}$ mile distant; low hills on both sides would have to be held by picquets. At 4 miles 7 furlongs cross a narrow deep nálá, easy gradient, watched by a Khatak post. On its right bank camping ground for two regiments.

At $5 \frac{1}{4}$ miles cross by a causeway a nálá from the Zaimúkht hills, $2 \frac{1}{2}$ miles enst. At $5 \frac{1}{2}$ miles cross the main nálá, 80 yards wide. The road to Balesh Khél continues up its right bank. Road to Shinak proceeds for $\frac{1}{2}$ mile north-west up zigzng to top of a plateau, and along it to the post. Carts and guns could not be taken up this zigzag, the turn being too sudden und gradients steep. They should follow Balesh Khél road for $\frac{1}{2}$ mile, and then up an easy slope to the post.

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A fortified post and sarái, about 150 yards from left bank of Kúram river. Two spurs from a stony plateau, which slope down from the Musazái hills ( $2 \frac{1}{2}$ miles distant), approach to within 150 and 250 yards of the post on the north and north-east respectively. Towers on these hills are held at nights by picquets, which also watch adjoining nálás. Camping ground for two regiments between these spurs and the post ; ground low-lying. In wet weather troops should camp on plateau north-east of post, where there is ground for a large force. Water from Kúram rivar and Kurmana stream, distant 200 yards and 3 furlongs respectively. Supplies from large village of Sudda and from Balesh Khél village. Rice and rice-straw plentiful.

Camping ground for three regiments on stony slope on the north-east and west faces of the enclosure. Grass (dhúb and hill) plentiful after rain; nt other times scarce. Camel-grazing good at foot of Musazái hills, north of post ( $2 \frac{1}{2}$ miles), also in hills behind village of Sangiána, on opposite bank of river. Strong grazing guards should be sent.

From Shinak proceed due north along narrow plateau. At 1 mile main Kúram road joins in on opposite bank of river for $2 \frac{1}{2}$ miles. There is a narrow belt of cultivation between river and low stony hills. It is studded over with about 15 villages of Házir Pír and Mindak, all protected by high mud walls and lofty towers. River banks both sides precipitous, from $50^{\prime}$ to $10^{\prime}$ high. On east of road, and situated on billside, 2 miles distant, are the Zaimúsht villages of Zelamai and Nirarai; slight cultivation round them. The plateau now widens to 100 yards, and is covered with low bushes and dwarf-palm, aud on the east is cut up by several deep nálás.
at $1 \frac{1}{2}$ miles road turns dorth-east. Plateau from 600 to 700 yards wide on west and 100 yards on east of road. It is here pretty clear of stones and bushes. Ample ground for two brigades of all arms. Water from river from $\frac{3}{4}$ to 1 mile distant. At 2 miles 3 furlongs road turns north-west and descends along left bank of a narrow nálá ; low hills 50 high on either side, and ooly 100 yards apart, and covered with dwarf-paln jungle. At $2 \frac{1}{2}$ miles cross deep stony nálá from Zaimúsht hills, 250 yards above its junction with the Kúram; gradients easy; might be temporarily impassable after heavy rain. Is watched by Khatak post. For the next $4 \frac{1}{3}$ miles the road continues north, skirting low hills of conglomerate, 100' to $60^{\prime}$ high. On the east and on the west continuous cultivation, from 200 yards to $\frac{1}{2}$ mile wide, descending in terraces to river bank, which is precipitous (in parts $70^{\prime}$ high). Cultivation chiefly rice and maize and a little múng dhal. Narrow patches are also occasiodnlly seen on the right bank.

At $2 \frac{3}{4}$ miles small village Madsháh (Bangukh) on left bank of river ; mud walls, 60 by 100 yards, $12^{\prime}$ high ; one low tower. Rocky hills on right bank now rise almost perpendicularly from river, $800^{\prime}$ to $1,000^{\prime}$ above it, and so continue for rest of march. At $3 \frac{1}{4}$ miles two roads; keep to lower one. A short slight ascent to small stone-built village, Shershai, on low hill east of road. The other road is a short cut, too steep for carts, and leads over spur behind the village. At 4 miles 1 furlong cross a valley $\frac{1}{2}$ mile wide leading up to zaimúsht hills ( 3 miles distant); cross stony nálá, Kalú Khwara, temporarily impassable after rain, 200 yards wide, left bank low; right bank precipitous, $60^{\prime}$ high, but easy gradient. Nálá bed covered with brushwood and dwarf-palm. Hamlet of Osakh on right bank, 100 yards west of road, stone-built, and one lofty strong tower. At 5 miles cross shallow stony nálá. On ite right bank, west of road, is the fair-sized village of Duráni: two lofty towers; mud wall

## Route No. 7—continued.

round village, $11^{\prime}$ high. Fine chinar aud mulberry trees. Water from nálá all used up in irrigation. Road now ascends very gradually through a well-cultivated valley, $\frac{3}{4}$ mile wide.

At $3 \frac{1}{2}$ miles pass through a grove of mulberry, wild olive, and camel-thorn trees, at base of a low conglomerate hill east of road; 400 yards west of road is the small hamlet of Duráni (Shinwáz Khán) on river bank; one tower. Small village of Kuchah on opposite bank, with one tower and a little cultivation. The road now again skirts low hills on the east, and so continues for the next 2 miles.

At $5 \frac{3}{4}$ miles a Khatak post. River banks on both sides precipitous and $40^{\prime}$ high. At 6 miles low-lying ground for 100 yards, liable to be flooded after rain; and then rise gradunlly to a low kotal for 600 yards. Descent for 150 yards through a grove of palm and wild olive trees.

Road for next mile level.
At 7 miles 4 furlongs road leaves the low hills on the east, and passes through extensive cultivation. Cross nn irrigation channel $5^{\prime}$ wide by low wooden bridge.

At 7 miles 3 furlongs large village of Sadda, adjoining road on east; four lofty towers. Village surrounded by wall of mud and stone, $10^{\prime} \mathrm{high}$; two or three water-mills, several fine chinar trees. A road used by káfilas leads from here through Zaimúkht country to Tóráwárí in the Upper Miranzái valley.

At 8 miles cross Kurmana stream, which flows down a rocky bed, 100 yards wide from the north-east. In August 6 inches of water. In May and June, when snows melt on Safed Koh, it is from 1 to $1 \frac{1}{2}$ feet deep. Left bank steep and high, but easy gradient; right bank low. It joins the Kúram river 200 yards west of the road. For the next 3 furlongs the road leads through cultivation, terraced fields leading down to the river bank.


A high mud-walled enclosure, 75 yards $\times 60$ yards, wall from $14^{\prime}$ to $16^{\prime}$ high. Entrance on east side. It is situated 250 yards south of main road, on the steep left bank of the Kúram (here $60^{\prime}$ high), and directly opposite the village of Maora, which is perched on the top of a rocky point, 560 yards distant, on right bank of river and some $400^{\prime}$ above it.

Adjoining the east face is the hamlet of Bangián.
This is a fair camping ground for two regiments, of sloping ground, on the right bank of a stony nálá 400 yards north-west of the post and north of the road, opposite the small village of Sodat-i-Kala. A regiment of infantry might also be encamped north of main road, on a stony slope, 250 yards north of the post. Water from river and from a spring immediately below the post, and south of it in river-bed. Supplies (as at former posts) procurable in small quantities from neighbouring villages. Grass procurable after rain; at other times scurce. Camel-grazing very scarce. A little may be picked up on the banks of the nálá leading up to the village of Jalandari, 5 miles north-north-west ; grazing guard necessary. On leaving Balesh Khél the road and river turn north north-west for the first $\frac{1}{4}$ mile, and then continue north-west for the remainder of the march. On the north the road throughout skirts low stony hills from $100^{\prime}$ to $150^{\prime}$ high, and south of it there is a continuous belt of rice, maize, and moong dhall cultivation, descending in terraces to the river bank, and varying in width from 200 to 400 yards. Slight cultivation on right bank; rocky hills rise from $600^{\prime}$ to $700^{\prime}$ above river.

At 6 furlongs road passes through a narrow cutting in a low spur of conglomerate. Two laden camels could not pass each other here. The cutting oan, however, be avoided by taking a path leading over the spur ; ensy gradients. The village of Balesh Khel is on this apur, 50 yards north of road. It is stone-built, wall $10^{\prime}$ high, and has three lofty towers; rice-straw plentiful.

At 7 furlongs small village of Rigi. Village of Sungina on opposite bank, built on a mound, with towers and surrounded by rice-fields.

At 1 mile a ruined village on the top of hill, north of road; at $1 \frac{1}{4}$ miles Khatak post. Road for next $\ddagger$ mile passes through a grove of mulberry trees. At $1 \frac{1}{2}$ miles cross shallow stony nálá, 300 yards wide. Fields for next $1 \frac{1}{2}$ miles studded with mulberry and camel-thorn trees and a few chinars. At $3 \frac{1}{4}$ miles good camping ground for two regiments north of road, at mouth of a stony nálá. Some grazing for camels $1 \frac{1}{2}$ miles up the nálá. Gradual ascent now for 300 yards up stony slope. Low hills on north recede 150 yards. At $3 \frac{1}{2}$ miles oross a stony nálá, 30 yards wide ; gradients easy. On its right bank, at junction with the Kúram, are the fortified sarái and large village of Íbráhimzái, both south of road. It is surrounded by rice cultivation, studded over with large chinar trees. Two hamlets of Íbráhímzái are on the opposite bank of the river. At 4 miles 3 furlongs low ground for 150 yards; slight ascent thence to village of Sundar Kot ( 4 miles 6 furlongs), situated on a conglomerate spur south of road. Hamlet of Garbanoo on opposite bank. At 4 miles 7 furlongs cross small, shallow, stony nálá. A large nálf joins the Kuram on opposite bank. At 5 miles low ground; low hille reoede 200 yards. Gentle ascent

## Route No. 7-continued.

up atony slope oovered with dwnrf-pulm. Three regiments might camp on it north of road, if necessary; 150 yards south of road ( $6 \frac{1}{2}$ miles) village of Yákúbi. Two towers, fine chinar trees. Hamlet of Saidán on opposite bank. At 5 miles 5 furlongs cross deep stony nálá, 30 yards wide, banks 10' high; gradients easy.

Skirt hills again on north, now $60^{\prime}$ high. At 6 miles pass through cultivated valley, 4 mile wide; low ground. Irrigation channels all bridged. At $6 \frac{1}{2}$ miles cross stony nálá, 40 yards wide. A little water in it ; rest of it takenup in irrigation. Village of Husén Alí on right bank at junction with Kúram. Follow up nálá bed, 300 yards north, and then strike off north-west across a valley, 350 yards wide. One hundred yards further up the right bank of the nálá is the Ziárat of Hazrat Abbás. At 7 miles cross a deep stony nálá, 30 yards wide. Banks 15', but gradients easy ; that up right bank would be difficult for camels after rain, soil being clayey. A little water in nálá, most of it being nsed in irrigating fields. Hamlet of Maidal on the right bank at junction with Kúram. Two hamlets and village of Butsutu on right bank of river. A path, direct across the hills from Hazár Pír Ziárat passes behind this village, and, crossing the Kúram a little below Wáli Muhamad Kala, leads up its left bank to Kúram fort. it is used by country carriers as a short cut. It is passable for mules, and avoids the Darwázgái pass.

From nálá proceed for 200 yards through rice cultivation. Two bridges, which require repairing, across irrigation channel at this point.

At 7 miles 3 furlongs the road ekirts the low hills again on the north, and for the next a mile is lined with fine mulberry trees. In parts road is low-lying, and liable to be flooded after rain.

At $7 \frac{1}{2}$ miles leaves the main road, and descends south by cross-rond, 250 yards, to Wali Muhamad Kala. This cross-road would be difficult for camels after rain.


## At 50 yards from Wáli Muhamad Kala road crosses

 small nálá, dry ; left bank low ; small cutting through right bank. Camping ground on right on terraced fields, which are kept uncultivated for this purpose ; soil light, easily drained ; room for a small brigade; other grounds in vicinity available, but usually irrigated for cultivation. Village of Bangi on left, 60 yards distant.At 500 yards from Wáli Muhamad Kala road rounds small spur on right, which commands it, and then crosses a small dry nálá; cuttings through both banks, 86 yards long, 15 feet deep; banks of nálá steep and broken, $10^{\prime}$ high; alternative footpaths to right and left; soil light and stony At 600 yards from Wáli Muhamad Kaly passes 44th milestone from thal, still commanded by low spurs on right. at 880 yards it crosses two small watercuts, bridged. Steep spur here commands on right, $30^{\prime}$ high; continues for 200 yards. Road, descending slightly, passes through richly-cultivated fields. Village of Ramkareh 300 sards to left, low spurs still commanding road on right, level and good; river bank $\frac{1}{4}$ mile distant on left. At 1 mile from Wáli Muhamad Kala, small cutting and steep spur on right, winds round fields, level and good. At 45th milestone from Thal village of Amalkot, 200 yards to left, built on banks of small nálá, dry. Road crosses nálá; banks low and easy : no impediment. Leaving Amalkot, road winds round several low spurs, all commanding it, between which is cultivation and deep irrigation cuts. For the next $\frac{3}{4}$ mile road rises slightly, rounding a steeply rising spur on right, till the village of Sultán is reached, built on high ground commanding the approach by road.

Sultán, a large walled village; good supplies. River $\frac{3}{4}$ mile to left. Here road, hitherto running north-west, takes a bend more northerly, rises slightly for $\frac{1}{4}$ mile, skirts low spurs on left, descends, passing 47th milestone from Thal, and crosses a nálá 200 yards broad; banks low and sloping on the right bank. Four hundred yards to left of road is the village of Agla, large; supplies plentiful. On right bank of nálá, cutting $10^{\prime}$ deep, $24^{\prime}$ wide, winding. 100 yards long. Country open and passable both sides. Road, rising slightly, crosses open grassy plain not commanded. Rich cultivation a little distance to left, extending to river bank, 1 mile distant. At summit of plain passes 24th milestone from Thal ; country round easily passable for cavalry and infantry. For the next half mile road good and level, apt to become rather heavy and cut up in places after rain, but ensily drained or avoided. It then enters cultivation, and at 49th milestone from Thal passes through village of Bukhtáwar. Few supplies procurable. At mile from Bukhtéwar passes village of Shabían, small; frelds around these villages much irrigated, and watercuts carried across road, over which are small planked roadwass from $3^{\prime}$ to $4^{\prime}$ span. At Shabián road crosses small nálá, dry; banks high, but descent and ascent of easy gradients, through small cutting on right bank, whence it rises slightly, passing over terraced fields. Country open both sides. Road not commanded, good, level, and wide till 50th milestone from Thal is reached. Here road descends to Kúrman Toi, 100 yards wide ; water at most seasons; banks high, precipitous, and broken; descent on left bank by a ramp parallel to course of nálá ; soil light, with limestone, shiagle, and boulders, easily worked away by water ; Kúrman Toi subject to heavy floods ; romedwy on left bank liable to be oarried away. On left.bank, and to left of road

## Route No. 7-continued.

village of Mistokot, smnll : few supplies. Right bank of Kúrman Toi low, ascent easy, through two small cuttings, 15 ' deep. At the 51 st milestone from 'Thal, village of Seedarah, small; supplies procurable. Road here crosses small nálá, dry ; banks low and easy. Two roads lead from bere into the station of Kúram, mile distant-one to left crosses a nálá with rather steep gradients; one to right, ascending slightly, crossrg open feld, till it descends, at 600 yards further, through cutting into nálá bed; gradient easy, $15^{\prime}$ deep; roadway $24^{\prime}$ wide; nálá 100 yards wide; hanks broken, irregular, and precipitous in places ; several springs in bed ; water for greater part of the year. Road ascends right bank through short cutting. At 200 yards from cutting, road crosses a narrow deep nála by planked bridge, $15^{\prime}$ span; bridge $12^{\prime}$ wide. At this point the precincts of the Kúrain station are entered.

Kúram, a large station, two forts; mud walls $20^{\prime}$ high, mark north and south bound. aries, connected by redan traces ; walls mud, loopholed, along which huts are built. Forts 800 yards apart, joined by good, broad roads, lined with trees. Water from springs west of station good and plentiful ; quantity of water in subsoil, which rises to a foot or two of surface in many places. Soil generally damp and heavy; climate fair ; fruits and vegetables of all sorts grown in lurge garden. Country round Kúram open and fairly level, but iutersected by many nálás, dry, except after heavy rain ; supplies plentiful. Height 4,654' above sea-level.


Three hundred yards from Kúram, road descends through short cutting to a nálá, 100 yards wide; bed stony; several springs ; liable to heavy floods after rain. Road goes through deef cutting on right bank, 15 feet deep, 60 yards long. Banks of nálá, steep, irregular, and broken. Gradients of cutting easy; soil light, mixed with quantity of limestone boulders, easily worked into by water. On the right bank of nálá a road, branching to left in a westerly direction, leads to Chamkani, and a track to right leading north goes to village of Zerán, and thence to Agam pass, over Saïed Koh range, into Jalálábád valley. Country open and uncultivated; road not comınanded. At 900 yards from Kúram, small nálá, dry ; short cutting, easy ; direction of road north-west. at $\frac{3}{4}$ mile from Kúram crosses nálá ; banks low, easy ; floods after heavy rain. Road, rising slightly over open uncultivated stony country, passes 1st milestone from Kúram (from this point forward the milestones are not numbered, and all distances will be reckoned from Kúram). At 1 mile 500 yards from Kúram crosses small nálá, similar to last; road gradualiy rises. At 1 mile and $\frac{3}{4}$ small nálá, similar to last. At 2 miles 250 yards small nálá, similar to last. Country same as above. At 2 miles 350 yards small nálá. At $\mathbf{y}$ miles 450 fards small nálá, no impediment; road dips and rises from a hollow. At $2 \ddagger$ miles crosses deep nálá, 30 yards wide; banks steep and broken; descent rather steep; ascent easy; liable to heavy flonds. At 2 miles 1,100 yards crosses wide nálá; left bank rather steep, right bank easy ; country open and uncultivated as before. At 3 miles 50 yards crosses similar nálá, 120 yards wide; banks irregular and broken. At $3 \frac{1}{4}$ miles crosses a nálá 250 yards wide, banks low and easy ; no impediment, except when in flood. Koad rises gradually, good and wide; country open, snme as before. At 4 miles a branch rad to left leads to south of fort Shalozán ; the upper road to right leads to north of fort, and is the better one. At $4 \frac{1}{4}$ miles road dips through low cutting, bank low, 100 yards long ; small cattle pond on left ; soil light, boggy after rain; road level and good at 5 miles road dips a little; apt to be much cut up and heavy for wheels after rain. At 5 miles 400 yards cattle pond on right. At $5 \frac{1}{3}$ miles nálá, banks low, no impediment. At $5 \frac{3}{4}$ miles a track crosses main road leading to village of Shalozán. At 5 miles 950 yards small nálá, banks steep; cutting on right bank; small cattle-pond on right; cutting 50 yards long; soil light, apt to cut up after rain; banks $10^{\prime}$ high. Road here turns slightly to right over grass, marked by stones on either side; level. At 6 miles small nálá; deep cutting both sides; easy gradients; floods after rain; country as before. At 6 miles 100 yards small cutting. At 6 miles 300 yerds orosses small deep nálá 30 feet wide, spanued by wooden bridge; small cutting either side; road level and good; country open.

At 74 miles small nálá cutting; no impediment. Shalozán fort on left; climate good; country round open, suited for camping large numbers of troops; water from irrigation cuts and village of Shalozán, $1 \frac{1}{2}$ miles north, good and plentiful; supplies abundant; timber and stone for building purposes procurable in great quantities from foot of Safed Koh spurs, about 2 miles distant ; small village Nai Kai south of fort.

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At 600 yards from the fort the road dips through small nailá; a few trees here. At $\frac{3}{4}$ mile small pond on right, and road crosses small nalá by slight wooden bridge. The rond here descends by an easy gradient to the Shalozín nálá, 500 yards wide, dry except after rain; stony bed;

## Route No. 7—continued.

banks high, but sloping, in places steep and broken, ascends the right bank by easy gradients from this forward the milestones cannot be distinguished from other similar piles of stones placed at irregular intervals). A few huts and cultivation on right bank. At $1 \frac{1}{4}$ miles from Shalozán fort a small deep nálá, crossed by swall wooden bridge. At this pond a branch road to left leads to road south of fort ; country open and uncultivated; road rising gradually. At $1 \frac{3}{4}$ miles small cutting; road dips into a hollow, crossing a small nálá ; banks low ; no impediment. At 2 miles site of old encompment ; country open and uncultivated: road descends to bed of nálá. At $2 \frac{1}{2}$ miles dry small cutting easy slopes; road crosses broad hollow in ground, in which are several dry nálá beds; small; no impediment. Road rises gradualls. The lower spurs of the Safed Koh range are now approached, about 2 mile distaut; country same as before. At $3 \frac{1}{2}$ miles crosses small nálá, 8 feet deep, by wooden bridge, 30 feet span. Nálá dry, except after rain. At $3 \frac{1}{4}$ miles crosses small nálá, dry. Road rises gradually ; a little cultivation on left, round village of Lutmai, slightly commanded by rising ground on right.

At $4 \frac{1}{2}$ miles deserted village of Habíb Kala, built by Afghán troops; would hold one regiment infantry and one battery. Village commands road; water from small cuts taken from spín Gawái. Rising ground and spurs of safed Koh range belind village. Road here crosses Spín Garwái, left bank low at point of crossing, commanded thoughout by right bank; nálá bed 700 yards wide; stony; near right bank water runs in a deep channel after rain; road carried on causeway; breakwater up stream to divert the current, at times very strong. At 5 miles on right bank of Spín Gawái, village of Paiwar or Gúndi Khél. A group of hamlets on high commanding ground, which sloyes in terraced fields towards road. To left, and close to road, is village of Turseh. About one mile down right bank village of Sharm Khél. From bed of Spín Gawái a track branches to right of main road up the nálá leading to the Spín Gawái Kotal. Leaving the bed of the Spín Gawái, the country is no longer open. Road, passing through richly cultivated and irrigated fields, is commanded by the village on the right; fields, divided by stone banks, narrow lanes, and irregulur cuts, are passable only by infantry, and that only when not under irrigation. Road beyond village still commanded by high ground to right. at $5 \frac{1}{4}$ miles small camping ground; water good and plentiful; supplies abundant ; descends deep nálá ; left bank ramped; easy zigzag; ascent on right bank easy; nálá banks steep, rocky, and broken, impassable in many places; commanding ground on right recedes slightly; country on both sides covered with jungle growth and hclly-oak trees, 10 to 15 feet high. Road gradually descends to a small picquet tower on right. At $5 \frac{1}{2}$ miles crosses a deep nálá; descent and ascent commanded on right ; slopes easy. Up this nálá, about 1 mile, small village of Ghundeh. Road descends; country same as before. View shut in right and left by steep spurs $\frac{1}{2}$ mile distant on either side. The gorge leading to the Paiwár TXotal may now be said to be entered, and road commanded till kotal is renched.
at 6 miles road crosses deep nálá; easy gradients of descent and ascent; small picquet tower on left ; country more shut in on right; high spurs commanding road; country same as before. At 7 miles crosses deep nálá; descent rather steep : ascent easy ; banks steep, rocky, and broken, passable only in places; nálá bed commanded from high ground on right; swall picquet tower on right. Up the nálá about $\frac{3}{4}$ mile small village of Gubazain. Road now rises gradually up to kotal, commanded on both sides; country same as before. For, the next mile the road is fairly level though rising till 7th mile; jungle undergrowth ceases, and cultivation appears on left.

At $7 \frac{3}{4}$ miles two knolls from adjoining spurs on either side completely command the approach. Small camping ground here on left.. Water from village of Turrai near road and at the mouth of adjoining ravine. The road now rises steeper, crossing a small nálá bed, till it reaches and passes through cultivation : steep pine-clad hill sides rise precipitously on either side, forming a gorge 100 y urds wide.

At $9 \frac{1}{2}$ miles a small water-tank and cattle-trough on right. Up to this point the road is good, with no difficulty for wheeled carriage; but now the final ascent of the kotal commences. Road rises by a succession of steep zigzags, wide and metalled; guns could be taken up by hand-ropes; hillside covered with pine trees; soil rocky, little or no undergrowth; sides of road built up in many places. About quarter of the way up a small spring to left of road.

At $10 \frac{4}{4}$ miles the summit of the kotal is reached, and road passes between small hills, with fairly level spaces between, suitable for encamping a large force. Drinking-water from spring, a short way to right and below kotal; supply good and abundant. Spring and cattle troughs about 1 mile beyond kotal. A bridle-path to right leads from the Paiwár Kotal to the Spín Gawái Kotal, situate about 2 miles to north. Path good and practicable for pack animals, leads for $1 \frac{1}{2}$ miles round steep and wooded hill sides, till it debouches on an open grassy plateau, $\frac{1}{2}$ mile broad : excellent camping ground; water and wood in abundance. Crossing the plateau, the summit of the Spín Gawái Kotal is reached. To the west of the plateau a path leads to the villages of Gundi and Zabardast Kala, the latter on the main road from Peiwár Kotal to Alí Khél and the Shutargardan pass. Paixar Kotal could easily be defended from a direct attack from the east or Kúram side, as the steepness of the hill-sides allow of but few approaches, which

Route No. 7-continued.
could be defended by a few men. An attack from the west by an enemy advancing up the Hariáb valley would be difficult to guard against, as the formation of the hills affords facilities for turning the position. The country to the north is bounded by the steep slopes of Sikarám, the highest peak of the Safed Koh, $15,620^{\prime}$ above the sea-level; while to the south the ridge descends to the Kúram river, crossed by the Istiah and Strimander Kotals and the Mangiár pass, which latter is the easiest, though most circuitous. Gencral elevation of the Paiwár Kotal ${ }_{8,500^{\prime}}$; climate good in the summer; the cold in winter is very severe : unlimited amount of timber for building purposes in the vicinity ; many kinds of fruits and vegetables grown in the neighbouring village.

Alí Khél is a large village of some 50 enclosures, each in itself a little fort. Forage scarce; little grazing for camels. Fuel abundant.

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$|$| River Road <br> Northern, <br> Road. Matn | $\frac{12}{12 \frac{1}{2}}$ | $143 \frac{3}{3}$ |
| :--- | :--- | :--- | :--- |
|  | $143 \frac{3}{3}$ |  |

Road runs through Hariab valley (the valley of the river of that name which rises in the Sikarám peak of the safed $K$ oh range). This valley is highly cultivated, and quantities of rice, maize, pulses for cattle, millet, peas, wheat, \&c., are grown in terraced fields, for the irrigation of which water is carried from the Hariáb and its confluents, the Lalidar and Kharshatal streams. The average height of the valley is about 7,500'; the climate in summer is very fine, but in winter it is very cold, snow lying thickly on the ground, and preventing winter communication between the various villages for a short time. The high ground under the mountains by which the valley is surrounded, and the mountains themselves, up to an elevation of $11,000^{\prime}$, are covered with forest of various kinds, seven-tenths of which is deodár, with Pinus excelsor, Alves, Smithiana and Urbiana, and edible pine in certain localities.

For first 2 miles to Hariáb river the road descends at gradient of about 1 in 30 , passing through a narrow defile, and commanded at about 150 yards on each side by low pine-clad hills, which could be easily traversed by infantry. These hills are themselves commanded by other and higher ones to the north and south.

At $4 \frac{3}{4}$ miles from Paiwár Kotal, on left of road, are springs of good water, from which the late garrison was supplied. At these springs a small stream rises and flows into the Hariáb river. The road runs along its right bank.

Just before arriving at these springs, the defile through which the road runs is joined by another defile from the north (through which a path runs to the Spin Gawái Kotal), and widens out, forming an almost circular grassy basin about 300 yards diameter, narrowing at its eastern end, through which the stream from the springs finds exit between steep bunks, about $10^{\prime}$ high The road runs through a cutting here on the stream's right bank, and all arms, except infantry, would have to confine themselves to it for about 70 yards. Having traversed this distance, the hills on each side recede from the road, and for about half a mile the route runs along fairly open country to the Hariáb stream, which it crosses by a rough bridge with stone (kacha) piers. This bridge is liable to the action of floods. The banks of the Hariáb stream are low, and it affords no obstacle. Having crossed the stream, the road bifurcates, the northern road being the longer by about half mile; (i) the southern or river road follows the right bank of the Hariáb, running south-west to Bián Khél, being commanded throughout by the pine-clad heights of the Mangiar range; (ii) the northern road takes a line east for about $2 \frac{1}{2}$ miles, and then turns south-east. It is not commanded by the Mangiár heights. Bifurcation 2 $\frac{1}{3}$ miles from Paiwár Kotal.
(a) Northern road ascends from the bed of the Hariáb by a zigzag of easy gradient, and passes hamlet of Zabardast Kali, consisting of a small enclosure forming a detached fort with dilapidated tower. Camping ground for two brigades, used by Afghán troops as a cantonment prior to 2nd December 1878.
at $3 \frac{1}{2}$ miles crosses Sergul stream ; bed about 200 yards wide; banks low. Water runs in several channels, the main one being crossed by bridge similar to above; no obstacle.

At $4 \frac{1}{2}$ miles Bilut nálá, crossing which road runs south. This nálá has precipitous banks about $15^{\prime}$ high ; descent and ascent by gradients of 1 in 7.

At 6 miles passes through village of Lower Bilút on left bank of Lalidar stream, oonsisting of about 5 houses, each detached and forming a small fort in itself. This is typical of all Jáji villages. About 800 yards up this stream, and on the same bank, is the village of Upper BurBilát at the mouth of the Lakarái pass. Lalidar stream is about 200 yards wide with precipitous banks, of which the left commands the right. The road descends into the nálá bed by a zigzag of 60 yards, gradient 1 in 20, and leaves it by a ramped ascent, $\frac{3}{4}$ mile long, cut at an easy gradient in the right bank of the nálá, paralled to its course. This ascent is commanded by the village of Petta on the right bank of the nálá and by that bank itself. About $7 \frac{1}{2}$ miles passes ali Sangi, a humlet 100 yards (?) to right of road, beyond a small nálá. From opposite this village road traverses a high uncultivated plateau, on which (on left of road) is ample camping ground

## Route No. 7-continued.

for a large force. Here are some ruined buildings left by troops of Sir Frederick Roberts' force cantoned on the platean, Bián Khél camp, in 1878 . Wood and water plentiful. At 8 miles descent by zigzag of easy gradient into Khurshatal stream, which crosses and passes at 9 miles village of Bián Khél, situate on low ground surrounded by cultivation. Bed of this stream about 250 yards wide; bauks high, steep, and grassy. Water-supply fair, rising from springs in the nálá banks. This northern road passes through terraced fields for the most part, and all wheels and animals would have to keep to it between Zabardast Kala and Bilít. However, especially to the uorth, cavalry might work, though not with facility, the ground being very stony and much cut up by nálás.

Bián Khél, near which the 2 nd or river road rejoins the northern road, is a collection of small hamlets like all Jájí villages.
(b) River road.-From bifurcation $2 \frac{1}{\frac{1}{2}}$ miles from Paiwár Kotal continue along right bank of H:rriáb under Zabardast Kala, which commands it; hence for next mile over stony ground. At $4 \frac{1}{\frac{1}{2}}$ miles passes villige of Kurkai, and shortly after Sharíf Kala, where road crosses mouth of Shergul nálá. At 5 miles crosses mouth of Lulidur strenmat its junction with the Hariáb. At $6 \frac{1}{\frac{1}{2}}$ miles the road passes under the village of Stir Kaln ; at 7 miles ascends by steep cutting of 200 yards (too narrow for guns meeting to pass) from river bed, and by a similar descent drops into the Kharshatal stream, which crosses and joins northern road at $7 \frac{1}{2}$ miles. This "river road" is commanded throughout by the Mansiár range (see above), and by the right bank of the Hariáb and the various villages beneath which it passes.

From junction near Biáu Khél the road continues along the right bank of the Hariáb to within 200 yards of Alí Khél, where it turns off to the right.
at $10 \frac{1}{2}$ miles pass under Ahmed Khél, opposite to which village a track leads via the Istiah Kotul to Kaclikina in Kúram, and the Sursurang defile, passable for mules and infantry, and forms an alternative route to the Paiwár. At $12 \frac{1}{2}$ miles the road which from the junction near Bián Khél is commanded by the spurs of the Mangiár range passes through the village Alí Khél, situate on the Keria, a small confluent of the Hariáb. Alí Khél is a village of the usual Jají type, and consists of some 50 enclosures. Hence the road ascends to the camping ground already described.

Throughout this route camping ground has been calculated as for troops equipped with mountain battery or sepoy pâls; heights bave been taken with a pocket aneroid, starting with Thal as $2,700^{\prime}$.

the worst of the defile, being confined and marching should crown the hill on left bik. Drik of the crown the hills on left bank. Draikala is a small village situated on left bank of the stream, and is a fuir place fon the bivonac of a brigade.

 of stream, the ravine opens out after Draikala; pass Jájí Thána (which is a ruined 40 yards square building) at 6 miles; then the road goes along the bed of the stream, stony bottom; general direction south-west-south. At about $8 \frac{1}{2}$ miles arrive at Karatigáh, and then the ravines of Leo-Hl-Gud join the strean. This is the point where opposition would probably be met; the ravines extending far back and ground much broken. This position should be held until all the baggage has passed through.
19 DOBANDI $\left.\quad \cdot \quad \cdot\left|-\frac{9}{}\right| 171_{8}^{\frac{2}{8}} \right\rvert\,$

Road turns to north, and goes over the crest of the hill by an easy ascent and two zigzags, with the exception of the crest, where it is steep. This position is quite untenable without artillery, and even then is very much exposed, being commanded by hills on the right bank of the Hazardarakht stream, and the position being easily turned on its left fank. Behind the kotal, and to the north of it, is a red hill commanding it, now occupied by a small Gbilzái tower. This is again commanded by a high hill on the left front called "Kamran Tang," which is the key of the position from the Surkhái Kotal to the Shutargardan. From top of the kotal there are two roads-one to the right descending into the valley of Kásim Khel, and one to the left leading direct to the Kásim Khél, the road descending by a gradual slope to the Thána, which is 11,000 feet above the sea, 50 yards square, but completely commanded ty the Kamrang Tang hill on the south of it ; distance of descent $2 \boldsymbol{t}$ miles.

## Route No, 7-continued.


#### Abstract

Almost immediately after the pass is surmounted, the road turns sharp round to the left, and rounds down a spur, which runs out in a south-west direction by a very rough, steep, and tortuous patl. After descending the spur on the left bank, the road crosses the stream, turning round to the north-west, and goes along the right bank by an easy way to the small village of Akhun Khél; diatince from crest $2 \frac{1}{2}$ miles. Just below the village the road through the gorge narrowa, nt some places, to 5 or 6 yards, being hemmed in by two projecting spurs. The villare of Dobandi is about 3 miles below Akhun Khél. Good camping ground on the fields; forage obtainable, but no other supplies.

For 3 miles to the crest of the Shutargardan pass the road is easy and the incline gradual ; the descent, however, is difficult, and presents a striking contrast to the ascent, as the present footpath is very steep and tortuous, though practicable for all baggage-animals. As the soil consists generally of disintegrated rock, the path could with slight manual labour be made into a fair road for wheeled traffic were a cutting made into the side of the hill with the outer bank supported by stones. Timber is not procurable on the spot. The descent is about $1 \neq$ miles in length, and merges into the Dobandi nálá, which carries off all the water of the neighbouring gorges running down from the Safed Koh. At a point about 1 mile from the bottom of the pass, at Akhun Khél, the nálá, whose bed forms the road, runs between precipitous rocky cliffs about 80 feet high, 12 feet wide, and 120 fert along. Infantry could get passage on either side on the high ground above covering the nálá. The next $3 \frac{1}{2}$ miles of road along the bed of the nálá, which is very stony, gradually opens out (and on the right are few detached houses and patches of cultivation) until the village of Dobandi is reached, lying on the right bank of the nálá.

On high ground on the left bank opposite Dobandi is an old unoccupied fort which commands the road up the stream. There is no encamping ground here for a force over the strength of a regiment, and the position would be a very bad one for any troops at all to make a halt in. There was very little water in the stream, and apparently, from there being no sign of a high-


 water mark, the road is rarely impassable from excess of water.$|$| Kusif |
| :--- |
|  |
|  |
| $\frac{1}{\frac{1}{2}}$ miles, and the decline very | road turns off due north over the Shinkái Kotal, which, though only about 500 vards in length, is very steep, and a severe trial to laden animals. A good road could easily be cut in three or four zigzugs. From the top of the kotal to Kushí is about $5 \frac{1}{2}$ miles, and the decline very gradual. On the right, running down from the foot of the Ghilzái hills, lies the extensive barren plain Dasht-i-Surkhao. The village of Kushí is on the left bank of the Dobaudi stream, and, being highly cultivated, can afford abundant supplies. Water is plentiful, though not very good. The rear guard with Embassy baggage laden on 32 camels and 200 mules, which ieft Kasim Khél at 5 A.m., reached Kushí at 4 P.m.-a fact which speaks fully of the difficulty of the march.

Note.-The march from Ali Khél to Kushi may alṣo be thue divided: Karatiga 17 miles, Kasim Khél 5 miles, Kushi 14 miles-total 36 miles.
$21 \mid$ Zargín Shair $\quad .|7|$ Leaving Kushí, the road turns north-north-west

- and runs over the Dasht-i-Surkláo. After 3 miles along a plateau the road descends into a broad dry nálá where water is never deep, and whose banks are budly defined. The distance between the road in the Ghilzai hills is about 4 miles, aud consequently no molestation could be offered to a force on the line of march, while cavalry swept the intervening plain. The road is practicable for nll arms. At Zargún Shahr there is very good and unlimited encamping ground, with first-rate water obtainable from karéz.
 the peak of Kalagái (which is about 2,000' above the plain), forma a plain (the Desht-i-Surkháb), at the northern end of which is situated the village of Záidábád. This plain is well cultivated, being mostly within reach of the Logar river (which now approaches the road), and contains the large Ghilzaí villages of Kuti Khél, Sangar Khél, and numerous other villages and forts. There is no physical difficulty whatever in the way, the road being good and broad throughout. On the left bank of the Logar river, which is about 2 miles distant from the road, some good villages are


## Roule No. 7-concluded.

visible, particularly that of Muhammad Agá, a Persian-speaking community; and his tomb is a prcminent white building on the hill slope. The Ghilzái hills are about 4 miles distant on the right and a low discounected range intervening between it and the Lógar river on the left. Two unimportant Ghilzáí forts are passed on the right about balf way.

Záidálód is a large fertile T'ájik villıge, situated on the left bank of the Lógar river, about 2 miles south of Saféd Saug; and Gumerán is about $\frac{1}{2}$ a mile lower down on the right bank. The bridge over the Lógar river nt Záidábád is in good repair and practicable for infantry as well as for laden animals. In August 1880 the river contained scarcely a foot of water at the ford below the bridge, where the bottom is firm gravel. Good camping ground with room for a division. Supplies fairly plentiful. Water abuudant from a channel near camp. From Záidábád two roads lead to Amír Kala-one viá Zargúushabr, \&c., the other viâ Kalangas and Báraki Bárak.

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Road excellent all the why. At 4 miles crosses, by an imperceptible ascent, the end of a spur from the mountains on the west. The spur is called the Sum-i-Duldul (hoof-print of Duldul). Duldul was the name of the favourite horse of Alí, the son-in-law of the Prophet; aud on a rock at the son-is believed to be the impression of the animal's head of the ascent is pointed out a mark which is believed to be the impression of the animal's
hoof.

The road then traverses the Dasht-i-Sakka, a level plain about $3 \frac{1}{2}$ miles broad.
At 8 miles crosses a low ridge. The descent is almost impercoptible. Road for last 2 miles passes over a perfectly level plain.

At the northera enci of the Maidán Saklra, at a mile from the road to the left, is the village of Namunias, situsted at the southern end of a spur running north and south. At the southern end of the plain, and on the left of the road, is the large Tajik villnge of Káhmatábád,* and on the further side of the Lógar river is situated the large Ghilzái village of Musái. The road to Childukhtarán diverges to the left nbout half-way across the Sakka plain. Between the road and the Logar river are lofty spurs, except at Lábmatábád, where the plain is open to the east. Hills also bound the view to the west at a distance of 2 or 3 miles.

Chárásiá is situated on the southern slope of a low range, running across the plain from east to west. A wile to the east flows the Lógar river ; but the village is irrigated from the Kábal river, which flows immediately behind the low hills north-west of the village, a water-cut being taken through a gorge in the low range above mentioned.

It is a very rich, well-cultivated village, possessing numerous gardens, orchards, and vine. yards. There are many trees, and it could give a great amount of all supplies. The Kabal Government often send out troops to this village for a season. The population is a mixed one of Afgháns and Tájiks. Good camping ground.

North-east of Chárásiá, and beyond the Lógar river, rises a prominent sharp-pointed mountain called Sakh-i-Baranbai, on the eastern side of which is the Khurd-Kábal pass.


Road level and good. At $4 \frac{1}{2}$ miles the low ridge of Khairábád is crossed. The kotal is about $100^{\prime}$ high and presents no difficulty.
at 5 miles the road enters the Sang-i-Nawishta, a defile about 1s miles in length, ihrough which it is confined between a lofty hill on the left and
the Lógar river on the right. The defile is commanded on the right by inaccessible and precipitous cliffs, and though practicable for all arms, it offers a cramped passage for a large force.

At 7 miles pass the village of Beni Hissár on left. There is room for a camp here, but the ground is much cut up by irrigation channels.

At 9 miles pass the Bála Hissár on left. The road is gooà and country all open, though much intersected by water-cuts and irrigation channels.

* Not marked on map.

ARTHUR R. DICK, Lieut.,
2nd Punjab Cavalry.

# Route No. 7A. <br> From Banń́ to Thal vid the Kúram Valley. Authority-Bengal Routr-Book. 

| No. of Stages | Names of Stages. | Distances in Milis. |  |
| :---: | :---: | :---: | :---: |
|  |  | Intermediate | Total. |
| 1 | Kúram | 5 |  |
| 2 | Zarone . | 15 |  |

## Remares.

An outpost on the Kúram; supplies from Bannú; water plentiful from the river ; country cultivated; road good; nálá bridged.

A small Wazírí village near the left bank of the Kúram ; water plentiful ; road rocky and stony, but fit for horsed guns and laden camels; enters the hills by the Gidrí pass, about 1 mile from Kúram ; these hills are from 500 to 1,000 feet high, but are easily crowned. The Kúram is crossed towards the end of the march; on the left bank a small open patch is reached, available for the encampment of 5,000 men.

$3 |$|  | LUKANI . |  |  |
| :--- | :--- | :--- | :--- |

A small village on the left bank of the Kúram forage procurable; water from the river; encamping ground extensive. There are two roads from Zarone ; the best is up the left bank of the Kúram, which has to be crossed twice on starting. The road then leaves the river, and for 8 miles passes over hard ground, until it enters the Karunjur gorge, through which it runs for about a mile. The other route lies along the bed of the river, which is crossed and re-crossed six or seven times ; after rain this route is impracticable, from the depth of water and strong current of the stream; the hills on each side are abrupt, but could easily be crowned; horsed guns and laden camels can travel either route.

42
A village situated at the junction of the Sangroba nálá with the Kúram, and surrounded by a stone wall 12 to 15 feet high, with two good gateways; for 4 miles the road runs up the valley, then it crosses the Kúram, and to Baland Khél is good, but hilly; about $1 \frac{1}{2}$ miles from Thal the Kúram is entered, and its bed followed for the remainder of the march. At Thal the road from Kohát to Kábal and Ghaznf is joined.
N.B.-There is also a road from Bannú to Zarone via the Gumalli pass, the distance being about the same. This route is solely of importance with reference to the Kúram route ${ }^{\text {( }}$ (vide No. 7).

ARTHUR R. DICK, Lieut.,<br>2nd Punjab Cavalry.

## Route No. 8.

## From Banń To Ghazní.

Authorities-Mardall and Smith; the Múlla; McNair and Syad;
M. H.; N.-W. F. Gazetteer.


## Route No. 8-continued.

westerly direction, to Mir Zail, the first rilluge across the frontier ; nálá averages 600 yards in breadth, strean nurrow and swift, fordable nearly evergwhere, 2 to 3 feet deep. Stream impassable in heavy rains, but flood quickly subsides.

A small bamlet, with a square tower, lying in a hollow near the stream. Camping space on plain N.-W. of village.

2 Haidar Kbél .|(P) $11|\quad|$ From Mir Zail atill along left bank, direction south
$\square^{21}$ west, rond flat and fairly good to 3 miles; bare stony plain to the right of road; to the left, across nálá, undulating bills practicable for skirmishers. At this distance there is broken ground for about $\frac{1}{2}$ a mile, which cavalry and baggage ahould avoid by taking the bed of the nálá, which runs here between high banks. At 5 miles, the nálá mnkes a sharp twist to the south, in the form of the letter $U$, about $2 \frac{1}{2}$ miles round, and the path lenves the nálá, going straight over a saddle (called the Shinkí Kotal), and joining it again after $\frac{3}{4}$ of a mile. From the kotal the track improves, leading for about a mile across a plain, then ascending to higher ground some $60^{\prime}$ above the stream, whence the ground is more open, aud there is no impediment to the advance of a body of troops.

This is the most direct route into the Dáwar valley, and there is good water all along the road. It is said to be passable for field artillery, the Shinkí Kotal being the only difficult part. This could be rendered passable by a couple of hundred pioneers in an hour.

There nre two other passes leading into the Dáwar valley, both longer and more difficult than the Tochí.

## RODTE VIÂ THE BARAN PASS.

Little is known about this route. The following account is from native information. The distance is probably about 30 miles. Entrance to pass is opposite Barán post. The pass is much more rocky than the Tochí, and there seems to be great doubt whether it is practicuble even for cavalry, there being many stiff, tortuous ascents in its course. It is the main trade route, so it would probably be practicable for mountain guns.

## route viâ the khaisora pass.

This route meets the Tochí route nt Haidar Khel. The distance is probably about 35 miles. Road fair, across open stony country, to Mírian ( 8 miles), crossing the Kach Kot at 3 miles From Mírian (called also Norúr) cross the Tochí. Here is camping ground on right bank at 10 miles. Supplies from Mírian and other villages on left bank, which is all cultivated. Thence across a wide stony plain to the Tanoí Khél huts nt 17 miles, where the Khaisor river issues from the hills, passing at $12 \frac{1}{\mathrm{~s}}$ miles the villages of Sardí Khél, and at 14 those of Mirmí Khél; road good. 'T'hence to Spín Wom ( 20 miles) up the broad stony bed of the Kbaisor, which is rough, but passuble except for wheeled guns. Here there is camping ground, commanded by low bare hills at close range easily crowned. Water plentiful. No village. Plenty of camel grazing. From Spín Wom, rond (as before) for 2 miles up the river bed, when it reaches the Khaisor Tangi, about 40 yards wide, formed by the river cutting through n rocky ridge. Both sides are high precipitous rocks, rising like walls at right angles to the road, behind which an enemy might make a determined stand until enfiladed. After very heavy rain the stream fills the gorge, which is then said to be impassable for hours. Shortly nfter passing the gorge, the road ascends to the Momaki Ragza, and there is a bad bit for 300 yards, which, however, would be cleared for wheeled guns by 100 men in an hour. Then for about 3 miles the road is good, when a mass of boulders obstructs trafic. It would take a native infuntry regiment three days to clear this, but no blasting would be necessary. At present camels can pass. At about 26 miles a low pass is crossed, which might require some trifing improvement for wheeled Artillery. Two miles from Haidar Khél the Tochí river is crossed in two branches, the doáb being $\frac{1}{2}$ mile across. Haidar Khél stands on the left bank. The right bank and doáb are cultivated. The Tochí river bere was $18^{\prime \prime}$ deep in September 1883; bottom gravelly with big boulders scattered about. Probably $5^{\prime}$ deep in spring.

The Déwar valley is divided into Upper and Lower by the Taghrái Tangí. Both valleys are highly cultivated, and are intersected by numerous watercourses, deep and broad. There are also

## Route No. 8-continued.

many marahes, and the country is not suited for cavalry operations. Forage, grain, firewood, ment and water, are everywhere abundant. The villages are walled, with flanking towers; and every field is defended by a tower.


On this stage there are no difficulties of importance. Road through cultivation; some watercuts which would require ramping for wheels. At 2 miles pass the village of Malik Samaud, the road running through the village, which is a parallelogram with bastioned mud walls. About 150 houses. Thence the road runs to Idak, crossing a small tributary of the Tochi from the north. west about half-way. Pass through Idak, a large walled village, with numerous hamlets outside. Hence a branch road to Khost. At 2 miles from Idak, Hákim Khél is reached over a low ridge. easy for whels. Road passes by the north wall of the village. A village of the Dáwari section of that name; rectangular form, with bas:ions at the angles. About 100 houses within the walls; numerons bamlets outside.

4 | $\substack{\text { Malik } \\ \text { Kala. } \\ \hline}$ | Shíhzãda |
| :---: | :---: |
|  |  |
|  |  |
|  |  | following the right bank for $\frac{1}{2}$ mile, when recross to left bank At 4 miles the cultivation cesses, and hills approach both banks, forming what is called the Tagrai Tangi. This, according to M. H., is perhaps a misnomer, as the valley, which is almost entirely occupied by the river bed, is never less than 300 yards wide. The tangt is nbout 3 miles in length, and the road follows the river bed, which is practicable for guns. The hills on either side are $200^{\prime}$ to $300^{\prime}$ in beight, aud easy for skirmishers. At the western eud of the tungi (about 7 miles) a camel road goes north to Kúram. At 12 miles are some bad nálás, deep and wide, which would require ramping or bridg. ing. The widest and worst is $30^{\prime}$ across. Thes were dry in September.

A village of Muhanad Khél Dáwarís, with five or six Hindú shopkeepers. About 80 houses ; walled and bastioned, with two gátes. Road runs thraugh village. Supplies procurable for a large force.


Road through fields for 5 miles; no difficulties. Then through a gorge for 200 yards, following the banks of the Tochí, passable for all arms. Leaving this tangh, the large village of Dakkar is passed on the right bank. Then over a spur that touches the river (road ensy), across a suall tributary from the north, and through fields to Míah Kala.

The place consists of two furts, one on either bank of the Tochí ; largest on right bank. Only a few houses; no supplies; but the latter can be procured in abundance from Dakkir and other large villages near.


Road follows the river bed throughout, frequently crossing and re-crossing. It is fit for wheeled traffic except at one point, where it passes over a spur on the left bank. This would be rendered fit for wheels by 400 men in a day's work. The bed of the river is passnble, bottom pebbly. On this stagen good many hamlets and much cultivation are passed. Ziárat-i-Máana is a collection of walled villages, with numerous 'Tájik and Wazirí inhabitants. Supplies abundant, including rice. It was bitterly cold here at the end of September.


At about 1 mile pass Adam Kláa Kala, a collection of Mada Khél forts (perhaps the Sberauni of the map). Thence over a level plain on the right bank of the Tochí, the hills being 1 to 3 miles distant. At 5 miles pass the mouth of a broad valley from the left (probably drains Sháwal), where there is a good deal of cultivation, and the alley is about 1 mile across. The road then follows the hiil slopes on the right bank, passing st veral forts on left bank. At 7 wiles is the junction of the Tochí ( Wast Toi of map?) and Mare ba (Tochí of map?) rivers. Hence the road follows the right. bank of the Margha, and is very bad for $\frac{1}{4}$ mile, and requires making. Roall runs sometimes along the hill slopes, sometimes in the river bed. At $14 \frac{1}{4}$ miles pass Sherpali Kala. Road continues up the valley, crossing the straan several times ( 2 deep in November), and leaving it occasioually to cross a suir.

## Route No. 8-continued.

At 23 miles pass Pepali, $\boldsymbol{n}$ few forts belonging to the Pepali section of the Wali Khél Waziris. At 24 miles the hills open out somewhat, and at 25 miles the road, now on the left bunk, crosses to the right bank. Margha belongs to the Sehpaii section of the Wali Kliél Wazírís, and consists of a number of detaclied forts, ench with a few houses. Water, fuel and forage plentiful; supplies procurable. Hence a road south-west to Urmul.
(M. H. silys that from the 2nd mile the above road is very bad. Hills approach both banks, and there is not room for camels to get along. River bed also impassuble for camels, being full of large boulders. The formation on right bank black rock; left bank clay, easily worked. Would require considerable labour to make road fit for wheels. At 12 miles road crosses a low pass; clay, easy slopes, little work necessary.)


At $\frac{1}{4}$ mile cross the Margha river, $\mathbf{2}^{\prime}$ deep and 15 yards wide in November. The valley here is about $1 \frac{1}{2}$ miles wide, and the road runs through cultivation for $\frac{3}{4}$ mile, beginning to ascend the hills on the north side of the valley at $1 \frac{1}{4}$ miles. Ascent easy, but ground much broken and unfit for wheels. The descent on far side is difficult, but practicable for laden cancls. At $6 \frac{1}{9}$ miles road crosses the Tochí twice, following the right bank thence for about $3 \frac{1}{2}$ miles, passing at $6 \frac{1}{2}$ miles a Darán Kala, at 7 miles crossing a spur, and at $7 \grave{t}$ miles passing a second Darán Kala, a Wazírí fort. At $9 \frac{3}{3}$ miles crosses the Tochí, and follows the left bank to $11 \frac{1}{2}$ miles, when it re-crosses stream, at this point 30 yards wide (November). Further on a few Wazirí houses and some graveyards are passed. The road hereabout is known as the Rál-i-Khar Algarh (not Khrá Algad, as in map). The hills are quite low and the valley open. (A camping ground would probably be found here.) At $17 \frac{1}{\text { a }}$ miles the valley contracts and hills become higher; road up bed of stream. The wnter springs out at $19 \frac{3}{4}$ miles. Up a ravine with stcep hill-sides to a kotal at 22 miles. This is the Waziri- Afghán boundary. For the next 3 miles is a gradual descent; road would require making for wheels; ensy soil. At 25 miles the road leaves the hills, and at 28 miles crosses the Len Rúd, which flows into the X́b-i-Fermúl at Pushtai. At $28 \frac{3}{\frac{3}{3}}$ miles is a village, Deh Sheikhán.

Orgún is a fortified town with many towers. About 1,000 houses and many Hindú shops. Supplies of all sorts procurable. The iuhabitants are Tájiks. There are two powder and three fliut-gun manufactories.

An alternative route exists from Sheranni to Urgún by the Mast Toi (called above Tochí). It is said to be a long stiff day's march. Grass and wood nre plentiful along the road, but not supplies.

Another road goes from Margha to Urgún up a tributary of the Tochí called the Du-áwa. It is known as the Rảh-i-du-áwa. M. H. heard that it was open aud ensy, but did not explore it.

## According to M. H. the following roads meet at Grgún :-

I.-A road from Katáwáz in the Bulimán Khél country, known as the Shatori route. This is a mule-track.
II.-A road from Saraoza vid Sultánai and the Zámeh Kotal. The latter kotal is passed at $1 \frac{1}{2}$ miles from Urgún. On the Urgún side the ascent is for 500 sards over rock, fit for mules only; blasting and much work necessary to fit it for camels even. On the other side, towards the village of Malik Rosshan ( 5 miles from the pass), there is the same slope, but there the soil is easily worked, with but little rock. Sultánai is 17 miles from Urgún by this route, which is very difficult owing to frequent abrupt rises and falls. The village of Malik Róshan has 40 houses of Kharótis.
III.-A road from Kamiai Saraoza (a place to the north-east of Saraoza proper). This M. H. could not go over, but it is the route used by the Kharótis, so as to avoid the Sulimán Khéls, with whom they are at feud, and by it they take camels laden with grain from Urgún to the Ghazni market.


Road for 3 miles across a level plain, when the hills are reached. The road crosses this range, which is rather steep; it may be avoided by a detour to the north. At $4 \frac{3}{1}$ miles pass Pushtai, which is about 5 miles to the right. The ground here is well known as Dahána. At 5 miles the Sháhtori stream is crossed, and the road goes down a ravine, crossing the stream several times; high chilgoza covered hill ou both sides. From 7 miles the road goes over a plain for $2 \frac{1}{2}$ miles, when the Sháltori is again crossed. At $9 \frac{3}{\frac{3}{4}}$ miles pass the cemetery of Sháhtori, the fort being a nile distant. Soon ufter the aseent to the Kotanai Kotal commences. This ascent is easy, the ground being soft and frey of rocks. At $12 \frac{1}{2}$ miles pass a spring. The kotal is reached at $13 \frac{3}{1}$ miles; devation 8,000 by ancroid. There is a ziarat on the crest. Descent casy, road commanded on both sides by low tree-cuvered hills. The bottom is reached at 15 miles, whence the road lies down

## Route No. 8-concluded.

a dara or glen. Camping ground on the left bank of the Paltú nála. Wood, water, and forage plentiful. The place is exposed to Jadrán raids,
M. H. says that between the Kotanai Kotal and Sanga Maidán there is a second kotal to cross, which, though not high, is very rocky and presents greater difficulties for baggago animals than the Kotanai itself. It crosses a spur which springs from the main range to the north of the Kotanai, and he snys that it becomes less rocky as it recedes from the main ridge. He is therefore of opinion that an easier point for the construction of a rond might be found farther south, or that the spur might perhaps be altogether avoided by a detour in that direction.


Road crosses the Paltú nálá. 20 yards wide (November). At $4 \frac{3}{4}$ miles pass Saroza, a Kharoti villnge, about 3 miles to the right in the hills. At $5 \frac{1}{2}$ miles cross a nálá, and at $6 \frac{1}{4}$ miles, cross the Saroza nálá, $18^{\prime \prime}$ deep and 60 yards wide, in November. The road requires making in places for wheeled traffic. At 7 miles the country opens a little, and road goes along the bed of a dry nálá for $\frac{3}{4}$ mile. At $7 \frac{3}{4}$ miles a road from Sultannai, $4 \frac{1}{3}$ miles distant, joins on the left. At $8 \frac{3}{4}$ miles the country becomes somewhat broken, and there are hills on both sides some $\frac{1}{2}$ mile distant. At $8 \frac{3}{4}$ miles is a slight descent. There is water here, and the place, which is often used as a camping ground, is called Tandak. Hence a road to the Gomal pass route. At $12 \frac{3}{4}$ miles the road enters on a level wnste, and further on runs through a dry nálá to 15 miles. At $16 \frac{3}{3}$ miles a village of Zúrmat, called Patanai, is passed; and nt $18 \frac{3}{\frac{3}{4}}$ milés there are two forts, 300 yards to the right.

Water abundant; supplies procurable. There are two forts.

garh. At $8 \frac{1}{4}$ miles the road crosses the Gnidez Gnrdez, 2 feet deep and 30 yards wide (November). River sometimes much swollen in spring and summer. Much timber is brought down by it. The water is unfit to drink. At 9 miles pass Koh-i-Múrsal, 400 yards to the right; at 10 miles Kala Mazdúr; at $10 \frac{\mathrm{I}}{2}$ miles Kala Sultán Bágh; at $11 \nmid$ miles Kala Niáz Khán; and at 12 $\frac{1}{4}$ miles Kala Sarandáz. Road good for wheels.

Supplies procurable. Water from a káréz. Fifty houses.

| 12 | Grazní . |
| :---: | :---: |
|  |  |

Road throughout level and good for guns. At 2 miles pass Mazúalah Khán's fort. At $6 \frac{1}{4}$ miles pass through Ürzú. At $6 \frac{1}{2}$ miles pass Shalez, a fort village, 300 yards to the left; at $7 \frac{1}{4}$ miles a káréz to right of road; at $8 \frac{1}{2}$ miles low hills to right of road, 300 gards distant. At 11 miles is a Tájik settlement of three forts, called Deh Khudadád; and about a mile further on, Kala Nau, a fortificd village near the bank of the river, which is about $\frac{3}{4}$ mile distant.

Ghazní is in the form of an irregular square, surrounded by a wall, partly of stone and brick masonry laid in mud, and partly of clny blocks built in courses. The wall is flanked by towers at irregular intervals. The houses are of mud, several storeys high. The citadel stands on a knoll at the north angle of the town, which it commands completoly. The town and citadel are both commanded by hills on the north.

Water from the river. Supplies, especially wheat and barley, procurable in large quantities; grass is also probably abundant, as there are magnificent pastures near. Fuel is very scarce.

Note.-There is eaid to be nn alternative route from Sheranni to Ghazaf vid Pái Khél, Asar, Lưárú, Gúíán, Pir Kúle, and Sbáhtorái. Fuel, supplies, and water said to be obtainable at most of these stages.

W. P. BLOOD, Lieut., R.I. Fusiliers,

Attaché, I. B.

# Route No. 9. <br> Dera Ismáll Khán to Ghazní viá the Gomal Pass. Authority-(Native.) 

| No. of Stages. | Names of Stages. | Distances in Miles. |  | Rrmabieg. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Inter- } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 1 | Haindin | 15 | $\cdots$ | Frontier road. The first march may also be made to Khúli, 13 miles, $\Omega$ small village. Supplies rather scarce; water bad and quantity uncertain. Country level, open, and barren. Road good. deep ravine is passed at 9 miles which, as well a the surrounding country, is impassable after heavy |

rain. The first march may also be made to Abashuid, 11 miles.


The town has n small share in the transit trade which passes viá the Ghwaleri. The country brtween Khúli and Kuláchi is level, open, and barren, with partial cultivation near the scattered villages, The road is good in dry wenther, but henvy in places.


Lúni is a village belonging to the Gandapúrs : good bázár and abundance of water.

Rond level and good. Country open and stony. Manji is a village about 2 miles from the entrance of the Shorunna pass. There is a fort here garrisoned by 65 sabres and bayonets of the Frontier Force.

Two roads.
61
(a) The first enters the hills by the Shorunna pass It is broad and easy-going the whole way to Mashkínai, with the exception of one place called Tsirai Tangi, which requires a little labour to ninke it practicable for guns, and for more than one laden camel passing it at tae same time. There is sweet water a little way off the road at Zinari, about 3 miles from Manji. There are a few other anall streams along the road, but their water is brackish, thougn men and horses do not seem to object to drinking from them. The distance from Mnnji in our territory to Maslikínai, the first balling-place in the pass, is not more than 12 miles. This road runs about 4 or 5 miles south of the Gomal stream, and therefore is always practicable for troops, which the Gomal road now to be described would not be when the stream was in flood.
(b) The second road into the Gomal pass from British territory leads straight towards the mouth frow Murtaza, and after passing over a low hill drops down into the bed of the Gomal, and for the first 3 miles the strean has to be crossed severnl times, as the high cliffs on each side do not allow of a road along the banks. This rond would be, therefore, impassable with the Gomal in flood. The distance, however, by it to Mashkínai is shorter by 3 miles than that by the Shorunua pass. At any time guns would have much greater difficulty by this route owing to the boulders in the bed of the Gomal for the first 3 miles than by the first rond, and ns the former is such a fine wide road, I would not recommend the use of this route for guns. After 4 miles it leaves the Gomn und enters a very open part, with the hills well retired on both sides. This is called the "Nilai Kach," and the Kiris coming out by the Gomal very ofter eucamp in the centre about 6 miles from the Gowal mouth. Three miles more over the same open country brings one to Mashkínai, so that by this route Mashkíuai is ouly 9 miles from British territory. It is, of course, better supplied with water than the other road, as for the first 4 miles it runs along the bud ar banks of the stream, and in the cold weather, with the Mahsúds praceable, the cavalry might go by this rond and water their horses for the day before they renched Mashkínai.

Note, The distance from Manji to Murtaza is about 5 mileq; good road,

Ronte No. 9—continued.
At Mashkinai there is the Ramu spring, which generally during the cold weather nffords a good supply of sweet water.


For the first 7 miles the rond from Mashkínai continues broad and ensy, but it then narrows considerably, through the hills ou both sides are low and easy for troops to crown. The ascent to the kotal now begins, and horses would have to be trken out from guns and drag.ropes used in the present stecp state of the kotal for about 600 yards up and 400 down. A few hours' work of a pioneer regiment would, however, make it much easier both for guns and laden camels, and would prevent any serious detention of the baggage, \&c., there. After this march the road procerds through low bills along the banks or in the bed of the Gomal stream towards Ghazní. The Kandalár road branches off at Kanzúr, about 20 miles on. Spín and the fertile valley of Tho lie to the north of the road, and the Powindah Kirris often march through them in preference to keeping to the Gomal stream, as forage for camels is more plentiful in that direction. After riding to the graves of the "martyrs" close to Tora Dabbar, we ascended a spur of one of the low hills and looked up the narrow valley of the Gomal stream for some miles. With its clearly-defined bnnks and even width, it has more the appearance of a canal than a river. Comparing the volume of water in the Zh..b with that of the Gomal, I should say that the former had about one-fifth more wnter than the latter, and must be decidedly the largar stream in flood, judging from its broad bed and high banks. The natives say that while the Zhob yields the water, the Gomal gives its name to it after they meet.

## Macaulay says there is another road from Mashkínai to Knsúra Kach : 一

"The Mauzai pass, by which I returned, leaves the Gomal at Kasúra Kach and rejoins it on the other side 3 miles from Mushkínai. Going by it increases the distance of the march about 4 miles. The Mauzai Kotal appears to me easier for laden camels than the Gwaleri. So crowded was the latter pass when I was there that the Kirri, which arrived the same day at Kasúra Kach, had to tike this route, so I saw all their laden camels passing over it. The slope up to it is longer on the west side, but unt so steep or confined as that of the Gwaleri, and I observed laden camels proceeding up the face of the hill to the crest by several paths. The descent on the east side is shorter but not steeper than on the west. An easy and good road might be made also across this kotal for the passage of guns and carringes. In the pass after the kotal is crossed there are some boulders, which would have to be blasted before guns could get along it ; otherwise it is very good-going in parts. There is water in two or three places, but it is brackish. It tonk me eight hours with one hour's halt reaching 'ritish territory from Kasúra Kach by the Mauzai Kotal and coming out by the Gomal mouth. I should say the distance was about 24 miles, - 15 to Mashkínai, and 9 on by the Nilai Kach to Murtaza. Troops going by this route would march without trouble to Manji on the frontier, and would find the Gomal pass ensy as regards the road, and they would never experience from October to April great heat, while at no time would they ever suffer from want of water, fuel, or forage, and they, would reach Ghaznf by ensy marches in 20 days, and Kandahár in 30 from Manji. The Gbazní road is stopped by snow in winter, but the Kundıhár rond is said to be never rendered impassable by snow." (1878.)

At Kasúra Kach is the junction of the Zhob and Gomal rivers. Above the junction the latter becomes a inuch less formidable stream, with a narrow bed, and low but clearly defined banks.


The road now enters an undulating plain. Two miles from Tora Dabbar is "Shaidar" or "witnesses for faith," the burial-place of a number of merchauts who were murdered by the Vaziris.

Near Tora Dabbar is an insulated rock with 2 trees and beautiful reed grass, called Kotkr. To the north are the valleys of Spín and Tou of the Daotánis and Wana, about 2 marches distant. The road follo wes the valley of the Gomal, which runs in wide straight reaches of easy shingle. Then the river being left, a plain, nearly a mile broad, is crossed, after which is pnssed the kotal of Kanzúrwáli n spur of the Zarmelán bills. The path is either along the botton of the ravine or on the south slope of the rocks.

The descent for the first $\frac{1}{2}$ mile from the kotal is steep; the next milo an easier slope. Guns could not go by this road without a hard day's labour from the pioneers, but it is pructicable for cumels.

## Route No. 9-continued.

No water at Kanzúrwali, but the river is not very far.

| 9 | Gúliaci | *15 | 108 |
| :---: | :---: | :---: | :---: |
| 10 | Khazana Gund | $14$ | 122 | At 10 in pround called Ting is traversed. This march is stony, with abundance of water. Forage and grass plentiful.

$11 \mid$ Betsul . . $\left.\quad\left|\frac{11 \frac{1}{\frac{1}{2}}}{}\right| 133 \frac{1}{2} \right\rvert\,$

Zariwan, said to come from near Birmul.
A short distance beyond pass Khairu Dingrah, a wretched hut so called: then leave the river and ascend the hill of Stigal; the road then lends for $4 \frac{1}{2}$ miles over the desolate plain of Sumblabor lhaghle, the boundary, ns it is called, between Khorásán and India. Betsul is a collection of graves of Lohárís who have died in the pass. Water, grass, and forage are abundant.


The road leads over a stony plain, then ascends to Gatkai by the bed of a rivulet which drains part of the Wazírí country and must be large in the rains, as it has cut a bed 30 feet wide in the hard slate. At Gatkai there are some troublesome large stones. The rond then runs along the side of a hill. At 8 miles pass a fine spring, then ascend an easy ravine, and cross the kotal of Stigai, about 150 yards high.

There is a low ridge crossed by three paths, all equally good. The descent is easy by a broad road, then follow the ravine to Stigai. This march is one of the most difficult, and a road could not be made under a day's hard work. The ravine is crossed by camel-tracks, but none of them are fit for guus, the first 3 miles above Gatkai being so difficult.

If necessary this obstacle could be avoided by keeping down the bed of the Gomal.
Water has to be brought from a spring up a ravine to the north nearly a mile distant.
Washu grass is plentiful. The camping ground is a dry plain 300 yards wide.

$13 |$| AHMADSI Kach |  | $10 \frac{1}{2}$ | $158 \frac{1}{2}$ |
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For 3 miles the road follows a level ravine, 40 yards wide, bounded by low rocks or hillocks often passable for cavalry, then enters the bed of the Gomal, which winds so much that crossing is very frequent. The breadth of water bere is 20 feet, and the depth 1 foot. Pioneers would have some work in clearing away the stones of the Gomal, but there is no real difficulty for guns.


The Gomal still winds so much that it has to be crossed as often as seven times in a mile. Footmen can climb the hills the whole march, and thus avoid this constant crossing. It is never less than 30 yards wide. The shingle is composed of large stones, some of them a foot in diameter, but there
is no serious obstacle for gans.
At $4 \frac{1}{2}$ miles is "Mamatsile," n great white rock in the centre of the pass, and at 9 miles the salt-river of $\overline{\mathrm{A}} \mathrm{b}$-i-Tultsh enters the stream.

Sarmagha is a halting-place, 500 yarde wide, and a few feet above the level of the river.

* From native authority this march is also given as of miles.

Roule No. 9-continued.

| No. of <br> Stages. | Names of Stages. | Distancrs <br> in Minge. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inter- <br> mediate. | Total. |  |

Gomal, is very confined, the Wazíri and Murunnú ranges appronching each other. The curves become more frequent. Before reaching Utmán the valley opens ngain. In the ravines at some distance the washi grass is plentiful. The Gomal here is 200 yards wide with banks 3 feet high; the channel in the dry season is 12 feet wide and 6 inches deep.

Utmán is a widening of the valley large enough for a camp. Water and camel forage in abundance.


The road presents no difficulty. At 6 miles pass the Kala-i-Bábakar, inhabited by Kharotis, who have shown great skill in conducting water to every little spot of soil within miles of their fort. Being the only place of supply for caravans within several marches, there is always a quantity of chopped straw for sale.
A tower of refugo bas been built on a rock commanding the fort; to this they fly on any danger appearing, and prevent by their fire any injury being done to the crops or gardens below them.

The main stream of the Gomal rises here; several springs join near the fort, and flow over a fine small shingle, the stream rapidly increasing till near Utmán, where it is generally 12 feet wide, 6 inches deep, and running 4 feet per second. Its banks, 3 feet bigh and 200 yards wide, show that the river is considerable in Marcb.
'the next 6 miles about the fort are up a pass, a pebbly reach 400 yards wide and very straight. The rocks bounding it gradually rise in height from the Kala-i-Bábakur. The space at Súghúrgai is wide enough to encamp in. Fuel, water, and camel-forage abundant.

| 17 | Snínsta |  |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |


#### Abstract

The road goes over the Kotal-:-Snrwandi, estimated by Broadfoot at 7,500 feet high. The ascent among hills covered with bushes lasts for about 6 miles, and has a slope of about $3^{3}$ : then for 2 miles runs along a level ravine 30 or 40 yards wide, winding among hills that are steep on the north side and rounded on the south.


The descent towards Shínsta commences with a slope of $11^{\circ}$ for about 20 yards: here are a few stones that require breaking ; after this there is a gentle undulating slope to Shíssta, passable for guns. This march would require a few hours' labour.

There are no houses at Shínsta, the cultivators being migratory, but a little watch-tower commands the cultivation. Water is plentiful from spring; grass is scanty; but there are abundauce of thorny bushes and low trees for fuel.
 side of the Sargo defile-one called Glo Kala, or thieves' fort.

Then there is a gradual descent to the deserted fields of Khún.i-Káréz (the " bloody spring" so cnlled from the contests between two factions to possess it), which gives a good supply of water. After this the road passes through the cultivated fields of Langur for 2 miles. There are two forts at Langar, containing about 80 houses ; the larger is a square of 100 yards, the walls, 20 feet high, 6 fect thick, are made of mud aud flanked by eight towers: the gate is uncovered. This is one of the strongest forts iu Kataw'áz.

Route No. 9-continued.

| No, of Stages. | Names of Stages. | Dietancra in Miles. |  | Remaris. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Inter } \\ \text { mediate. } \end{gathered}$ | Total. |  |
| 19 | Dand | 16 | 2363 | On leaving Langar, cross a stream 20 feet wide, 1 foot deep, current 2 feet per second: the water slightly brackish. Its banks are 4 feet high, but easily passable in many places, though in spring it is scarcely fordable. Then ascend gradually to the open plain of Katawaza, and pass |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Zardhún Sbahr (green city), a fort of abont 50 houses of Balc Khel and Sulímáu Khél, with some 500 ncres of cultivation. Then for 3 miles through Gázdara, which is a puss formed by water flowing into Katawáz through the hillocks formed by the Zhérú range, and tho end of Katacang. The Gázdara gradually diminishes in width. In the middle for about half a mile the width at bottom is ouly 20 feet, the hills at the side 200 feet bigh, and the windings frequent and sharp. On the Dand side the pass is 30 feet wide, bounded on either side by bills that may be easily crowned. A few small springs issue from the crumbling rocks, but are soon lost. Guns could be dragged through the pass, and a few hours' labour would make it a good road.

Little Gazdara Pass.-There is another and similar pass, a mile or two the north, called the Little Gázdara. From Katasang the road reads over a plnin for 4 miles, descending easily to Dand. This is a fort with 30 houses and about 150 acres of cultivation, but there is no water nearer than Dihsai or Nání- the former a large village of Andars with 100 houses; the latter a group of four or five forts of Andars and Sulímán Kléls.


Leaving Dand, a dry watercourse is crossed with banks 4 feet high; it then goes among some low hillocks; the road then bifurcates, one fork going over the ridge, the other round, und both joining again at Jaralsaram, 4 miles from Dand. The road over the ridge saves a few hundred gards. It then goes over a plain, and crosses some easy hillocks near Pána. The whole road is very easy for guns. Near Pána are a number of villages and forts which would supply a brigade with grain and forage, and water abundant at all of them. Pána itself is a village inhabited by about 500 Andar Ghilzais. Supplies for a somall force could be obtained, and there is a watersupply from kávéz.

Two cross-roads from Pána to Kala-i-Kharóti.


A cluster of forts. No description of the road.

No description of the road. Encamp near a broad canal, called the Ju-i-Sher. Supplies and fuel procurable. Water, grass, camel forage abundant. Nání is a large place, and there are severul other forts in the vicinity inhabited by Andar Ghilzáis.

The road is a good one over an open flat plain. On the right pass the group of villages of Kara bághi (inhabitants Kazilbásh) and Kala-i-Sher and Kala-i-Fakír (inhabitants Andari). On the left, about 2 miles distant, is a low rauge of hills, beyond which lie the districts of Kakrak and
Waghaz. On the left, opposite Nogai, is a large group of villages called Bagla.


The road for the first $4 \frac{\mathrm{r}}{2}$ miles is good. A low range of hills borders it at a distance of $1 \frac{1}{2}$ miles to the west. The country between is well cultivated and studded with a number of villages. That to the east is equally fertile, and extends to a much grenter distance to the hills in this direction. At about 31 miles is a garden called "Chilbachagán," and between this and the town is a sandy bed of a river about 200 yards broad. From this point two lines can be taken to the

## Route No. 9-concluded.

encamping ground on the north side of the fort, i.e., the direct road through the gardens outside the town which is practicable for artillery, and one by a detnur to the right (east) which can be utilised for baggage animals. The immediate vicinity of the south side of the fort is much intersected by canals, and the Ghazni river whshes the south-west fuce. In the event of the fort being occupied by an enemy in farce, it would be necessiry for nuriny moving to a position on the north and north-east to work round by aconsiderable detour to the east. This can be done from the vicinity of Chilbachagán.

For description of Ghazni, vide Route No. 8, stage 12.
Note. The above ronte is closed by snow in winter. After Kanzúrwali the information is not very reliable.

ARTHUR R. DICK, Lieut., 2nd Punjub Cavalry.

Route No. 10.
Fhom Dera Ismáil Khánto Kandahár viá Ráh-i-Márgf.
Authority-(Native Information.)

| No. of Stage日. | Names of Stages. | Dibinnces in Milbs. |  | Remarie. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intermediate. | Total. |  |
| 1 | Haindin | 15 | ... |  |
| 2 | Kolíchi | 12 | 27 |  |
| 3 | Léni . | 8 | 35 |  |
| 4 | Mánji . . | 14 | 49 | Vide Route No. 9. |
| 5 | Mabieinai | 12 | 61 |  |
| 6 | Kasúra Kaok | 12 | 73 |  |
| 7 | tor Dabar . | 12t | 851 |  |
| 8 | Kanztrwáli . | 8 | 93늘 |  |
| 9 | Dámandar | (?) 9 | 102t | Kanzúrwáli to Dámandar (distance not certnin). The road follows the bed of the Gomal and then up a steep cscent. It is a balting-place, watered by a spring on the watersbed line, between the Kandar and Gomal streams. |
| 10 | Husén Nita . - | 102 | 113 | Dámandar to Husén Nika, 7 kós. This march is a difficult one, first over a high kotal and then through a rugged pass. The hulting-place is at the ziárat of Huseu, where the Koldad Khél, and other Sulímán Khél Ghiizáis come down to barter with the Lohánis. From here two roads strike offone to Gbwaleri, tie other to Záo. |
| 11 | Gasta or Gugtoi . | $10 \frac{1}{2}$ | 123른 | Husén Nika to Gasta, 7 kós. Road along the bed of the Kandar stream. This is au eucamping ground without houses, belonging to the Mando Khél, described as a pastoral race in alliance with the Nésars and generally able to hold their own. They never molest caravans passing through their country. |

Route No. 10-continued.

| $\begin{gathered} \substack{\text { No. } \\ \text { of } \\ \mathbf{S}^{\prime} \text { ،ges. }} \end{gathered}$ | Names of Stages. | Distanees in Miles. |  | Remabig. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Inter- medintc. | Total. |  |
| 12 | Kilarkandi . . | $9$ | 132 ${ }^{\frac{1}{2}}$ | Gasta to Khnrkandi, 6 kós. Road along the bed of the Kandar stream. Hereare a few villages in the midst of cultivation belonging to Mando Khóls and Násars. |
| 13 | Måmú Khíni . . | 9 | $141 \frac{1}{2}$ | Kharkandi to Mámú Kháni, 6 kós. Road generally through a billy country along the bed of the Kandar. <br> Mámú Kháni is a plain inhabited by Mando Kléls and Násars. |
| 14 | Mainíl | $\underline{ }$ | 1531 $\frac{1}{2}$ | Mámú Kháni to Mnkhál, 8 kós, an encamping ground. A long and tiresome march. The road at first goes over the Mámú Kháni plain, and then enters a narrow defile commanded by lofty hills. This defile is about 5 lós loug. From Makbál three passes or valleys open out into view-those of the Zhob, Kandar, and Gomal. |

Tlie Káknrs hold Zhób. The Karótis, Appezis, Mando Khél, Shiránis, and Wazírís nre to be found in the other troo. Major Grey sajs that at Makhál the roads to Ghazní and Kandabár respectively separate.

Another account (native) makes them separate at Trikhgáz.


Makhál to Trikhgáz, 6 kós. The road passes through a long defile, the country being hilly and barren. The place itself consists of 30 or 40 houses of the Jhumiran tribe. It was in the days of the Mogal Empire fanous for the manufacture of weighingscales made of raw hides; and although this trade bas almost disappenred, yet the manufacture still exists. Water procured from a small stream.

Trikhgáz to Lári, 7 kós. Lári is the name of a plain where káfilas usually encamp. It is occupied by a poor and inoffensive tribe of Kákars. Water from springs. At Lári the road turus off to Kandahár.

Spínwárí on the road from Kandahár to Quetta; about 60 miles. No reliable information regarding this route.

About 30 miles through the Marúf valley. The valley is well cultivated. The town of Marúf looks a long straight one, running generally uorth and south of a whitish appearancc. It is supposed to be fortified in the same manner as Knlat-i-Ghilzai, only there is no hill. The, Arghastán river runs to the north of it and forms a deep ravine seemingly. To the south of it there seens a spur runuing out from the range which entirely commands it. To its west is a logg narrow wood running enst and west.
(N.B.-This was observed through a telescope at a distance of some 15 miles, so the description canuot be considered accurate.)

The houses of the villages in the Maruf valley are not domed.

Route No. 10-continued.

| No. of Stages. | Names of Stages. | Distancris in Miles. |  | Rimares. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intermediate. | Total. |  |
| 25 | A Stagh | 15 | 278 | At its north-eastern end the Arghastán valley is almost a circular platcau surrounded by hills, with the town of Marúf in the centre of it. It is seemingly highly coltivated and is fairly wooded. The valley then becomes a long, narrow, winding one for about 20 miles, about which distance it reaches |
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|  |  |  |  |  |
|  |  |  |  |  | the plateau described ns dividıng the Kúshk-i-Rúd and Arghastán valleys, and it here nssumes a more open character, till it reaches the village of Amin Kala, when the hills dividing the Kúslls-i-Rúd and Tamák valleys commence closing it in.

$26 \mid$ Amín Kala $\left.\quad \cdot \quad\left|\begin{array}{l}15 \\ \end{array}\right| 293 \right\rvert\,$

Pass Arvat, Muhamad Aslam, and Mezkín Khén, distant $10 \frac{1}{2}, 11$, and $12 \frac{1}{2}$ miles, respectively, from the last stage. On leaving Mezkín Khán the road passes through low stony hille and ciose to Anín Kala crosses the Wándóz nálá, the left bank of which is very steep. Amín Kala is a large village with a fair encrmping ground. The water-supply is close at hand, and grain and bhusa are plentiful. The villagers do not keep a large supply of wheat on hand, but there are mills on the river at frequent intervals where wheat can be ground. The Wándóz nälá here joins the Arghastán. On this náláa are situated the villages of Abdúl Latif and Mír Aslam. On the Wúchanakar nálá, which joins the Wándóz about 1 mile from Amín Khan, is Saifulla. From these villages and also from Mezkín Khán, supplies could be collected for a force encamped at Amín Khán. There is good grazing for camels in and along the river bed.

27

At intervals of about $\frac{1}{2}$ a mile are Muhamad Husén, abdulla Khán, and Pír Mubamad. From Pír Mubamad to Ata Muhamad (nbout 6 $\frac{1}{2}$ miles), the road passing round the north of the high hill, above the latter place becomes more difficult for wheeled traffic. In a few places it will be necessary $t$ leave the road and pass through the low gravelly hills to the north, owing to the rocky and dangerous nature of the path along the river bank. Between Pír Muhamad and ata Muhamad is the village of Fakír-úd-Dín, on the left bank, close to Fakír-úd-Dín, is the Lalar nála, 3 miles from the mouth of which is the village of Smáilai. Between Amín Kala and Pir Mubamad, on the left bank of the river, is Sájaó, to the south-east of which are the villages of Muhamad Kbán Loé Káréz, Kachnái Káréz, and Imárat. To the four latter villages there is a rough road from Amín Klán. Good supply of water near encamping ground.

Supplies might be collected here from Ságzái, Khógáni, and Fakír-úd-Dín. There is very good grazing for camels close at hand.

The road proceeds westwards along the right bank of the river for about 12 miles, when it turns northward and leaves the valley of the Arghastán over a low kotal which offers little difficulty for the passage of guns. It then proceeds in an westerly direction towards Murghan Kecha.

The right bank of the Arghastán, along which the road runs, slopes, with a few exceptions, gradually down to the water. The opposite bank is steep, and only accessible at intervals to guns and cavalry.

Ságzái, Karwán, Katzi, and Babar are passed at 3, 5, and 7 miles respectively.
Before reaching Ságzái the Sodani and two amall nálás are crossed. Ou the former is situated the village of Khógani, which consists of three hamlets about $\frac{1}{\frac{1}{2}}$ mile apart.

The nálás present no difficulty to the passage of guns. The road is rough and stons, but
passnble for guns ; all the nálás could be ramped with a few minutes' labour. The drainage from the hills on the right of the road in falling into the river crosses and cuts up the track at frequent intervals, but most of the nálás thus formed can be made practicable for guns with a few minutes' labour.

Route No. 10-concluded.
The rond is commanded on the right throughout almost its entire length by low undulating hills. An enterprising enemy might seriously annoy convoys, all the ground being very favourable for the concealment of large bodies of men.

Murglan Kecha is a large village of some 200 houses and supplies are plentiful. There is a good campiug ground to the east of the village. The water-supply is obtained from a small stream mbout $\$$ mile to the south. Another very small stream runs through the village. The water from both these sources is brackish. There is good grazing ground for camels in the neighbourhood.


Cumping ground confined by cultivation.

Between Murghan Kecha nud Mandi Hissár two nálás are met, - the first of which is about 1 mile from Murghan Kechn. This nálá would be difficult to cross with guns during rainy weather, owing to the swampy nature of the ground near the road, and a slight detour to either bank would be necessary: otherwise the road, which passes through a stony undulating country, is good. Water from káréz. Sinall post, the garrison of which was 30 sabres und 40 rifles. Grain and bluisa procurable.

30 KANDABÁB . . 10 各 $\quad$ North-west towards the low kotal of Shórandán.
 Its bed is about 100 yards broad, and generally contains water in pools. At 2 miles 7 furlongs the crest of the kotal, broad and flat. Thence steady but easy. descent for nearly a mile. Shórandán village lies off the road to the right, and is about 4 miles from Mand-i-Hissarr. After getting on to the plain, the road is crossed by numerous irrigntion canals, which might be troublesome to artillery. The soil is also soft and cuts up with traffic. At 6 miles 1 furlong cross dry bed of Shorad river. It is broad and shallow. At 8 miles 7 furlongs poss a ziárat on the right, at which the Kilát-iGhilati road comes in from the east (right rear). At 9 miles 7 furlongs the suburb of Deh Khwaja, lying ulong the left of the road for nearly $\frac{1}{2}$ a mile. Irrigated fields on the right. The road leads straight to the Bár Durání Gate, but there is a broad track all round the walls outside. The Ídgáh, or north gate, is renched at $11 \frac{1}{4}$ miles, and the centre of the former British cautonment, north-wert of the town, at 12 miles trom Mand-i-Hissár. The best camping ground is on the maidán, worth of the city between the graveynrds and the hills, and also about 12 miles.

The above route ${ }^{1 s}$ fairly corroborated by information supplied to Major Macaulay, from which it seems that Kandahár is 34 easy marches from Dera Ismáil Khhn. This road is said never to be closed by snow.

ARTHUR R. DICK, Lieut., 2nd Punjab Cavalry.

Route No. 21.
Ghazní to Bámián via Maidán and the Unai and Irák Passes.
Authorities-Kábal-Kandahár Force (1880); Route of Force under General Ross (1880).


## Route No. 21-continued.

At the 4th mile rond ascends a low kotál in neurly a straight line. (This kotal overlooks the Ghazni plain.)

From bere the hills open out on both sides, forming a basin from 1 mile to $1 \frac{1}{2}$ miles broad, in which is a line of kárézes, furuishing water to a few score acreas of cultivation.

At $6 \frac{1}{2}$ miles the hills hnve converged again, and here is the southern end of the Sher Dnhán pass. The road ascends gradually to the crest of the pass, which is reached at $7 \frac{1}{3}$ miles (elevation 8,500 feet), containing hills bare und treeless, easy of access, especially from the east.

The hills open out from entrance to crest of pass.
at 91 miles northern end of pass is reached. Ascents and descents gradual, and quite practicable for the heaviest wheeled guns. The road through the pass is good, and broad enough for four horses abreast, and easy for all arms.

List $3 \frac{1}{2}$ miles road good over opeu country. Hills to the east from 2 to 3 miles distant, right up to Shashgao.

Shashgao is a walled village, surrouoded by a considerable amount of cultivation. Good camping ground on open plain. Hills to the enst, : mile distant. The Shinéz is here a very small stream, but water is plentiful in numerous springa. Supplies and forage procurnble for a large force. The whole of the Kábal-Kandabár force camped here on 14th August 1880.

$2 |$| Haft $\AA$ Siá | $\cdot$ | $9 \frac{9}{4}$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |

Road easy for all arms. On the east it rans close under the hills, and the ground thereabouts is unsuitnble for the action of cavalry and wheeled artillery. To the west the ourntry is open, and troops can move on a broad front.
Supplies and water sufficient for three mixed brigades of all arms. Camel-grazing and forage also procurable. Inhabitants Wardaks.

$3 |$| Haidar Khét. | $\quad-10 \frac{1}{2}$ |
| :--- | :--- |
|  | $33 \frac{1}{2}$ |

Up to about 5th mile troops can move along on a broad front, the country being open. At about 5 miles the road narrors, and troops and bagguge lisve to converge on the one road for a short distance.
Road passes under low hills on right; a little diffi. cult in places for heavy guns. The valley is extremely fertile and well cultivated, with numerous villages dotted about.

Good camping ground on west of road, with room for two infantry brigades (8 regiments), and room for a similar force can be found a mile or so this side of Haidar Khél, between that place and Jakin (Thkia).

Supplies and water in sufficient quantity for one cavalry and three infantry brigades.

| 4 | Sátadábiád | 5 |
| :---: | :---: | :---: |
| 6 |  | 104 |

Easy rond along main Kábul-Ghazní hiqhway.
The best camping ground here is on the opposite or left bank of the Shínéz river. Supplies have to be collected at Sáiadábád from the villages in the Shínéz and Unkái valleys, both of which are fertile and well cultivated.

The road runs for about 3 miles along an open
$48 \frac{3}{3}$ valley, and thence to Shekhábád is commanded by low hills close to it on the east, and by higher and more distant ones on the west. There is a rapid descent into Shekhábád (elevation 6,650'), where the river is crossed, and thence a continnous ascent, at first somewhat steep, but gradually becoming gentle, up the valley to Top.

Ample space for camping, and a good supply of water from a stream.


## Route No．21－continued．

Ample camping ground，and water abundant and good from a stream．Near Kaln Durání is another fort called Kala Sher Muhumead，and the place is known by either name．


The road is good，and fit for wheeled artillery，ex－ cept at one or two points which require widening and inprovement，to Páen Maidán， $7 \frac{1}{\nmid}$ miles．For $2 \frac{8}{4}$ miles from Kala Durání，it continues to descend gradually，when the Kábal river is crossed，which here，bending north－enst，flows through the La－ landar valley to Kábal．The river was easily torduble in April， $18^{\prime \prime}$ deep．Hence to Páen Maidán （elevation $7,170^{\prime}$ ）the valley is somewhat contracted，road following the course of the river．

Frow Páen Maidán（where General Ross encamped in 1890）a track follows the river up the Bálá Maidán valley，joining the Kábal－Bámián road near Kot Ashrú（vide Route No．6），It would require making for wheeled artillery．

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 8 9 | Jálrez－ Sar．f－Cfashma | $\frac{10 ?}{10 ?}$ | 82 ${ }^{\frac{4}{4}}$ |  |
| 10 | Unat Kotal（foot of） | 9 ？ | 92⿺𠃊⿳亠丷厂犬 |  |
| 11 | Gardan Diwait | 12 |  |  |
| 12 | Kala－t－Khírzár | 11 | $113 \frac{1}{4}$ | Vide Route No．6，Stage 3 et seq． |
| 13 | Kala Irák | 151 |  |  |
| 14 | Kala Topchí ． | 10才 | $139 \frac{1}{3}$ |  |
|  |  |  | 1493 ${ }^{\frac{3}{4}}$ |  |
| 15 | BÁMİN ． <br> （Kala Surkárí）． | $8{ }^{\text {8\％}}$ | $158^{\frac{3}{8}}$ |  |

The above is distinctly the best and most direct route from Ghazní to Bámián．There is another route which runs north－west from Ghazní，crosses the southern continuation of the Paghmín range by the Kotal i－Náúr，and the Helnand some 40 miles below Gardan Diwár，and finally passes over the Band－i－Bábá by the dificult Kotal－i－Reg into the Bámián valley．The iuformation regarding this route is scanty and generally unreliable，being almost entirely from native report．What is known is given below．

# Ghazní to Bámián viá the Kotal－i－Náúr and Kotal－i－Reg． Authority－Maitland． 



Route No. 21-concluded.



Road good, along steep, rocky bill-sides for 2 miles. The stream is then crossed (fasily fordable, except when in flood; there is also a wooden bridge practicable for camels), and the road follows the opposite hill sides for the rest of the stnge. It is thronghout made, and good. Several villages are passed.
A village of 30 houses of Murád.
The road to the Kotal-i-Reg turns north from the main road at Ghargara, and ascends the Band-iBábá range. The kotal is passed beyond Jiriak. hána. The passage is said to be urrow (about 30 yards wide) with precipitous rocks on either hand. It is stated to be practicable for horsemen, but not for camels. From the kotal the road descends to the Damián valley by the Dara Faoládi, and is said to be fair.

The Kotal-i-Reg is said to be closed for four months in the year. It derives its name from the sand-drifts which nccumulate on the kotal. The present Amír advanced into Afghánistán by this pass, meeting Sher $\Delta$ líat Ghazuí.

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[^0]:    - This 9 -mile march takes at least six hours, and is very diffliult for laden animals.

