This paper is transmitted for the personal

Andre Organie River Com

by direction of His Excellency the Commander-in-Chief in India, and is to be considered Secret.

(To appear in annual returns, see rule

606

THE

MILITARY GEOGRAPHY

A. 5.

No. 13

C. 26. ROOM 0011

Record Copy

OF

AFGHANISTAN.

PART III.

HERAT

73.7

MAJOR E. G. BARROW,



SIMLA:
PRINTED AT THE GOVERNMENT CENTRAL PRINTING OFFICE.



THE

MILITARY GEOGRAPHY

OF

AFGHANISTAN.

PART III.

HERAT.

BY

MAJOR E. G. BARROW, INDIAN STAFF CORPS.





SIMLA:
PRINTED AT THE GOVERNMENT CENTRAL PRINTING OFFICE.
1893.

COSTORY AND DISPOSAL OF RECEST BOOKS, REPOSTS, &c., ISAVED BY THE INTELLIGENCE BEARGE, QUARTER MASTER GENERAL'S DEPARTMENT IN INDIA.

The attention of His Excellency the Commander-in-Chief having been called to the want of system in the custody, me and disposal of exceet works, &c., His Excellency desires that in future the following regulations may be strictly adhered to:—

- (a) Officials to whom works of a secret nature are issued, will be held personally responsible for their safe custody, and they must be very careful to keep them under lock and key; and under no circumstances to here there where they are likely to be observed by people who should have no access to them. They will submit anough! (on the 1st January) to the Intelligence Brauch a return showing that such matter is utili in their prosession.
- (b) When an official to whom a secret work has been issued vectors his appointment or is transferred or proveds on they on twee (out of India for any period, or in India for any period exceeding those over to his successor the late temperary or period, and in India for any period exceeding those over to his successor the late temperary or percanascal, and a report administed to the Indialigence Planch by the officer handing over the issue showing that this has been done. The following is the form of report to be made: —

No.	Fall title of work.	No. of vols.	No. of copies.	REMARES: Explaining reason of handing over,
		l	1	

Place and date.

Signature

Signature of receiving officer.....

- In the case of officers of the District Staff, these reports must be sent through the G. O. C.
- (c) In the cree of an official bearing his station under circumstances other has above stated, it is optional for him to hand over the secent works in his stages to another officer with the above prescribed formalities; but if he does not do so, he is as responsible for them during his aboves as he is during his presence at his fastion.
- (d) Personal or complimentary issues of secret works will be held by the recipient until his departure from India, when the secret matter will be roturned to the Intelligence Branch for safe ousledy, or special permission obtained for its retention.

ARMY HEAD QUARTERS;

JAMES BROWNE. Major-General.

Quarter Master General in India.

Intelligence Braveh Diary No. 70 of 1893-" Afghanistan."

NOTE.

"The Military Geography of Afghanistan" has been compiled in five parts, namely :—

- Part I. Badakhshan, by Major E. G. Barrow, Indian Staff Corps.
- Part II. Afghan Turkistan, by Major E. G. Barrow, Indian Staff Corps.
 - Part III. Herat, by Major E. G. Barrow, Indian Staff Corps.
- Part IV. Kabul, by Captain A. H. Mason, D. S. O., Deputy Assistant Quarter-Master General, Intelligence Branch.
- Part V. Farah and Kandahar, by Colonel E. R. Elles, Assistant Quarter-Master General, Intelligence Branch.

The object of this work is to present in a concise and readable form information about the several provinces of Afghanistan of interest from a military point of view. This information has been compiled from reports, gatetteers, route books, and the records of the Intelligence party with the Afghan Boundary Commission.

The work was commenced in 1801 and finished in 1803, before the Kabul Mission took place. It is important to remember this as events are constantly happening, and fresh knowledge is being acquired, which tend to modify statements and opinions contained in this work. For instance, on page 2 of Part I, Major Barrow in writing of the read from the Baroghil pass to Mastuj vid the Yarkhun valley, describes it as "an impassable route in summer and very difficult in winter." From reports lately received from Captain F. E. Younghushand, C.I.E., and Lieutenant G. K. Cockerill, who examined this route in October and November 1803, respectively, it appears that the route in question is easy for eight months in the year, namely, from September to May, and that when it is closed, there is an alternative route vid the Kankhun pass which is open during the summer.

It should also be remembered that any opinions given or deductions made, are only the personal views of the writers and have no official authority.

G. II. MORE-MOLYNEUX, Lieut.-Colonel,

Assistant Quarter-Master General,

Intelligence Branch.

PART III. THE PROVINCE OF HERAT.

CHAPTER I.

INTRODUCTION.

The third great division we have to deal with is the Afghan province of Herat, a province which has at times been independent but has latterly formed part of Afghanistan. The inhabitants, except in Sabzwar, that is, the southern portion of the province, are for the most part alien to the Afghan, and this fact is one which should always be borne in mind when considering the military or political situation.

We have now, thanks to the Afghan Boundary Commission, a very complete knowledge of the most important districts of the province, and here again it is the reports of Colonel Maithand and Major Peacocke, which have been mainly relicd on. The deductions drawn from that information are my own personal ones, and again I must warn the reader against presuming that they represent official opinious.

PHYSICAL FEATURES.

The Herat province may be described as that part of Afghanistan which is drained by the Murghah, the Hari Rud, the Adraskand and the affluents of the Farnh Rud, above where it enters the plairs. It is bounded on the north by the sandy desert known as the Chol, on the east by the mountains of the Huzara country, on the west by the deserts of Khoresan. It is thus, to a crain extent, physically cut off on all sides but one by natural obstacles from the surrounding countries and provinces. On the southern side it is open, and the great roads from Kandahar and Sistan lead to it through the broad space between the Taimani hills and the Persian desect.

The most populous, fertile and flourishing part of the province is that comprised in the districts of Herat, Ghorian, Obeh, Karokh and Shahfilan, that is to say, the valley and basin of the lower Hari Rud. These districts are traversed by good roads, and communication with Persia, Badghie and Sabawar is easy and unobstructed by any serious obstacles. They are capable of supporting troops and are well fitted for military operations, so much so that wheeled transport even could be used with the application of a very slight amount of labour. North of this fertile tract is the Siah Bubak, known to Europeans as the Parapamisus. This mountain range is really a prolongation of the middle branch of the Koh-i-Baba. North of Herat, and to the eastward of that place, the hills of this range are of some height, the peaks rising four or five thousand feet above the valley. The roads over this part of the range are rough and rather difficult, but westward of the meridian of Herat the hills become lower and the passes easier, till in fact the range becomes a series of low downs. These hills curve round from west to north-west and are continued in that direction by a range on the left bank of the Hari Rud. North of the Siah Bubak is the district of Badghis. Badghis is for the most part an expanse of open rolling downs of light clay soil, covered with rich grass during the earlier half of the year, but arid and parched during the latter half. The eastern portion of Badghis, comprising Kushk and Kala Nao, is more and more hilly as one travels east, until it may be characterized as almost mountainous. The only perennial river in the whole of Budghis, not counting the Hari Rud on its western border, nor the Murghab on its eastern, is the Kushk; so that from July to December the country away from these streams is almost destitute of running water, a very important point to remember. In spring and early summer, however, every walercourse contains a rivulet. The hills of Badghis gradually sink into the rolling waterless Chol, which is here the natural frontier between Iran and Turan.

The most important features of the country north of the Parapamisus are the Marghab and Hari Rud, whose valleys constitute the only practicable lines of approach across the Chol from Turkomania. The Murghab is, generally speaking, deep and unfordable, and, when in flood, is an impassable obstacle. The Hari Rud, on the contrary, is generally shallow and fordable, except of course in flood, when it becomes a rapid turbulent river, about 200 yards wide. The flood season is from the middle of March to the beginning of July. Though the Hari Rud has generally a flat casy bed, it must be distinctly understood that it leaves the Herat valley by a rocky, impassable defile.

East of the Herat valley and Badghis, is a wild mountainous country inhabited by Firozkohis, Taimanis and Hazaras, though but few of the latter are in the Herat province. This is a region of barren rugged hills rising in places to 10,000 and even 12,000 feet. The main axis of the mountain system comprised in this area is the Band-i-Baba, which is in itself a continuation of the Hindu-Kush. The Band-i-Baba, just before entering the Herat province, breaks up into three main ranges, which tritureate like the prongs of a pitchfork. The northern one is the Band-i-Turkislan, the central one is generally spoken of as the Koh-i-Daba, and the southern one is called the Band-i-Band or Safed Koh. Between the two first is the country of the Firozkohis, an impracticable region for military operations. Between the two read connecting Kabul with Herat; it is not, however, an easy road and is of minor military importance. South of the Safed Kobis the Taimani country, which also is a country unsuitable for the movement of troops?

South of the Herat valley is the open country of the Sabzwar district, drained by the Adraskand, which lower down becomes known as the Harut Rud. One prominent feature in this southern part of the province is the Do Shakh range, which, running obliquely from the Hari Rud near Zindajan to the Persian frontier, considerably narrows the front available for military operations on the roads leading south from Herat, though at the same time it must be remembered that the Do Shakh range is traversible at several points. The Hari Rud in this part of its course, that is, in the plain country of Herat, is no obstacle except when in flood (middle of March to end of june), and so for 8 or 9 months of the year need scarcely be taken into consideration.

BOUNDARIES.

The boundaries of the Herat Province are as follows :-

North.—The new Russo-Afghan frontier line from Zulfikar on the Hari Rud to a point N. E. of Kala Wali. The Zulfikar pass itself is Afghan.

West.—The Perso-Afghan frontier line. This where it passes through the salt desert is rather loosely defined, but from a point a few miles above Toman Agha, the Hari Rud itself forms the boundary.

South.—From the junction of the Khushk and Harut Ruds, it runs up the Khushk Rud to Bazdeh, then passing close to the western end of Koh Bechiberau, it regains the Barut Rud, or Adraskand, and, following it some way towards Sabzwar, passes into the Taimani hills and there crosses the Forah Rud, so as to include nearly the whole basin of that river within the hills.

East.—The watershed between the Parah Rud and Helmand basins. It then crosses the Hari Rud above Daelat Yar and runs through the Firozkohi country, to the Russian frontier east of Kala Wali.

ADMINISTRATIVE DIVISIONS.

The province of Herat is divided administratively as follows :-

(1) The city of Herst and the 9 butuks or sub-districts in its vicinity. This portion of the province is directly administered by the Governor of Herst, however, Shahfilan has now a Hakim of its own. Houghly speaking, each butuk consists of the villages watered by a particular canal or canals.

^{*} Safed and Siah Kob are names given by Ferrier and found on many maps, but are not in unigar use.

- (2) Ghorian to the west of Herat and adjoining the Persian frontier.
- (3) Karokh, north-east of Herat.
- (4) Obeh, east of Herat up the valley of the Hari Rud.
- (5) Sabzwar, south of Herat.

These four districts are known as the Chahar Wilayat of Herat, and each is administered by a Hakim. To them may now be added:—

- (6) Shahfilan, properly one of the 9 buluks which lies south of the Hari Rud and Obeh, and to the cast of Herat.
- (7) Badghis, including Kushk and Kala Nao, that is, the country between the Russian frontier and the Siah Buhak range.
- (8) Murghab, between Badghis and Turkistan.
- The Taimani country, south-east of Herat, in which may be included Daolat Yar.
- (10) The Firozkohi country, cast of Badghis, a portion of which is more or less independent.

Of the above, (7) and (8) are described in Chapter II; (1) (2) (3) in Chapter IV; (4) (6) (9) (10) in Chapter V, and (5) in Chapter VI.

Towns.

The only places that can be described as towns in the Herat province are Herat, Sabzwar and Ghorian.

Of these, the only really important place is Herat. Sabzwar is a walled town, in ruins, and now contains only about 600 families. Its position, however, on the Kandahar road makes it important. Ghorian is a long straggling place, with about a thousand families and can hardly be called a town.

POPULATION.

The total population of the Herat district is estimated by Colonel Maitland at about 128,000 families, or say 650,000 souls. Of course, this estimate is a mere approximation, and the population may be anything between half a million and three quarters of a million. The city of Herat contained in 1986 about 8,000 inhabitants, while in the neighbourhood, that is to say, in the 9 bulnks which comprise the district of Herat, there were said to be 60,000 families, of whom more than two-thirds were Heratis, the remainder being Afghans. Herati, it must be understood, is the term usually employed for all Persian-speaking inhabitants who are not Afghans, such as Tajiks, Temuris, Arabs, Jamshedis, etc. In Obeh there are about 4,500 families, of whom nearly Arabs, sulmittee, the 2,000 are Alghans, mostly Ghilzais. Ghorian and Karokh are distinctly Herati as regards their population and include very few Alghans. They each contain about 4,000 families, Salvawar is the most Afghan district of the province, and excluding the outlying districts of Anardara and Kala Kah on the Persian border, the Afghans are to the rest, as at least 3 to 1. They are chiefly Duranis, so that ethnographically Sabzwar belongs to Afghanistan, while Herat does not. The total population of the district is probably between 60,000 and 70,000. The population of Badghis, the Firezkohi country, and the Taimani country is very uncertain; but Colonel Maitland puts them respectively at 10,000, 7,000, and 14,000 families.

Breadly speaking, the population of the province may be said to consist of the distinct classes; the (1) Heratis, who are mostly what we call Tajiks and Parsiwans, (2) Afrlans, mostly Ghilzais and Duranis, dwelling in Obeh and Sabzwar and (3) the Chahar Aimaks. As regards the latter, there has been considerable misconception in India, and I have therefore thought it advisable to here give a short account of them.

ТПВ СНАНАВ АІМАК ТВІВЕЯ.

The meaning of the word Aimak is simply nomad, and at the present lime the following four tribes are those usually understood by the term :--

1.	Jamshedis]	Fide Chapter II.
٤.	Suni Ilazaras o	f Kala Nao		•••	,
3.	Firozkoliis		•••]	Fide Chapter V.
4	Taimania) the sample

The Jamshedis occupy the Kushk district in the centre of Badghis, but a large portion of this tribe has lately been deported to the Hari Rud. East of them come the Suni Hazaras, and east of them again, between the Band-i-Turkistan and the Band-i-Daba lies the Firozkohi country. The Taimanis occupy the hill country south-cast of Herat. Some authorities include the Temuris among the Chahar Almaks, but this is a mistake, as the Temuris abandoned Afghan territory at the beginning of the century.

The Jamshedis and Firozkohis are of Persian descent, the Hazaras are of course Turanian. They were brought from the Hazarajat to their present locality by Nadir Shah. The Taimanis are in the main Persian, but they have a strong strain of Kakar Pathan blood.

Among the Chahar Aimaks the authority of the tribal Khaw is considerable, but of late the Afghan policy has been to diminish their power and influence. The Jamshedis and Hazaras have always been more or less united tribes, but the Firozkohis are divided into the Mahmudi or Western Firozkohis, and the Darazi or Eastern Firozkohis. While these, again, are divided into rival clans. The Taimanis are divided into northern and southern, the former being under several chiefs and the whole without much cohesion. All the tribes are seminomadic, that is to say, people who dwell in tents, depend mainly on their flocks and herds and do not pay revenue on land. The southern Taimanis use the black blanket tent of the Afghans; all the others use the felt tents known as khargabs or kabitkas. All the tribes speak Persian, but the dialects differ. The Jamshedis and Ilazaras are all horsemen, and so are most of the Taimanis and western Firozkohis. The horses generally are indifferent. They fight on horseback, but with firearms, and rarely with sword or lance. The Firozkohis are admitted to be the bryest, and the Hazaras the least so, and also the least intelligent. All are badly armed. The following estimate has been made of their numbers:—

Jamshedis	•••	•••	4,000	families		
Kula Nao Hazaras			4,000	,,		
Mahmudi Firozkobis	•••		3,400	30		
Darazi Do.			7,400	,,	Including	Tojiks.
Northern Teimanis		•••	6,000	,,		
Southern Do.			14,200	,,		
		_				
	Total		39.000			

All the tribes are more or less disaffected towards Afghan rule and would readily welcome an English or Russian occupation. But as regards this, I fear I must add that the same may be said of all the inhabitants of the province, excepting the Afghans of Sabzwar and possibly those of Obeh.

CLIMATE.

The climate of the Herat province has four seasons—bahar spring, taimus summer, tirima autumn and zamistan winter. Spring is supposed to commence about the Naoroz (21st March), and each season to last about 3 months. Winter is cold in the Herat valley, with snow, but it does not as a rule lie long. March and April are rainy months, and the rainfall appears to be heaviest

after a severe winter. By May the weather is clear and then towards the end of the month the famous \$Brd-issd-o-bist-rox*, or wind of 120 days, sets in. During the summer months the wind is very strong, being always highest after sunset, and if there should be rain to the north it increases almost to a luvricane. Thi November there is always more or less wind in the Herat valley. This wind is felt far to the south and blows with unabated fury in Sistan. In Badghis there is no wind, nor is it felt east of Tunian, in the Herat valley. There is no summer wind at Obeh, and this place has a much pleasanter climate than Herat, which is disagreeable and not very healthy except in winter. When the wind is not blowing, the summer heat in the Herat valley is great, though of course not comparable to that of India. The barley harvest of Herat and Glorian is due about the 20th June, that of Karokh and Obeh on the 1st July, that of Badghis about the 10th. The wheat harvest is about 10 days later than the barley harvest.

During the summer and autumn the weather is pretty settled, usually fine and clear. By September it begins to get cool again, and that month and October are very enjoyable. In November, clouds appear with cold winds, rain and sleet, but there may be tolerably fine weather nearly up to Christmas when the real winter sets in.

SUPPLIES AND TRANSPORT.

Regarding this important military subject we have now fairly reliable internation. It has been calculated that Herat and Ghorian, that is to say, the Herat valley, could supply a force from local resources with about:

So that an Anglo-Indian Army Corps of the usual strength could be supplied with about 6 months' food for men and 2 months' for animals. Major Rind was of opinion that with some assistance from Farah the Herat province could support a force of 15,000 men all the year round, though of course with occupation, cultivation would increase, and a much larger force might be subsisted.

Forage is on the whole plentiful, and probably about 200,000 maunds of bhusa would be available. Lucern is largely grown in the valley, and excellent gass is abundant in the hills to the north, and in Badghis all the spring and part of the summer; camel-grazing is good almost everywhere, particularly towards Obeb. Sheep are numerous and quite sufficient to meet the wants of a large army. Vegetables and fruit are abundant in the Herat Valley.

Transport is not very plentiful. Camels are not numerous, nor indeed are ponies, but there are great numbers of donkeys. However, in the Herat valley there is nothing to prevent the utilization of wheeled transport.

ARMY.

Statistics under this head can never, of course, be reliable, as garrisons are constantly shifting, and the troops being increased or reduced according to political exigencies. In 1895-56, the garrison of the province was:—

10 023340 01 3444040 (444404)		Total	8,900
10 bairaks of khasadars (military police)			1,000
7 batteries of 6 guns			700
12 squadrons	•••		1,200
9 battalions infantry			5,400

But in 1837 the artillery was reported to have been increased to 12 batteries.

Besides the regulars, there are about 4,000 irregular horsemen who are the local militin and are mostly at the outposts.

Nearly the whole of the regular troops are at the capital, but there are small detachments at Ghorian, Obeh, Bala Murghab and Chakcharan.

The regulars are mostly Kabuli or Kandahari troops. The irregulars are very badly armed and totally undrilled. They are mostly Heratis, and therefore unreliable.

The only fortified places in the province are Herat and Bala Murghab. The walls of Sabzwar are in ruins and Maruchak is merely a post.

ROADS.

In a military sense the only important roads are those which lead to and from Herat, and of these the principal ones are the following:—

- (1) From Kundahar vid Sabzwar.
 - i) " Sietan rid Lash Juwain and Anardara, or vid Farab.
- (3) , Kabul via Daolat Yar and the Hazarajat.
 (4) Bala Murghab via Kala Nao and Zarmust pass.
- (4) "Bala Murghab viā Kala Nao and Zarmust pa
 (5) "Bala Murghab viā Kushk and the Baba pass.
- (6) , Panjdeh rid Kara Tupa.
- (7) Sarukhe rid Zultikar and the Sang Kotal.
- (8) , Sarakhs wid the Nihaleheni pass and the Hari Rud valley.
- (9) , Mashhad md Tirpul.
- (10) "Mashhad viā Turbat-i-Haidari.

As regards (1) and (2), reference is invited to Chapter VI. The Kandahar really very good, and armies accompanied by wheeled artillery have frequently marched by it; but in winter the want of camel grazing would render its use a difficult matter for a large force, while in spring the rivers in flood would offer obstacles to rapid movement. The total distance is 405 miles, which an army would take about 6 weeks to cover. The Sistan routes would only affect military operations if a British force based on Sistan were threatening the line Heart-Kandahar. They are easy routes and that by Anardara was used by the Afghan Boundary Commission. The total distance from Lash-Juwain to Herat is 18 marches or 215 miles. (References, Routes VI and III-C, Helmand series, A. B. C. Routes)

The Herat-Kabul road viá Daolat Yar is a made road for most of the way. The total distance is 479 miles, and of course it is much shorter than the route viá Kandahar; on the other hand, it is only open for half the year and is really only fit for nule or pony carriage in its present state. Its bearing on military operations is discussed in Chapter V. (References, Route XLVI, Herat series, and XIX, Kabul series, A. B. C. Routes).

The routes to Bala Murghab vid the Zarmust and Baba passes are the ebortest from Herat, but by no means the best, and are only fit for baggage animals. The altitude of both these passes is over 7,000°, and they are consequently closed by snow for about three months. The best routes are the circuitous ones by the Batan and Ardewan passes, but the former are particularly important as turning or flanking routes and are therefore noted here. The distance from Herat to Bala Murghab ria the Baba pass and Kushk is 137 miles, by the Zarmust Kotal and Kala Nao, 142 miles, i.e., about a fortnight's marching. (References, Route XX, XX-B, and XXIII, Herat series, A. B. C. Routes).

As regards the road from Panjeleh as far as Kara Tapa, 64 miles, the road follows the Kushk Rud. From Kara Tapa to Hornt there are several routes, and the hills may be crossed by either the Ardewan, the Robati-Mirza or the Batun pass, all of which might be roade good gunroads. They all meet again at Parwana, 12 miles from Horat. Fix the Batun pass it is 79 miles from Kara Tapa to Herat. by the others about 70 miles, so that Herat may be considered as about 14 days distant from Panjeleh. (References, Routes XVIII, XIX, and XIX-A, Herat series, A. B. C. Routes).

The road from Sarakhs to Zullikar is now a good cart road and presents no difficulties. Onwards the road by Gulran and the Sang Kotal is a good camel road and might casily be made practicable for guns. The total distance is 190 miles, and though it is reckened only 12 marches would probably take troops nearly three weeks. (Reference, Route XIII, Herat series). The Nihalshein route is 217 miles, but is perhaps on the whole easier and is less likely to be closed by snow in winter. (Reference, Route No. IX, Herat series)

Of the roads from Mashhad the best is probably that viá Shahr-i-Nao and Tirpul or Kuhsan. The distance is 14 marches or 224 miles. It is fit for wheeled vehicles. There is an alternative road by the valley of the Jam to Tirpul. It is rather shorter, but perhaps not quite so good. There is a third road, that through Turbin-i-Haidari, Rui Khaf and Ghorian, but it is 274 miles. (References, Routes I, IV. V. Herat series).

STRATEGICAL FEATURES.

The strategical features of the Herat province deserve the most attentive consideration, as Herat for many reasons must be the primary, though not necessarily the main objective of a Russian invader. Till quite recently it was assumed that the Herat Kandahar line of advance was the only one the Russians were likely to adopt in force, and Herat therefore held an exaggerated importance in public estimation. Again it was assumed that the hill range north of Herat was a formidable barrier to an enemy from the north, and consequently the possibilities of a defensive campaign in the Herat valley were seriously entertained. A better acquaintance, however, with the whole theatre of war has removed both these misconceptions. We know now that an advance on the Kabul line is more than possible and offers more direct, and perhaps greater advantages. We know too that the Siah Bubak range is no obstacle to an enemy, and consequently the likelihood of the Herat province being the chief scene of the impending struggle has receded into the background. Nevertheless, the political, moral and strategical value which attaches to the possession of the Herat valley makes it absolutely certain that on a declaration of war it will become one of the immediate objectives of the Russian forces.

A study of Chapter II will show that the Russian advance must be made either along the line Sarakhs Zulfikar or Merv-Panjdeh, or indeed more probably along both. As there will be nothing north of the Siah Bubak to seriously oppose an advance, a division of forces would probably be advantageous to the Russians, sepecially with reference to water, fuel, etc. Of course, if the railway line is brought to Sarakhs, the chances are the main advance will be made along that line, while a column moving along the Murghab line flashs it on the left and detaches a force to hold the Bala Murghab position. Climatic considerations would render it probable that the Russian advance would take place in May or Jure, though this of course will be regulated by political exigencies.

From the chapter on the passes across the Siah Bubak (Chapter III), it will be seen that that range is really no obstacle, and offers many easy lines of approach to the Herat valley; and the chances are that as no formidable opposition could be made to their passage several routes would be adopted simultancously, the various columns converging after crossing on the Parwana gap in the Kamar Kalagh hills, immediately north of Herat. Even if the watershed range between Badghis and the Herat valley were an important barrier capable of defence by a field army, its value would be minimized by the fact that it can always be turned altogether from the Mashhad direction. Of course, there might be serious political objections to using that line, but the fact remains that if it were necessary, there is nothing to prevent the Russians adopting it. Taking the extreme assumption that a British force were actually concentrated in the Herat valley, it is doubtful whether the defence of the main range could or would be attempted. Any pass or group of passes can be turned by some other; while even if all could be held, the range as a whole can be turned from the Mashhad-Kuhsan direction, so that it is reasonable to suppose that even in this extreme case the defence would be confined to the actual ralley of Herat, that is, to the cultivated district surrounding the city.

Chapter IV shows how comparatively limited is the area in the Herat valley actually inhabited, and how, if a field army were available, this cultivated portion of the valley might be defended by occupying selected and pared positions. If the attack were from the north, the position would probably be in the neighbourhood of Parwana; if from the west, at or about Sanghast. In the same chapter is described in general terms the nature of the Iterat fortress, and it will be admitted that if the Afghaus choose to defend it,

the place is safe from a coup de main. Moreover, if they displayed any real tenacity in its defence, it is probable Herat could hold out for some weeks and would only be captured by a considerable sacrifice of life.

Assuming that it would take the Russians at the most three weeks from the outset to reach Herat and at the very most four or five weeks to capture it. we may safely conclude that within two months of a declaration of war Herat would be in Russian hands, and, considering the political nature of the Afghan position in Herat, and the almost certainty that the non-Afghan population would welcome the Russians, it is more reasonable to allow one month for the advance on and capture of the city. Under these circumstances, it is impossible to hope or expect that we could forestell them, as even from Kandahar it would take an Anglo-Afghan army at least 6 weeks to reach Herat. If anything then is certain in war, we may accept as inevitable the fall of Herat and the firm establishment of the Russians in that valley. Of course, if we had previously established ourselves in Sistan, the whole situation would be modified; and it is not improbable that the Afghans might hold out at Herat long enough to enable us to attempt its relief, but we are not established in Sistan. and till we are, it seems useless to contemplate conditions based on that supposition. The only really useful study is the use that could be made by the Russians of their position in the Herat valley and the lines by which we could attack it.

As regards the first point, it is unquestionable that a Russian advance in force from Herat can only be made by the line Sabzwar-Farah -Kandahar, and all fears of an attack by way of the Hazarajat or through the Taimani country may be dismissed. The Russians having firmly established themselves at Herat will either content themselves with gradually absorbing the country south and east of it, or will prepare for a general movement on Kandahar. study of Chapter V will be useful, as it demonstrates the unlikelihood of the Daolat Yar road being used by either the Russians or ourselves, except for obtaining information or for the purpose of creating alarm. The hill country east of Herat may become the scene of guerilla warfare; it can hardly become the theatre of war for organized armies. Chapter VI will give some idea of the country immediately south of Herat and of its suitability for military operations. The ground practicable for the movements of armies between Herat and Kandahar is restricted to a comparatively narrow space between the Taimani hills on the one hand and a broad expanse of desert on the other; there is consequently no breadth of country for manœuvring strategically, all the way from Herat to the Helmand, so that a campaign fought out anywhere along this line would probably depend on the tactical or numerical superiority of one of the combatants; and, considering the difficulties of supply and transport, there is no reason why that superiority should belong to the Russian invader. Moreover, from the Helmand to the Sabzwar district the population is Afghan and might under certain conditions be expected to strenuously oppose an invader. Of course, if the Russians were advancing on Kandahar, it would scarcely be politic for us to minimize their difficulties by advancing across the Helmand to meet them, unless indeed we had previously taken up a secure flanking position in Sistan; but the case might arise where we were in a position to assume the offensive towards Herst, and in that case the Russians might find it desirable to take up a defensive position somewhere on this line of country, though the probabilities are that in such a case they would content themselves with covering Herat by means of a field army in a prepared position immediately south of the Hari Rud, say, in the vicinity of Rozabagh.

CHAPTER II.

BADGHIS, THE JAMSHEDIS, AND SUNI HAZARAS OF KALA NAO, &c.

Badghis may be defined as the country lying between Russian territory on the north and the Siah Bubak or Parapamisus on the south. The Russian frontier is the northern boundary from Zulfikar to Kala Wali on the Turkistan road. West and east it is bounded by the Hari Rud or Tajand and Firozkolii country respectively. Although the whole of this tract including Murghab and the basin of the Kashan river is now politically included in Badghis: the real Badghis is properly speaking only the country between the Hari Rud and the Kushk river. This tract is very fine, consisting mostly of open rolling grassy downs. The soil of all the valleys is exceedingly fertile, and, where cultivated, hears excellent crops of wheat and barley without irrigation. This part of the country is known as Gulran. It was formerly occupied by the Temuris, but for the last half century it has been completely deserted owing to the raids of the Turkomans. It is believed there are now (1892) some few hundred Afghan colonists in Gulran, and there are certainly small military posts at Zulfikar and Gulran itself. The whole of Gulran may be said to drain north-east to the Kushk river or its affluent, the Dahan-Islim. The valleys which carry off the drainage are usually shallow, flat-hedded hollows. The downs, though covered with luxuriant pasturage in spring and early summer, are acid expanses of parched grass in the latter half of the year. The soil is clay highly impregnated with salts, so that the water obtained by digging in it is more or less brackish, especially in the red clays, where it is seldom drinkable. During the spring rains, the soil of these downs becomes very heavy for traffic of any sort and quite impassable for wheels; but it soon dries up, and then troops of all arms could traverse these downs in almost any direction. There is very little fuel. Tamarisk and kandam bushes are found in some of the larger watercourses and along some of the lower slopes, but as a rule Gulran is treeless. As regards water, cast of the Maghor Rud, most of the larger watercourses contain water all the year round, but westward, except at Gulran, the country is practically waterless except in the wet season.

North of the Islim valley lies the chol. It consists of rolling treeless and sandy downs, but with a total absence of any distinct drainage courses of any Ak Robat is the only spot where there is any large supply of water. There some twenty large wells have been sunk for the use of the flocks of the Panidel Sariks, and it seems probable that water could be found by digging wells in any similar natural basin; but at present in the whole of the chol from the Hari Rud to the Murghab and Kushk rivers, owing to the absence of water, there are no practicable roads for troops, except small bodies of cavalry, in any direction except the old Gulran-Ak Robat-Adam Ulan-Sarakhs road, This applies to 9 months of the year; but in winter, after a snowfall or after the spring rains, large bodies of cavalry might perhaps cross this tract. The Hari Rud and Murghab valleys thus form the only two practicable avenues of approach for troops from the north into Badghis proper. At Pul-i-Khatun on the one line and at Ak Tapa on the other, practicable roads first begin to branch off, and the possession of these two places bars or lays open, as the case may be, all further advance into Badghis. To add to their importance there is an ancient route between the two places, which, if all the old wells were re-opened, would give lateral communication across the chot. At present both these places are in Russian hands and the advantage lies with them. Irrespective of this disused lateral line, columns advancing southwards up the two valleys first arrive on a connected and comparatively fairly watered front when they reach the line Zulfikar-Ak Robat-Chaman-i-Bed. As this line is within the Russian frontier, it may be said that the great difficulties of the desert tract have been overcome. and that any further advance towards Herat will start on a well connected front. The best roads probably are Pul-i-Khatun to Gulran, by Zulfikar and Kares Elias, and up the valley of the Kushk to Kara Tapa and the Batun pass. As regards the former, the Russians have made a good cart road from

Sarakis to Zulükar, the distance being 75 miles. Zulükar as the frontier post of the Afghans on the Tajand or Hari Rud is of some local importance. It is simply a cleft in the cliffs which bound the valley of the Tajand on its right hank and is of military importance because it is one of the few points of passage by which the high choic can be gained from the banks of the river. There are two lines of cliff, one behind the other, with some low broken ground between them, and there are two delies, one through cuch line of cliffs, and by them a portion of the drainage of the downs excepts to the river. From Zulükar to Gulzan by Karez Elins it is 47 miles, and from Gulran to Herat by the Sang Kotal it is 68½ miles. Thus the total distance from Sarakhs to Herat by this route is 1903 miles or 12 marches (vide Route XIII, Herat series, A. B. C. Routes). As regards the route from Panjdeh to Herat above mentioned, the total distance is 1313 miles or 11 marches (vide Routes XIX and XIXA of Herat series, A. B. C. Routes). So that failing physition it is obvious the Russians could be before Hera within a fortinight of the declaration of war on whichever line they advanced, assuming previous concentration at Panjdeh and Sarakhs.

East of Gulran comes the Kushk district, the land of the Jamshedis one of the Chabra Aimak tribes. The following account of the Jamshedis may therefore be usefully introduced here. It must, however, be understood that this account applies to the Jamshedis as they were at the time of the Afghan Boundary Commission (1885-86); since then a number of Afghans from Zamindawar have been settled in the district, especially at Kara Tapa, while the Jamshedis themselves have, it is believed, been mostly deported to districts in the Herat valley.

THE JAMSHEDIS.

The Jamshedi country till quite recently was the central portion of Badghis; that is to say, the country about Kushk, but since 1869 the greater part of the tribe has been deported to the valley of the Hari Rud and forcibly settled in the Obeh, Karokh and Shahfilan districts. Their Badghis settlements covered about 1,000 square miles of country between the Koh-i-Baba and the Russian boundary. The elevation of this tract varies from about 6,000' to 2,500', Kushk itself being about 3,600' above the sea. The greater part of the country consists of rolling downs and long ridges, separated by hollows, all thickly covered with grass. The height of these ridges above the hollows is often 400' or 500', and their slopes are steep though smooth. The country is entirely destitute of trees or bushes except a little tamarisk along the watercourses. It is a well-watered tract, and the soil is light and rich and everywhere cultivable. Formerly cultivation was extensive, and the country thickly populated. The wealth of the Jamshedis, however, lay chiefly in their flocks, and in 1885 they were calculated to possess about 56,000 sheep. East of Kushk the country becomes more hilly, and rocks begin to make their appearance, while pistachio trees become frequent.

Kushk consists of a number of villages or kishlaks in the valley of the Ak Robat or Kushk stream. The principal settlement contains a fort which is Kushk proper and was the residence of the Jamshedi chief. It is said to be unhealthy. The roads through the Jamshedi country are important. The old main road from Herat to Merv leads through the Kush Robat pass to Kara Tapa, as also one of the present roads to Panjideh and Merv through Kushk. Again, there is the road to Aighan Twisistan, and the old road from Mashhad to Balkh nid Gulran and Kushk, so that the Jamshedi district is strategically somewhat important.

The strength of the Jamshedis may be taken in round numbers at about 15,000 souls, but it is believed that not more than a quarier of these are now left in the Jamshedi country. They are generally a tough active race though not big. They are badly armed and poorly mounted, though they are essentially horseman. As a rule, they are a peaceable, well-disposed peasentry, but are not deficient in courage. They live in khargalis or kibitkas and are seminomadic, that is to say in spring they move off to the bills with their flocks and return for the harvest in July.

Up to 1886 the Jamshedi chiefs collected revenue from the Iribe for their own benefit; but since then there has been no chief, and the revenue has been taken by the Afghau. The Jamshedis are expected also to find a mounted lovy of about 400 men.

Besides the Jamshedis of Kushk, there are those of Karokh, numbering about 5,000 souls. These live in regular mud built villages and have their own Khan.

East again of Kushk is Kala Nao, the country of the Suni Hazaras.

THE SUNI HAZARAS OF KALA NAO.

This tribe is located in Badghis between the Jamshedis on the west and the Firozkohi district of Kadis on the east. They are known as the Suni Hazaras, as those of the Hazaras at all Shias. The area of the Suni Hazaras country is approximately 2,300 square miles.

Its length from south to north is about 50 miles, and it is about the same width on the Russian boundary, where it is broadest. Its clevation varies from 7,00° to 2,00° at Babulai, Kala Nao being about 3,000 at

It is more hilly than the Jamshedi country, and between the hills and plateaux are great ravines, whose beds are sometimes far below the general level. Their upper parts are rocky, and narrow, but lower down they widen out and become broad shallow valleys, all meeting to form the Kashan Rud. The low hills, of which seven eighths of the country is composed, rise from 100' to 400' above the general level; their slopes are generally steep and smooth. bare of vegetation except grass. There is a good deal of cultivation both on the hill sides and in the valleys. Kala Nao is situated in a valley about half a mile wide. It is a large rudely built fort, with a small bazar outside and numerous khargahs scattered around. It could, however, offer no resistance to civilized troops. The only other existing fort is Kala Maghor. Naratu is a place of great natural strength, being an ancient fortress crowning a flat-topped hill, with a scarp all round like the Mahratta forts of the Decean. The pistachio tree is very common in the Kala Nao Hazara country, and a good trade is done in the nut. The number of sheep and goats in the country is enormous compared with the population, the total being put at 150,000. Supplies, especially meat, are fairly plentiful, and in spring and early summer there is plenty of forage. The country is not a difficult one to travel over, though the frequent ups and downs are trying for laden animals. All the routes from Herat to Afghan Turkistan lie through it. The best route from Kala Nao to Bala Murghab is that via Babulai and Manghan. This route has been used by artillery. The next best route is by Kala Maghor to Dara Bam (vide Routes XX, XXB, and XXIII, Herat series, A. B. C. Routes).

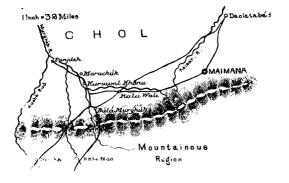
The Kala Nao Hazaras are a colony from the Hazarajat planted by Nadis Shah. Their actual strength may be taken at about 4,000 families. In dress, manners and language they resemble the Jamshedis, but are somewhat bigger, and with their Tatar caste of countenance look more like Turkomans. They are very indifferently armed and badly mounted; they are supposed to furnish a mounted levy of 500 men, but as soldiers they are supposed to furnish a mounted levy of 500 men, but as soldiers they are quite inefficient. Their country is now directly administered by an Afghan official.

MURGHAB.

North of the Kala Nao district lies that of Murghab, which extends along both banks of the Murghab river from Darband-i-Kil Rekhta to the Russian frontier at Maruchak. In 1884, this tract had a mixed population of about 2,000 families of Jamshedis, Kala Nao Hazaras and Firozkohis, but chiefly Jamshedis; but most of these Chahar Aimak tribesmen have since either left of their own accord or been cleared out by the Afghans. At present probably the population is very considerably reduced, and consists chiefly of Obeh Ghidzis and Herati Afghans settled in the neighbourhood of Bala Murghab and at Kala Wali. There is also a strong post (200 khasadara), mostly Logaris, in the Maruchak fort. Bala Murghab and Maruchak, though miserable places, have some military importance; the former lies astride the main road from Herat to

Turkistan, while the latter watches the road from Panjdeh. Dala Murghab is a large square mud fort, with round towers or bastions at the angles, standing on a mound. It is itself commanded by the low hills to the east, otherwise it would be a place of some strength as the river encircles it on three sides and is about 60 yards wide, deep and strong. The troops are quartered outside the fort in a number of domed huts irregularly disposed. The usual garrison is a buttalion of infantry, a battery of artillery and some cavalry. No bridges exist, though there are traces of several old ones, and fords are now the only means of communication. During the flood season, March, April, May, transit is altogether stopped. The valley of the Murghab is here about 2 miles wide, flat and tolerably well cultivated, confined by low hills on either side. There are absolutely no trees, and it would be very difficult to get wood for bridging; even firewood is wanting. Grass is abundant in spring and summer, but the amount of supplies locally procurable is inconsiderable. From Bala Murghab to Maimana via Kala Wali it is 91 miles, but the road from Karawal Khana, 11 miles down the Murghab valley, where the Kala Wali stream joins the Murghab, is perhaps a better one to follow. The triangle Bala Murghab-Kala Wali-Maruchak is a very important one, as whoever holds it absolutely bars communication between Herat and Turkistan, or covers it, as the case may be. Moreover, any force hostile to the Russians in that position would immediately threaten their Merv-Panjdeh-Herat line of communications. Maruchak is one march below Karawal Khana, or altogether 25 miles below Bala Murghab. Maruchak has been a small walled town, dominated by a high citadel and surrounded by a wet ditch. The present fort occupies the site of the ancient citadel. The defects of the position are that it is commanded by the hills of the chol 2,500 yards distant; that the outer enceinte is too extensive, requiring at least 3,000 men to defend it; and finally, that it only closes the right bank of the Murghab. Nevertheless it is a position of some value, especially for purposes of observation.

Kala Wali not only closes the routes from Bala Murghab and Karawal Khana to Maniana, but also the tracks leading from the *chol* into the Kaisar valley, as shown in the sketch map below. This subject is fully discussed in Vol. 111 of the A. B. C. Records, pages 279—286, to which reference for details is invited.



The whole hilly tract between the Kushk and Murghab rivers may now briefly be described. This tract has two main axes or watersheds, the one running north from the Baba range to Manghan, and the other from near Naratu northwest to Kushk, and then bending north towards Panjdeh; these two watersheds being separated by the valley of the Kashan Rud. As far north as the line Murghab-Chaman-i-Bed the whole constitutes a very hilly tract. Infantry, cavalry and camels can work across most of it without great difficulty, but off the few main roads it would be barely practicable for wheeled transport or guns. The eastern of these two hill systems is almost mountainous in character. Towards the Dara-i-Bam on the cast the fall is very difficult and precipitous, while westwards, towards Kala Nao and Babulai, the hill-sides are distinctly steep and the descents to the main valleys considerable. From where the Dara-i-Bam joins the Murghab to the narrow rock-bound gorge of the Darband-i-Jackhor, the Murghab flows in a narrow defile. The Dand-i-Jackhor is a lateral ridge running from the Murghab to the Kashan Rud and may be described as the northern watershed of the Kala Nao basin. It is a very narrow ridge and presents to the north a line of precipitous cliffs, with a grassy glacis deeply furrowed by ravines draining to the Manghan stream. North of this again a stretch of low undulating hills, diversified by a number of conical knotls or peaks, none of which however rise to any great height, is seen extending to the Murghab below Maruchak. These hills abut on the Murghab and Kashan in steep crumbling clay bluffs.

The western system of bills as far west as Khwaja Kalandar has an elevation of 7,000 feet to 5,000 feet; it then subsides into a tract of irregular broken clay hills, the main axis of which runs north, separating the drainage of the Kashan Rud from that of the Kushk river. The principal drainage channels, such as the Kolari, are broad, flat, easy valleys, but quite waterless during the dry season. About Chingaruh a high irregular lateral ridge, about 3,000 feet high, is thrown out east and west, which abuts on the Kashan Rud at Torsheikh and with the Band-i-Jackhor above mentioned forms the northern limit of the Kala Nao basin. The country north of the Band-i-Chiugaruh is very similar to that north of the Band-i-Jackhor right away to Panjdeh, but the features are on a larger scale, and except at one or two places the country is destitute of water except just after the spring rains. At that season, that is, when rain water pools are to be depended on, these hills can be traversed in most directions by troops excepting of course wheeled artillery. About the latitude of Kala Maur the bills sink into a hard undulating plateau, which is crossed by the road from Kala Maur to Maruchak. There is a steep ascent on to this plateau from the Kushk but otherwise this road is passable by guns; but there is no water on it for 26 miles until the Kashan is reached and even there, from July to December, it cannot be depended on. North of this road the downs rise again considerably to the flat table-topped eminence, called Takht, above Panideh, which forms a prominent landmark from all sides.

The Kushk valley consists like the Murghab valley, of a series of small plains separated by defiles where the hills close in on the river. At Kara Tapa, the highest point on the river within the Russian frontier, the river in December is 2' to 5' deep and about 12 yards wide. North of Chaman-i-Bed the Kushk, except in spring, runs underground for several miles.

The hilly tract just described is crossed by several roads; the most important appear to be:— $\,$

- (1) That from Naratu to Kala Nao, and thence to the Dara-i-Bam either by Kishlak Khwaja or by Maghor.
- (2) From Kushk by Kula Nao, Bahulai and Manghan to Bala Mueghab. This is the main Herat-Turkistan road. It is easy and requires but little improvement for guns, but is without water in the dry season for the greater part of the way.
- (3) From Babulai to Panjdeh by the Rud-i-Kashan.

- (4) From Kushk down the Kushk Rud, a good easy road for guns except for a short distance above Nanak, where the river flows through a comparatively narrow gorge, and where, if the river is too high to use the bed, the road is forced to cross a rocky promontory. This is the best read to Panjdeh.
- (5) From Hauz-i-Khan to Robat-i-Kashan. This is an easy road for anything but wheels, and there is a small supply of water at Chahii-Nakash. From Robat-i-Kashan good guu roads lead in a single march to Maruchak or the Murghab valley.
- (6) The road from Kala Maur to Maruchak above referred to.

North of the hill region above described and below Maruchak on the Murghab comes the district of Panjdeh, which it will be useful to describe here, although it is no part of Badghis.

PANJDEH.

Consists of the valley of the Murghab from Maruchak down to about Marat Imam, also of so much of the affluent valleys of the Kushk and Kashan as lie north of the frontier line. The district is inhabited by Sarik Turkomans, who reside in and cultivate the valleys, but graze their flocks in the chol. There are no villages, as the Sariks dwell in kibithas and their camps are constantly shifted. New Panjdeh and 'Old Panjdeh' are merely the sites of towas coeral with Merv. The valley of the Murghab is bounded by the steep but low hills of the chols on either side. The river is deep, swift and generally impassable. Its fords are few and difficult. It is a marshy sort of river, with large reed heds. The land available for cultivation was in 1885 insufficient for the wants of the Sariks who inhabit the district, but they possess large flocks anounting to 300,000 head of sheep besides camels; and on these and the carpet industry they make their living.

The whole Sarik population is practically concentrated at Panjdeh and at Yolatan. There are said to be about 7,000 families in the former place and 4,000 in the latter. Panjdeh really begins about 4 miles north of Maruchak, here the defile expands into a valley about 25 miles long and from 1 to 4 miles wide. North of the junction of the Kushk and the Murghab it closes in again. The Panjdeh valley is well irrigated by cauals, the principal one of which is led across the Kushk river by the old brick aqueduct known as the Pal-i-Khisti or Tash Kupruk, which played so notable a part in the fight at Panjdeh. From here the caual is continued along the left or west bank of the Murghab as far as Yolatan, but it was out of repair and disused in 1866, and may still be so. The Russians have established their civil station at Takhtishara, but the troops are cantoned a march helow Ak Tapa. The Murghab near Panjdeh is a rapid river about 50 yards broad. In late summer and autumn it may be forded, the best fords being at Hazarg Bazar and at a point about 50 yards south of the south-cast corner of New Panjdeh, while just below Ak Tapa is a deep and difficult ford, the last before Yolatan is reached.

The elevation of the Sarik country varies from about 4,000' to less than 1,000'. The average elevation of Panjdeh may be taken at 1,100', the Korabel plateau at 4,000' and the western chot at 2,500'.

The climate of Panjdeh is not good. The winter is raw, cold and disagreeable, though snow does not lie long; the summer is long, hot and unhealthy, and there is then a good deal of fever. The wheat harvest is early in June.

The Sariks are rather a fine race, tall, strong and bony. They are said to be thetre fighting men and braver than other Turkomans. There are industrious and hard-working and live penceably among themselves. They are all Suri Muhammadans, but by no means bigoted or strict in the practice of their faith.

As regards transport, the camels of the Sariks are a very fine breed, a cross between the one-humped Bactrian and the Afghan. They are said to possess about 16,000, and that from 2,000 to 5,000 would be available for hire.

THE CHOL.

As regards the chol, a short description will not be out of place here. The word chot signifies in Arabic a sandy desert, but the chol is not a sand desert in the usual sense of the term. It is rather a sandy undulating broken plain, of which the soil nearly everywhere possesses a certain consistency, actual loose sand being only found in a few places, especially near the Oxus and user Panjdeh. The whole of the chot is covered with grass in spring. The lighter the soil the less the grass, but the more sand the more bushes of tamarisk and sexual. Thus there is always abundant fuel and camel grazing in the chol. There is a higher chot and lower chot, the former being represented by the Karabel plateau and its continuation west of the Murghab. From the north and west edges of the Karabel plateau descend a mass of ravines containing little streams of salt water called shors, and this is all the surface water the chol produces, so that practically the chol is impassable for troops.

The military situation as regards Badghis may now be summed up. The nature of the chol restricts the advance of the Russians to two lines only, that from Sarakhs towards Zulfkar by the valley of the Tajand, and that from Merv to Parjdeh by the valley of the Murghab. As the Russians now hold these two lines throughout their length, Badghis is open to invasion at any moment, and practically no resistance can be offered under present conditions. The country about Gulran is fairly easy, while eastwards, towards Kushk and Kala Nao, it becomes more hilly and difficult; it would therefore seem probable that the main line of advance would be from Sarakhs by the Tajand valley; but this again is dependent on railway considerations, and the Russians may find the Murghab line the better one for railway extensions.

The nature of the country and climate causes the spring or early summer to be the most favourable season for a Russian advance. During the rains at the end of winter the ground is too heavy for large movements. In the middle of summer the heat is considerable and animals suffer greatly from flies while in the autumn not only would forage be scarce, but water would be hardly obtainable.

There is one other important military feature in this region. It is the steaping value of the trilateral Maruchak-Kala Wali-Dala Murghab. Whoever holds that in commensurate force is master of the situation; for a force in that position not only commands the communications between Herat and Turkistan, but forbids or covers, as the case may be, any advance from Panjdeh towards Herat.

References.

Lecture on the Russo-Afghan Frontier :—
Part II, 1929: 23 to 30.
Afghan Boundary Commission Records :—
Vol. I, 1929: 153-267, 234-297 and 317-325.
Vol. III.
Vol. III.
Vol. III.
Vol. III.
Vol. III.
Afghan Boundary Commission Routes, Heat series.
Afghan Boundary Commission Routes, Heat series.

CHAPTER III.

THE PASSES LEADING FROM THE HERAT VALLEY TO BADGHIS AND THE VALLEY OF THE MURGHAR.

The Herat valley is bounded on the north, at an average distance of 25 or 30 miles from the Hari Rud, by a range of hills which is in fact a prolongation of the main or middle range of the Koh-i-Baha. These hills are themselves spoken of as the Koh-i-Baha, though its western portion is known as the Siah Bubak.

The range is generally speaking a low and easy one. North-east of Herat the hills are of some height, the peaks rising four or five thousand feet above the valley while the roads across this portion of the range are rough and somewhat difficult; but from a point almost due north of Herat, the hills drop considerably, and the passes across them, instead of being over 7 0:0' above the sea. are from four to five thousand feet; that is to say, less than 2,000' above the plain; while the portion known as the Siah Bubak may be described as a series of broken downs, the passes over which, west of the Khumbao, are all under 3,000', or less than 500' above the valley of the Hari Rud. West of the Khumbao the range is split into two by the Chilgazi stream, and the two spurs thus formed end abruptly in the Hari Rud after that river has taken its great bend to the north. There is no route of any sort down the valley of the Hari Rud which in this part of its course is an impassable defile, and consequently all communication between the Herat valley and Badghis is restricted to the passes across the Sinh Bubak. The bills on the Persian side of the Hari Rud are decidedly more difficult than those on the Afghan side, and therefore the easiest as well as the most direct route from Sarakhs to the Herat valley is to be found across the Siah Bubak. The passes over these hills naturally divide themselves into several groups. The most westerly of these groups is that connecting the Kubsan portion of the Ghorian district with Sarakhs through Zulfikar. This group consists of :-

> (1) The Nihalsheni. (3) The Karango. (2) ,, Sang Nawisht. (4) ,, Chashma Surkak.

Of these, the first three lead through Karez Elias, while the last goes through Kizil Bulak, (3) and (4) are practicable for laden camels in their present condition, while (1), (3) and (4) could all be made fit for wheeled artillery. is of no military value. All four are practicable throughout the year, though liable to snow storms. The same general description applies to all these passes. The soil is clay mixed with sandstone and in wet weather or after snow the ground is very sticky and heavy. The general character of the ground encountered in crossing by any of these passes from south to north is first an outer and almost detached ridge, like the Sawaliks, then an ascent through a series of parallel clay or sandstone ridges, finally ending in a steep ascent up a ravine or broken scarp to an open upland plain which is succeeded by a gentle descent ending in an abrupt drop of two or three hundred feet to the Chilgazi Rud. Crossing this, a gentle ascent up a shallow open ravine leads to the crest of the second or northern ridge, which is a narrow serrated line of jagged sandstone crags; then comes a sharp descent of a few hundred yards, followed by an easy fall to the foot of the perpendicular scarps of the chol on the northern side of the Karez Elias,

The next group of passes is that connecting Kuhsan and Ghorian with Gulran. This group includes:—

(1) The Khumbao. (1) The Ao Mazar.

(2) ,, Robat-i-Surkh. (5) ,, Ao Safed or Padagi. (3) ,, Asia Badak. (6) ,, Chashma Sabz.

All these passes except (6) cross the hills about 3,500' above the sea; that is to say, the hills hereabouts are nothing more than low downs rising 600' or so above the plain; at the Chashma Sabz pass, however, the rise increases to 1,700'. None of the passes are closed in the winter, though show lies for a month or two, and show storms may block a road for a few days. In crossing the Ao

In fact the Nihalabeni is so now in dry weather; vidr. A. B. C., Eccords Vol. 111, page 432,

Safel on the 4th April, the head-quarters of the Boundary Commission came in for a tertible snow storm, which caused the death of 24 followers (cide pages xv and 262 Vol.1, "A. B. C. Reends.") The soil is, generally speaking, clay, with outcrops of sand-tone, consequently after snow or rain the roads are reheavy. None of these passes lend themselves to defence, and the Tuckomans in old days raided over them at will. (1) and (2) are both good camel roads, which might be easily made practicable for guns. They would be most useful for troops moving between Kulsan and Gulran. (3) is a mere foot path. (4) and (5) are passes connecting Ghorian with Gulran; both are easy camel roads and even guns in dry weather could use them in their present state. (6) though and more difficult than the alternative routes that it is of comparatively little amportance.

The third group consists of the passes leading into Badghis from Herat and includes the best route to Panjdeh; the passes in question are:-

- (1) The Darakht-i-Tut. (3) The Afzal. (2) ,, Sang Kotal. (4) ,, Batun.
 - (5) The Kush Robat-Sang-i-Robat and Ardewan.

Of these (1) is uscless from a military point of view. (2) would be used for a movement on Gulran from Herat, and it can be easily made it for guns. (3) is an alternative road to (2), but it is only a pack road. (4) and (5) are the hest routes to Kara Tapa and Panjdeh, the former route being a little longer, but practicable for artillery even in its present condition. These roads, may be regarded as the most important lines of communication between Herat and Turkistan. In this group the passes vary from 4,600' to 5,100' so that the hills may be said to be about 1,600' above the plain.

The most easterly group of passes is that leading from Herat to Bala Murghab, through Kushk and Kala Nao. It consists of :--

- (1) The Baba. (2) ,, Golah. (3) ,, Dalauta. (4) The Banush Dara. (5) ,, Shutar Murda. (6) ,, Zarmust.
 - (7) The Rah-i-Kabuti.

These passes are all over 7,000' and are closed by snow for two or three months in the year. (7) is only a foot path, while (2) (3) (4) and (3) are really only fit for mule and horse traffic. (1) is considered the shortest road to Afghan Turkistan, but is by no means so good as the Batun and Ardewan passes, and in fact is difficult even for camels. (6) is considered the main roate to Kala Nao, and guns can be got over by means of drag ropes. It is in fact the only route of real military importance in the group.

The general conclusion to be drawn from a study of the passes across the Komi He north, and that it does not lend itself to defence, as apart from the tactical unsuitability of the passes for defence, there is the strategical objection that any pass is liable to be turned by others in its neighbourhood. Moreover, even if the range formed in itself an admirable barrier, it is still exposed to the disadvantage that it can easily be turned altogether by an advance in force from the Mashhad direction, in which case all efforts directed to the defences of the passes would have been thrown away. On the whole the conviction must force itself on the mind that for a numerically inferior force, the defence of the Herat valley is a task presenting the most serious difficulties.

For convenience of reference, a short abstract of the information obtained by the Afghan Boundary Commission regarding the passes is given below.

The Nikalsheni pass.—This is the most westerly of the passes leading from Kuhsan to Badghis and Sarakhs, and is the best and most direct road from Kaman-i-Bhishit to Karez Elias. It enters the bills about 6 miles morth of the former place and about 12 miles cast of the Harl Rud. The distance from this point to Karez Elias is about 233 miles; thence to the Harl

Rud, it is about 8 miles by a good road. The British Commission merched by this pass in November 1985. The Afghans had then made a good road practicable for guns throughout.

As already stated, the Siah Bubak at its western end is broken up into two ridges by the lateral course of the Chilgazi, so that the road first crosses the Takht-i-Khuri Kotal (2,00°), then drops 1,00° to the Chilgazi Rud, ascends to the Nihal-heni Kotal (2,795°), and finally descends to Karez Elias (1,575°). The Chilgazi Rud is usually dry, but water is obtainable on this route at about the 10th mile.

At Karcz Elias there is a fair camping ground. Thence to Zulfikar, it is 12½ miles by a good casy road practicable for all arms. From Zulfikar there are two roads to Sarnkhs, one by the left bank of the Hari Rud through Persian territory (76 miles), the other a cart road along the right bank, recently constructed by the Russians (75 miles). Thus from Kuhsan to Sarakhs by this route, the total distance may be taken as about 150 miles.

References.

- Caplain Pensceke's report on the Nihalsheni pass, page 431, Vol. III, Records of Intelligence Party, Afghan Boundary Commission.
- (2) Routes IX and XIII, Afghan Doundary Commission Routes, Herat series.

Song Navisht and Karango passes.—These two passes, which are branches of one and the same pass, lead from Kuhsan through Kaman-i-lihisht to Karez Elias and thence to Zuläkur; the western branch is known as the Sang-i-Nawisht; the castern as the Karango. The former is almost useless for military purposes, while the latter could be rendered practicable for field guas, and is even now passable with ease by laden camels except at one place. Like the Nihalsheni both these routes cross two distinct ranges as well as the deep ravine of the Chilgazi. The Karango Kotal is 2,025' above the sea, so somewhat higher than the Nihalsheni pass.

Reference

- (1) Captain Peacecke's report at page 435, Vol. III, Records of the Intelligence Party, Afghan Doundary Commission.
- (2) Route No. X, Afghan Boundary Commission Routes, Herat series.

The Chashma Surkala pass.—This pass lying between the Kavango and Khumbao passes, leads from Kuhsan to Kizil Bulak in Badgbis. It is, except at one point, an excellent camel road; and though the direct road is in its present state impracticable for guns, still by a slight detour field guns could easily be taken across the bills from the head of the Chilgazi Rud to Chah Yulki. Like the passes to the westward, the Chashma Surkak crosses two ridges and the intervening valley of the Chilgazi, but as it crosses the latter near its head, there is not the same abrupt drop which characterizes the western passes. The first kotal is 2,780′ above sen, while the Chilgazi Rud is crossed at 2,130′. The rad is here open and its surface comparatively smooth; down its course a good track, practicable for field guns, runs to the Nihalsheni road. The ascent from the Chilgazi to the second kotal is about, 600′. The ascent and descent of the second or northern ridge is the only real difficulty on this road, and 3 or 4 days' work by a company of suppers would reader it lit for guns.

References.

- (1) Captain Peacocke's report at page 438, Vul. 111, Afglian Boundary Commission Records.
- (2) Route No. XI, Alghan Houndary Commission Routes, Herat series.

The Khumbon pass.—This is one of the most important and easiest passes over the range separating the Ghorian district from Badghis. The old main road from Strakhs to Kulsan viá Gulran appears to have led over it. At present the route is an excellent camel road, and could, without difficulty, be made a gun road, as the soil is easy to work. The route crosses the bills east of the bifurcation caused by the Chilgazi, and consequently there is only one kolal to cross, and this is estimated at 3,47° above the sea. The length of the pass, that is, the portion where troops would be restricted to the road, is about 12 miles. The pass does not lend itself to defence except at the kotat. The soil throughout is soft clay intermixed with sandstone rocks. It would be heavy

in wet weather or after the melting of snow. From Kuhsan to Chah Yalki

References.

- Report by Coptain Mailland at page 442, Vol. III, Afghan Boundary Commission Records, and report by Captain Peacocks at page 445.
- (2) Route No. XII, Afghan Doundary Commission Routes, Heral series.

The Robat-i-Surkh pass.—This pass also leads from Kuhsan to Gulran in Badghis. It lies about 3 miles south-east of the Khumbao Kotal. It is higher than the latter, and the gradients on the south slope are somewhat steeper. Nevertheless it is short and easy, and may be pronounced practicable for even siege guns in dry weather, as far as any unmade road can be considered so. In old days it is said to have been the caravan route between Persia and Panidel and thence to Merv. It is even now an excellent camel road, and a few hours' work would make it a good gun road in dry weather; but the soil is light and would be heavy after rain or snow. The kotal is 3,900' above the sea, and the distance from Galachalt to Gulran is less than 29 miles.

- (1) Report by Captain Maitland at page 443 and report by Captain Peacocke at page 451 of Vol. III, Alghan Boundary Commission Records.
- (2) Route No. XIIA. Afghan Boundary Commission Routes, Herat series.

The Asia Badak pass .- This is little better than a footpath, but is said to be practicable for horses. It lies about 31 miles east of the Robat-i-Surkh pass, and is of little use except as a path flanking the latter on its right.

Page 455, Vol. III, Afghan Boundary Commission Records.

The Ao Mazar pass .- A path leading to Gulran from Ao Mazar and crossing the Siah Bubak a few miles north of the Ao Safed route. It is an extremely easy route practicable even for artillery. The ascent is for 3 miles over grassy downs, while the descent on the north side is even easier than that from the Ao Safed. The distance from Ao Mazar to Gulran is about 15 miles. The drawback to this route is the want of water. At Ao Mazar from July to December none can be counted on.

- (1) Page 450, Vol. III, Afghan Boundary Commission Records.
- (2) Route No. XVI, Afghan Boundary Commission Routes, Herat series.

The Ao Safed or Padagi pass.—This pass leads from the Ghorian district to Gulran, and is one of the easiest of the passes through these hills. It is only 7 miles long, and for half that distance can scarcely be called a pass as it crosses open upland slopes. In its present condition it is passable for light carts in dry weather, and a few hours' work would make it fit for guns. The soil is a soft red clay which becomes very heavy after rain. There is no water in the pass in dry weather, and except in the winter season there is practically no water between Chashma Sabz and Gulran (23 miles). Chashma Sabz (3,150) is 31 miles from the Hari Rud at Rozanak. The road to it is open and easy, and so far there is plenty of water. There are two kotals to be crossed, the first 3,550' above the sea, the second 3,850' so that the total rise is only 700'. The pass is not one that lends itself to defence.

References.

- (1) Captain Peacocke's report, page 457, Vol. III, Afghan Boundary Commission Records.
- (2) Route No. XIV, Afghan Boundary Commission Routes, Herat series.

The Chashma Sabz pass .- One of the passes leading from the Ghorian district to Gulran; it offers the most direct route from Ghorian to Gulran. The Chashma Sabz spring is about 24 miles from the Hari Rud, and from this point to Gulran it is about 25 miles. The crest is reached at 41 miles, clevation 4,860' or about 1,700' above Chashma Sabz. The route lies for the most part over soft soil and after wet would be very heavy. The road is never blocked by snow, though it lies on the ground for nearly two months. It is on

the whole a very fair camel road, but is not to be compared with the Ao Safed, and it would be a work of some trouble to make it fit for guns.

Reference.

Caplain Maitland's report at page 459 of Vol. III. Afghan Boundary Commission Records.

The Darakht-i-Tut pass.—A very difficult pass and but little used except by the nomads. It is useless for military purposes except for messengers, reconnoitring parties, &c. The allitude of the kotal is 4,050°. It is situated 7 miles west of the Sung Kotal.

Reference.

Captain Peacocke's report at page 464, Vol. III, Alghan Boundary Commission Records.

The Sang Kotal pass.—This is the most direct road from Herat to Gulran. The pass is barely 3 miles long, and the summit is only 4,670°. It is no excellent gun road except for the first half mile of the descent on the north side, where it is very steep and stony. There are no water difficulties. From Herat to Gulran by this route it is about 69 miles or 5 longish marches, while to Sarakhs it is 190 miles through Zullikar.

Reference

- (1) Captain Peacocke's report, page 465, Vol. III. Afghan Boundary Commission Records.
- (2) Route No. XIII. Afghan Boundary Commission Routes, Herat series.

The Afzat pass.—This may be regarded as an alternative to the Sang Kotal route, and as on that route, the descent on the north side is very steep and bad, though a moderate amount of labour would make it a fair pack road. The crest is 4,750' above the sea.

References.

- (1) Captain Maitland's report, page 467, Vol. III, Afghan Boundary Commission Records.
- (2) Route No. XVII, Afghan Houndary Commission Routes, Herat series.

The Batun or Botan pass.—This is one of the easiest passes leading from Horat to Badghis, and its position renders it one of great importance. It is quite fit for wheeled traffic, though doubtless it could be much improved in places. The only serious objection to this road is its liability to become impassable in wet weather, but this applies to all these passes. The kolal is 4,910' or nearly, 1,500' above Herat, from which it is distant about 30 miles. From Herat to Kara Tapa, the nearest post on the Russian frontier, it is 70 miles or 7 marches.

References.

- (1) Captain Maitland's report, at page 470, Vol. 111, Afghan Boundary Commission Records.
- (2) Route No. XVIII, Afguan Boundary Commission Routes, Herat series.

The Sang-i-Robat and Ardenon passes.—These passes lie 5 miles east of the Batun, and though perhaps not quite so easy are more generally used as being the shortest routes from Herat to Badghis. Both may be considered gun roads, but guns would have to be dragged by hand in several places. An Afghan battery crossed the Ardewan Kotal in the spring of 1884, though nothing had been done to improve the road. By the Sang-i-Robat route Kara Tapa is about 17 miles from Herat, and Panjdel about 135 miles or 11 marches.

Kush Robat (4,150) is an excellent camping ground, 25 miles from Heart; not only is there ample space, but water, fuel, and camel grazing are abundant. Two miles beyond this the pass bifurcates; the left branch goes direct to Kara Tapa vid Sang-i-Robat, while the richt leads by the Ardewan Kotal to Kushk. The former crosses the watershed 4 miles from Kush Robat at 4,850. The latter rises to 5,150. These two passes are often collectively spoken of as the Kush Robat, the name of their common starting point. It would practically be impossible to defend these passes, and except in wet weather they form no obstacle.

References. .

- (1) Captain Maitland's reports at page 476, Vol. III, Afghan Boundary Commission Records.
- (2) Routes XIX and XIXA, Afglian Boundary Commission Routes, Herat series.
- The Baba poss.—This leads from Herat to Kushk, and thence through Kala Nao to Bala Murghab. It is the shortest road between Herat and Afghan Turkistan, but it is by no means the best, the Kush Robat and Batun passes being

far better in every respect. The Baba pass has two entrances on the south side, of which, the eastern one, by the Dara i-Khwaja Jir is far the best, and is the only on when used by caravans. The road is difficult for camels, being in places steep, rocky and rough. The crest of the pass is 7,650 above the sea. The pass is nearly always closed by snow between Christmas and February, and in spring the water in the Tahak ravine sometimes renders the route impassable. This pass is susceptible of defence in conjunction with the Golab.

- (1) Captein Maitland's report at page 483, Vol. 111, Afghan Doundary Commission Records.
- (2) Captwin Peacocke's report at page 488.
- (3) Route No. XX, Alghan Boundary Commission Routes, Heral series.

The Golah pass. -This pass leads from Herat to Kala Nao by the Khwaja Jir ravine. It crosses the main range at 7,970' so that it is full 300' higher than the Baba Kotal than which it is considered to be more difficult. On the other hand it is somewhat shorter, and therefore preferred by the Kushk people. The descent on the north side is certainly better than that from the Baba Kotal. The pass is perfectly practicable for cavalry and even mountain guns, but snow and wet would render it useless for camels till March. It is 92 miles from Herat to Kala Nao by this route.

References.

- (1) Captain Maitland's report, page 403, Vol. III, Records of the Afghan Boundary Commission.
- (2) Routes XXI and XXII. Afglian Boundary Commission floutes, Herat series.

The Dalantu pass, the Banush Dara pass, and the Shutar Murda pass .-All three passes are more or less difficult. They lead from the Karokh valley north-east of Herat to the Dara Zawal and thence over the Band-i-Babs range to Kushk or Kala Nao through Khwaja Kalandar. The most westerly of the three routes, which are however only a few miles apart, is the Dalantu, said to be a camel road. The Banush Dara is more difficult, but is practicable for laden mules. The Shutar Murda is used by horsemen, but never for camels, but practically speaking these three routes are mere sheep tracks.

- (1) Captain Maitland's report, page 495, Vol III, Afghan Boundary Commission Records.
- (2) Route No. XXIV, Alghan Boundary Commission Routes, Herat series.

The Zarmust pass .- Leads from the upper end of the Karokh valley to Naratu and thence to Kala Nao and the Firozkohi country, or through Kala Nao to Bala Murghab. It is much travelled and is of considerable importance as it is considered the main route to Kala Nao and Maimana. There are two kotals to be crossed by this route, namely, the Zarmust and the Kashka; the first (7,700') over the main range, the second (6,910') over a spur running north-west, which is separated from the main range by the Tagao Robat valley down which is a road to Kushk. Snow lies on the passes for about 5 months, and the road is generally closed during January, February and March. The Zarmust route is very steep in places, but it is practicable for all baggage animals, and with drag ropes guns could be got over. Heavily laden camels would find the road dillicalt. From Herat to Kala Nao it is 61 miles and to Bala Murghab 142 miles, or 12 stages.

References.

- (1) Captain Maillaud's report at page 497, Vol III, Afghan Boundary Commission Records.
- (2) Captain Pracocke's report at page 504.
- (3) Route No. XXIII, Alghan Boundary Commission Routes, Herat series.

The Rah-i-Kabuti pass .-- This leads from the eastern end of the Karokh valley to Kala Nao. At the point where it crosses the main range, it is nothing better than a difficult and dangerous footpath. It has not been explored.

Reference.

CHAPTER IV.

THE HERAT VALLEY AND CITY.

The Herat valley may be said to consist of Herat city, the adjacent district so called, and the Wilayats of Ghorian on the west and Karokh on the north-cast, though the latter is not part of the main valley. The Herat valley is by far the most populous, fertile and important part of the whole province, and is strategically speaking one of the most remarkable positions in Asia. It is watered by the Hari flud which, traversing it from cast to west, turns north and becomes the western boundary of Adghanistan in this direction. The Hari Rud in this part of its course has only one considerable affluent, the stream which drains karokh and which rises in the Band-i-Baba, some 20 miles cast of the Zarmust pass (ride Chapter III). At this point a very lofty spur called Dawandar is thrown out south-west towards the Hari Rud, and this forms the southern watershed of Karokh which lies in the fork or angle thus formed between the Band-i-Baba and the Dawandar spur. It will be convenient to describe Karokh here before proceeding to describe the main valley.

Kanoke.

This district is one of the Chohar Wilayat of Herat, that is, one of its four onthying districts. It extends as far west down stream as the Kacha Sangi defile. The total length of the valley is thus about 53 miles. The river runs for the most part along the south side of the valley in a deep narrow trough close under the Dawandar ridge as far as Kaorozahad; where on the north side it opens out, the ground rising in a series of steps and upland slopes to the foot of the spurs from the Band-i-Baba. The soil is fertile, but only the lower terraces and the neighbourhood of the river are cultivated. The rud itself is quarter to half a mile wide, with a strong stream flowing down a broad gravelly bed bordered by an alluvial margin of cultivation, and good grazing meadow land. The valley is very thinly populated, and the few villages that exist lie along the river. The hills bordering the valley are quite bare, and trees are only seen at the villages. Machkanduk and Karokh are the two centres of population.

The former is a large village, about half a mile north of the river; here there are several small forts and a fair amount of cultivation. Karokh is larger and consists of a group of 8 or 10 villages and hamlets, with a large fort, which is the residence of the Governor. The villages are surrounded by orehards and walled fields. The fort is of the usual Afghan type and is not a formidable structure (altitude 3,840°). The population of the Karokh district was estimated in 1885 at 4,000 families, of whom half were Jamshedis, the remainder Tajiks, Hazaras, &c., and a considerable number of Afghan ommads, mostly Obeh Ghilzais. Sheep are plentiful in Karokh and a certain limited number of camels are procurable (say 250); about 1,000 kharwors of wheat and barley might also be obtained from the district.

16 miles above Karokh are Naorozabad and Khwaja Chahar Shamba, which are the highest villages in the valley. Beyond them the valley is narrow and moultivated.

The chief, indeed the only importance of the Karokh district lies in the fact that through it lies the road from Hemt by the Zarmust Kotal to Kala Nao, which is considered the most direct route to Mainana.

The distance from Herat to Kala Nao by this road is 80 miles (nide Route XXIII, Herat series). Besides the Zarmust, there are two or three other passes leading from Karokh over the Band-i-Baha, but they are all very bad (nide Chapter III).

There are four roads leading from the Horat valley into Karokh, viz :-

- (1) By the Dahau-i-Sabzwari, a difficult road for laden camels.
- (2) By Malimah, used by laden camels, but difficult.
- (3) By Ao Garmak, easy for baggage animals, but impracticable for guns.

- (4) By the Khwaja Gasar gap and up the Karokh river; easy road. There are also four roads over the Dawandar range from Obeh, viz. :-
 - (1) The Karambao road, had :
 - (2) The Shorgird, practicable for laden camels;
 - (3) The Siah Chubak, impracticable for camels;
 - (4) The Khinjak Alamdar, a good road which leads to Marwa.

None of these, however, are of any military importance, and the Zarmust Kotal route is the only one worth studying. It must be remembered that from Christmas to the end of Mare this route is usually closed by snow, and practically it would only be used during summer and autumn.

THE HERAT VALLEY.

The Herat valley has a varying width. Below Obeh it commences to widen out, and at Tunian is some 14 miles broad. It continues of this same average width to the city, west of which it is joined by the Pahra valley and its breadth may then be estimated at about 20 miles. Abreast of Kala Yadgar, it is contracted to a width of 5 miles by the Kaftar Khan promontory, but again rapidly opens out to some 8 miles at Zindajan, to the west of which it is joined by the Ghorian plain. The plain of the valley is perfectly level, and, though more or less covered with villages and orchards, is altogether destitute of large trees. The valley north of Herat is bounded by the minor hills known as Gazargah, Kamar Kalagh, Koh Mulla Khoja and Koh-i-Shahr Andak, some dozen miles behind which rises the lofty ridge of the Band-i-Baba terminating westward in the Koh-i-Ardewan. From this point the main range sinks into comparatively low hills of soft outline and trends away in a curve to the north-west. The Kamar Kalagh hills are about 15 miles west of the city and are replaced by a low plateau or dasht known as the Daman-i-Reg which abuts on the north side of the Hari Rud in low sandy cliffs and gradually sinks into the rud where the latter bends northwards.

Along each side of the valley, at the foot of the hills or higher ground, lies a strip of open gravelly daman shelving down to the level cultivation that borders both banks of the river. The breadth of this daman varies from } to 4 miles, while the width of the irrigated land varies correspondingly. At Tunian it is about 7 miles, around Herat from 9 to 12 miles, at Sangbast only 3 miles, at Zindajan 5 miles and at Ghorian 7 miles. Large portions of level area are occupied by riverside chamans and of the remainder of the cultivable ground quite two-thirds lie fallow every year. The minor range of hills north of the valley rise to an average height of about 1,000' above it, and forms a distinct obstacle to movement on that side. It is, however, pierced by numerous gaps which give access to the open dasht on the north. The principal of these gaps are the Shahr Andak, the Sang Kotal, the Kamar Kalagh and the Khwaja Gazar; the rest are only used by individual horsemen or woodcutters. The first leads to the Dasht-i-Hamdamao and thence to the Chashma Sabz pass. Good roads also lead from it to the Ardewan and the passes west of that as a sathe Sang Kotal. Through the Shahr Andak gap flows the Sinjao stream, which always contains water as high up as Kush Robat. It flows out across the plain between the villages of Mamizak and Shekiwan over a broad gravelly bed, and its water in the dry season is intercepted by the Sangbast-Mamizak canal.

The next pass, that of the Sang Kotal, which must not be confounded with the Sang Kotal over the main range, is a good road fit for guns, and leads in much the same direction and to the same passes as the Shahr-Andak. It is important as it turns any position which might be taken up at or about Sangbast to cover the west end of the valley.

The Kamar Kalagh gap gives a good easy road for guns and troops and is the main road from the city to Parwana and thence to the same group of passes into Badghis. The Khwaja Gazar is a good road leading either to Karokh and the Zarmust Kotal or to the Baba Kotal via Palezkar.

The entire plain surrounding Herat is closely studded with villages, especially on the south, cast and west. These villages are as a rule large and straggling, covering large areas with walled gardens and orchards. With them are mingled the ruins of old forts and villages. The whole of the centre part of the plain is closely cultivated and well irrigated. One peculiar feature of the villages near Herat is that in many places the reads are tunnels under the houses. They are high enough to ride through as a rule and would form excellent fry warm hombproof cover to the troops besieging the city. The walls of the villages and orchards are generally 8 to 12 feet high, so that the neighbourhood of Herat presents nothing to the eye but bare mud walls with the tops of trees showing over them. The houses are for the most part low doned hovels connected by a puzzling labyrinth of narrow lanes. A few of the villages are, however, square mud forliets.

The north side of the plain, as already stated, is closed by a low range of hills. To the south the plain is bounded by the open gravelly daman which skirts the hills on that side, namely, the Doshakh, the Bland-i-Madira and the Sangu Siah, while to the east the valley is closed in by the lofty Kohi-Dawandar and its spurs. All these hills are bare and rocky, destitute of trees and verdure.

The city lies about two miles north of the Hari Rud, which here, except when in flood, is a stallow gravely stream in three channels, each a few yards wide and about 2 feet deep. It was formerly crossed by the Puli-Malan, but this bridge is now broken and useless. The plain is well hirrigated by karezes and capals, here called juin, some of which are considerable obstacles. The Karobar Nala, for instance, when in flood, is 30' wide and 0' deep with steep clay banks. As the city is approached, the villages become larger and more numerous, and finally form an almost continuous bell of walls and gardens on the north, west, and south side of the city, but on the east-side the ground is much more open and the villages further apart. There is a fairly clear zone all round the city about 70-9 yards wide, a point of considerable importance as regards the defence.

As regards communication on the north side of the Herat valley, the main road runs along the open gravel duman skirting the cultivation. It is good in all weathers, and by it troops or guns could move on a broad front. All the others run through the cultivated tract, which is closely intersected by water channels and where the narrow lanes would often restrict movement to single file, besides which in wet weather they would be very difficult. There is one road, however, which passes for the most part over the open grass chamans along the right bank of the river, and this in dry weather would probably be the next best road for guns after that by the damen. These chamans, when dry, form splendid encamping grounds and in spring give good grazing.

The possibility of defending or covering Herat by means of a field army is, of course, a point of considerable importance; but though there are positions which lend themselves to a defensive action, they are not such as could be held by an Alghan army against regular troops, and are perhaps more likely to be made use of by a Russian army covering Herat, than by an Alghan or even British force defending it. It is as well, however, to glance at the subject.

On the southern side of the Herat valley the line between cultivation and barren country is very sharply defined, and the front facing south is an almost continuous line of wall, the outer edge of the orchards, vineyards and gardens which extend from Siahwashan on the east to Ziaratgah, 6 or 7 miles west of Rozabagh, so that the total front thus covered may be taken at 10 miles. force marching from Sabzwar by Hauz-i-Mir Daud would have to attack this line across a perfectly open plain, about 4 miles wide, absolutely devoid of cover, while the front towards Parah is almost equally formidable to attack, though strategically more dangerous to defend; for if the attack were successful in this direction, troops at Rozahagh and eastward might find their line of retreat on Herat intercepted. Within the outer line of walls the enclosures are not so dense and with management free communications everywhere along the position might be arranged, for the orchards and enclosures are only about a mile deep, and beyond there is tolerably open cultivated ground to the river at Pul-i-Malan near which are a few more villages. It may be noted that a canal runs all along the outer edge of the enclosures, which adds greatly to the difficulties attending an attack. This position might be utilized by a force covering Herat against attack from the south, as such an attack could be contained by a comparatively small force.

On the west Sanghast seems to offer the best position for covering Herat from an enemy advancing either from Ghorian or Kuhsan. Sanghast consists of two small forts and villages, the one about 200 yards from the river, the and open, but the irrigation channels render it very difficult to cross, and it appears quite feasible to entrench a position here which would fairly well cover licrat against an enemy advancing from the west.

On the north side of Hevat the best position for a field army would be at Parwana, north of the Kamar Kalagh gap through the range of hills of that anne. This position lies along a low ridge pieced by the Parwana and Deh Sheikh Nalas, and as an artiflery position it is first class. The lanks are strong and well defined. The position could be held by a division and the soil is suitable for field works (vide pages 164-65, Vol. III, A. B. C. Records). This position closes the Ardewan pass route and adjoining roads, but it is of course liable to be turned by the Baba pass route on the cast.

SHAHFILAN.

This district was formerly one of the nine buluks which constituted the Heart district, but is now under a separate Hakim. It lies entirely south of the Hari Rud, between that river and the range bounding the valley on its southern side. The district extends from the Dahan-i-Doah as the mouth of the Tagao Ishlan is called, for about 24 miles down the Hari Rud valley. It contains about 40 villages and could doubtless give a considerable quantity of supplies. The population in ISS5 was estimated at 5,500 families, of which nearly two-thirds were Heratis, the rest being Afghans. Shahfilan may be considered as distinctly part of the Herat valley.

GUORIAN.

We now come to the most westerly district of Herat. On the south bank of the Hari Rud the district commences at the Kaltar Khan ridge which divides it from what may properly be called the Herat valley. On the north bank Mamizak and Shekhiwan are included in Ghorian. The north boundary is the Siah Bubak, but the district extends down the right bank of the Hari Rud as far as Zolifker.

The principal places in the district are Ghorian, Zindajan, Shekhiwan, Miniak, Barnabad, Shahdeh, Rozanak and Kuhsan. There are altogether some 19 villages, or groups of villages, containing in all about 5,000 families, nearly all being Tajiks.

The character of the Herat valley changes west of the Kaftar Khan ridge: instead of a broad fertile plain, the cultivated portion is limited to a breadth of 1 or 2 miles on each bank. This cultivated portion is much cut up by watercourses and is generally difficult for the movement of troops. North and south of the actual bed of the valley and under the hills on either side lie open sloping dashts of variable width covered with grass and camel-thorn, and over these run good roads. That on the right bank leads viá Kuhsan to Mashover tiese tur good touts. And of the variety of the villey is the villey is the villey is the villey is as the valley is descended, become fewer and further between. They are mostly open and straggling with large walled enclosures. The Hari Rud, in the dry season, is passable almost anywhere, being a succession of stony shallows a foot or so deep and from 30 to 80 yards wide. The banks are low and casy. In the flood season (March till end of June) it is impassable by troops. A few miles helow Rozanak towards Kulisan, instead of easy slopes, the valley is hemmed in by broken ground and precipitous hills, while the actual bed of the river is my proxen ground and prespect of the valley offers several good positions, specially about Shabash, but any position here is liable to be turned unless secured by a strong detached force about Chashma Sabz. The river is crossed by a brick bridge at Tirpul, about 4 miles east of Kuhsan, and from Tirpul the road down the left bank is excellent.

Ghorian itself is a large narrow straggling place, about 24 miles long, divided into four quarters or wohallrs. It contained in 1886 about 1,100 families in all, mostly Parsiwans and Tajiks. In Iact, there were not more than 130 Durani families in the place. There is a small fort at Ghorian and usually a garrison of 500 men. On the south side of the village stretches an open gravelly plain, covered with sparse camel scrub, 20 to 25 miles wide, extending from the Doshnkh range to the Sang-i-Dukhtar and Robat-i-Turk hills on the west. Across this plain, about 9 miles south of Ghorian, a low undulating ridge forms the southern watershed of the Hari Rud. A good camping ground may be found anywhere along the south cdge of Ghorian on this plain. From Ghorian good roads lead viá Khaf and Shahr-i-Nao to Mashbad. There is also a road to Birjand viá Chahraks.

Zindajan is another large village in two parts, containing 800 to 1,000 families, half of whom are Afghaus. It is 1½ miles long and perhaps as much in width. It lies between the river and the open dasht above mentioned. The actual bed of the valley is closely cultivated and much intersected with water-courses, most of which are difficult to cross without bridging. The narrow lanes between the high walled orchards add to the difficulties of movement.

Kuhsan is the most westerly village in the Herat valley, and the first that is passed on the road from Mashida. It only contains about 350 families, but it looks much larger, as it covers more than 2 miles of ground from east to west and is about 1½ miles broad. The lanes through it are narrow and hardly wide enough for more than a single horseman. The town proper is at the north-west end of the enclosed ground and is surrounded by a crenelated wall, much dilapidated, within which again is a large square fort in tolerable repair. Just below Kulisan the Hari Bud finally turns north and becomes the western boundary of Afghanistan.

THE HABI RUD.

It may be useful if in this place I give a few notes regarding the Hari Rud. The river, except in the flood season (March to June inclusive) consists of a succession of gravelly shallows, rapid but seldom more than a foot deep. In the flood season it is a turbulent river, 200 or 300 yards wide and quite impassable.

It falls over 1,300 feet between Kaman-i-Bibisht and Sarakhs, and consequently is very rapid in that part of its course. Nine miles below the former place the river enters the hills. It runs at first through a flat gorge à to 3 of a mile wide, filled with tall grass and tamarisk. After 13 miles of this gorge the river becomes lined with very broken hilly ground. At Tangi Darya or Tangi Malu further progress down the river bank is barred. The Tangi Main gorge is about 100 yards wide, the sides being precipitous sandstone cliffs, and for 11 miles is of so impracticable a nature as to forbid any idea of military road making. The gorge is not one continuous defile, but a succession of short narrow ones, with intervening portions of comparatively open ground where lateral valleys join the river. The final gorge through which the river issues on the north side of the hills exceeds in difficulty all the others. Here the bed is only 40 yards across and choked with gigantic rocks and boulders. while the cliffs on each side are several hundred feet high. North of this gorge the hills recede and the alluvial trough of the river becomes about a mile wide and gradually resumes an easy character; but it must be clearly understood that, owing to the difficulties above described, the river bed does not offer a practicable route into the Herat valley.

HERAT.

The city of Herat is not only the capital of a province, but has a strategical value and a historical reputation which has given to its possession a moral influence out of all proportion to its actual importance as a city or even as a fortress some detailed account of this famous city is therefore necessary; but in describing it I shall purposely refrain from describing except in general terms the details of its fortifications and armament; a knowledge of such details

is not necessary for a comprehension of the geographical and strategical situation, and indeed such details would only be interesting or valuable to those who had actually to direct the defence or the attack of the fortress, and may therefore with advantage be omitted from a study of this nature.

Herat is a walled city nearly square in plan and having an area of about 400 acres. It has 5 gaies, the Kuluh Chak and Mailik gates on the north face, the Kusuk gate on the east face, the Kandahar gate on the south face, and the Irak gate on the west. There are four basars meeting at the Chake 30 or cross roads in the centre of the town. Each baser is named after the gate to which it leads. The town is divided into four quarters, ris.:

The Kutub Chak lying north-east. In this are included the Chabar-bagh and the old citadel.

The Charkhtabau lying north-west, which includes the old citadel and the Arg-i-Nao or new citadel.

The Khwaja Abdulla-i-Misri, on the south-cast side.

The Burj-i-Khakistar, at the south-west corner.

The population in 1885 was estimated at nearly 9,000, of which 3,000 were Afghans and 5,000 Parsiwans or Heratis. There were then 1,400 shops in the bazars and nearly half the population was engaged in trade. The houses within the city are mostly in ruins, but they are substantial two-storied buildings, with very thick mud and brick walls and domed roofs; they are quite incombustible and would be very little the worse for bombardment. Every courty and has generally a well or small reservoir for woise; there are also numerous public reservoirs of considerable size, so that there is no fear of the want of water being felt during a siege. The four principal streets are tolerably straight and from 12 to 16 wide, but the rest are simply narrow crooked lanes, many of which are arched over and form low dark tunnels. Altogether the oity offers every facility for a house to house defence after a successful assault on the walls. There are many spacious serais which might be converted into barracks.

Each face of the fortress is 1,500 or 1,600 yards in length. The main defences consist of a mound or rampart 60' to 70' high, surmounted by a wall* nearly 20' high; on the outer slope of the rampart are two parallel trenches called shirazis, 30' wide and covered by parapets 7' high. At the foot of the rampart is the main ditch, which varies from 45' to 60' in width and from 15' to 20' in depth. It is 12' to 16' wide at bottom, and its sides are unrevetted, sloping for the most part at 1 in 1. On the whole this ditch is a formidable obstacle, especially if wet, but the main strength of the place lies in its lunge carlt mampart which with its shirazis gives a triple line of fire. This rampart might be pounded till doomsday without much effect, while an assult would be rendered the more difficult by the nature of the ground outside the ditch. The ground on the east, south and west faces for about 100 yards from the countercarp is 4 to 6 feet below the ordinary level. This low ground is cultivated and is irrigated so that there would be no difficulty in flooding it and forming a belt of deep mud and slush round three sides of the city, thus rendering mining operations very difficult and limiting assault to the northern side.

The northern side has a command over the city. At about 4,000 yards the regord sides of the Gazargah ridge rise to a height of several hundred feet above the plain. Below this ridge is an open gravel glacis-like space, which slopes down for about 1,000 yards to the Jui Nao. This line of canal offers an excellent position for the batteries of an enemy, and from it the east and west faces can be enflated, while with modern artillery even the south face would be exposed to reverse fire. About 900 to 1,600 yards from the Jui Nao, and about 75' below it, winds the Jui-Anjir. Both canals are 12 to 15 feet wide and 3' deep, with spoil banks 7' high on each side. They are crossed by frequent brick bridges capable of bearing field guns. Both if drained would

The wall is about 7' thick at top and over 12' at the base; the parapet on top of 15 is about 2' thick and 7' high, it is fairly bullet proof and is loopholed; the pathway round the top is only 4' wide. The interior face of the ramput is in general scarped.

form capital ready made parallels. Nevertheless the advantages of artillery attack from this, the north side, are seriously discounted by the uninviting nature of the target which Herat and its ramparts present.

The most serious source of danger to the city is perhaps the Karobar Nala on the south-west side. It is here about 40 ands wide and 20' deep, with a smooth gravely bed forming a covered communication to within 500 yards of the south face. In it during the dry season a large number of troops could be collected for assault, or from it approaches could be pushed against the south face. In flood the Karobar is a deep swift stream quite impassable. South of the Karobar the country is a mass of villages, orchards and vineyards to the river bed.

Herat may in fact be described as a sort of gigantic field redoubt, relying on its three tiers of rifle fire and its formidable wet ditch. Supposing it defended by men who meant resistance, it is, after the improvements made in 1886, safe fr-m a coup de main. Even supposing a storming party gained the top of the main wall the descent therefrom into the city should stop it, for the enemy would find itself confronted by a vertical drop varying from 70 to 100 feet. Along the top of the wall troops can only move in single file, and except at the gateways the only means of descent are a few narrow flights of stairs; a storming party thus situated would be exposed to heavy fire from the houses of the city.

Of course, a preliminary artillery attack might have breached the walls and cowed the garrison, but still assault would be a dangerous operation. While a regular siege would probably he a slow operation, for owing to the great command of the walls, all saps would have to be unusually deep; and if the garrison were 12,000 to 15,000 strong, it would require a field army of nearly 30,000 to invest it. No mention has been made of the citadel or Arg.i-Nao, but it really is of no importance in the defence of the place, in fact it is a weak point in the north face. This, however, is immaterial so long as the outwork at the Tal-i-Bhangian mound lies about 600 yards from the counterscap opposite the Arg-i-Nao.

References.

VOI. 1,	Alghan	Boundary	Commission	Records, pages 127—335 and 397—424.	
" II,	,,		,,	радев 561—599.	
,, III,	10		,,	pages 51-65, 144-169, 193-23	ı

CHAPTER V.

THE HILL COUNTRY EAST OF HERAT,

In this chapter are described the mountainous districts lying between Herat and Kabul on either side of the valley of the upper Hari Rud. That is to say, the country of the Firozkohis and Taimanis. For convenience also the district of Obeh is added, as it lies on the road thereto. and is only of importance in connection with military movements east of Herat. The main feature in this region is the Hari Rud in the long narrow valley bounded north by the Band-i-Baba and south by the Safed Koh or Band-i-Baian. North of the Band-i-Baba and between that range and the Bandi-Turkistan lies the country of the Firozkohis. South of the Band-i-Baian lies the country of the Taimanis, while the Hari Rud valley between is occupied by both Firozkohis and Taimanis. At the eastern end of the valley Hazaras are met with, while at the western end in Obeh and Shahtilan, Ghilzais and Heratis form the bulk of the population. East of the region described in this chapter lies the rugged Hazarajat, while west of it is what may perhaps be called the plain country of Herat and Sabzwar. The valleys in this region generally speaking, are from 4,000' to 8,000' above the sea, the mountains from 9,000' to 12,000', these latter are not so rugged nor so barren as might he supposed from our acquaintance with eastern Afghanistan, but more resemble the Highlands of Scotland. Water is plentiful and supplies in some quantities are procurable. A great military feature of this region is the newly constructed road from Kabul to Herat; but this with its bearing on military operations will be described further on.

THE UPPER HARI RUD.

The Hari Rud rises east of Daolat Yar and is formed by the junction of the Lal and Sar-i-Jangal streams a short way below that place. The upper parts of both these vaileys belong to Bamian and are inhabited by Hazaras. The lower part of the Lal valley is an impracticable defile, but the upper part is important, as from it diverge the reads to Kabul and Bamian. The climate of Lal (and that of Sar-i-Jangal is much the same) is severe. The winter begins about the middle of November and heavy snowfalls soon close the road. About the middle of February the snow begins to melt, and the road becomes absolutely impassable even for footmen, as every little stream becomes a rangin (orrent; this lasts till May, and as a great deal of rain also falls about then, it may be accepted that for at least six nonths the routes through Lal to Kabul, Ghazni and Bamian are absolutely closed to troops.

DAOLAT YAR.

This is a small district belonging to Herat. It may be described as the extreme north-east corner of the Herat province, as, 8 miles higher up at the Dahan-i-Sar-i-Jangal, the country of the Dai Zangi Hazaras is entered, and this tract is administered from Bamian. The valley of Daolat Yar is about half a mile wide at bottom; its elevation about 8,100. The hills bounding the valley are from 600' to 800' higher. The fort of I adalat Yar is a large mud structure, with towers at the angles. It stands on the left bank of the river and is not commanded except at long ritle range. The river is here about 50 yards wide, but shallow and easily fordable in July. The population does not exceed 1,000 families and consists of Taimanis, Firozkohis, Hazaras and Tajiks. Supplies can be collected in considerable quantities at Daolat Yar. Below Daolat Yar the Itari Rud valley is about a mile wide and filled with low willow jungle through which the river winds in several channels.

CHARCHABAN.

Is the valley of the upper Hari Rud below Daolat Yar, that is, below the junction of the Sar-i-Jangal and Lal streams, down to the defiles of Kaminj. The course of the Hari Rud through Chakeharan lies between 8,100° and 7,200°, while the passes over the hills to the south are 9,000′ to 10,006′. Chakcharan is about 24 miles wide from crest to crest of the bounding ranges, but the actual valley is only half a mile to a mile in width, contracting in places to narrow defiles between the ends of spurs. The watershed on both sides is from 2,000′ to 3,000′ above the valley. The numerous ravines and gleas between the spurs that spring from them nearly always have water and grass and sometimes patches of cultivation. There is good land in the main valley and a number of half ruined forts, round which the Firozkohis camp in winter. The river is 70 to 100 yards wide, clear, swift and not easily fordable. Abundance of grass, clover, brushwood, &c., may be found on the river banks.

The district apparently extends over the northern range into Karjistan nearly as far as the Murghab, and marches with Chaharsada. The total winter population was computed in 1885 at about 3,000 families, of which a few hundreds were Tajiks, the rest Darazi Firozkohis, but in summer most of them go off into the hills.

From Chakeharan down to Kaminj the valley of the Hari Rud in its present state is quite impracticable for men on foot, so that the road has to go over the Band-i-Baiau into Shaharak. There are two routes, viz., the road over the Zartalai Kotal and the route from Ahingaran by the Shutarkhun pass which is that most frequented though not so easy as the Zartalai. Kaminj belongs to the Taimanis, but below this the valley down to Khwaja Chisht the highest place in Obeh, belongs to the Firozkohis.

Овеп.

Obch is the easternmost of the Chahar Wilayat or four outlying districts of Herat. Generally speaking, it is the valley of the Hari Rud from about Khwaja Chishi to Buriabat on the right bank and to the Kaogan river on the left. There are about 60 villages or groups of villages in the district, with a population of about 4,500 families, or whom nearly 2,000 are Afghans, mostly Ghilzais. Rice is largely cultivated, but sheep may be considered the principal produce of the country. In 1895 it was calculated that the Obeh maldare owned about 60,000 head of sheep. Most of these maldars are Ghilzais who lead a nomadic life in the hills around, which are richly grassed. Of late the Duranis have also been migrating into the country, while the Firozkohi has been almost entirely dispossessed. The people as a whole have the character of being fearless and independent, but otherwise give very little trouble.

Obch itself is a collection of 15 or 20 villages on or near the right bank of the Hari Rud. The valley is here 5 or 6 miles across, and the river flows near the south side, so that it is a long way from the villages to the bills. Probably not more than a third of the expanse is cultivated. The fort of Obch is on the north side of the hien of villages. It is built of sun-dried brick, and though abandoned might easily be made defensible. It is surrounded by a large ditch which can be flooded, and there is a clear space all round for several hundred yards. Obch on the whole looks a flourishing place. There is abundance of water, and very fine orchards exist. The Hari Rud in July is fordable at Obch, though not higher up.

North of the Hari Rud valley lies, as has already been stated, the Firozkobi country which may be here described.

THE FIROZEOHIS.

The Firozkohi country comprises almost the whole of the upper basin of the Murghab and the district of Chakolaran in the upper valley of the Hari Rud, thus extending about 130 miles from west to cast.

On the north the Firozkohis are bounded by the Band.i-Turkistan, which wit is eastern continuation separates them from the Uzbaks of Maimana. On the east the Firozkohis do not extend quite to the headwaters of the Murghab, that region being occupied by the Tajiks of Chiras. On the south the Band.i-Baian divides Chakcharan from the Taimanis, but from the Kaminj district westward the Band.i-Baba is the northern boundary. To the west of the Firozkohis is the Kals Nao Hazara country.

Geographically speaking, the Firoskohi country may be divided into three parts:—

- (1) Kadis, which is considered part of Badghis, as also the Kara Jangal district—that is, the tract between Bandar and the Murghab.
- (2) Karjistan, that is, the basin of the Murghab above Shah-i-Mash-bad, but exclusive of Chiras.
- (3) Chakcharan, which is the upper valley of the Hari Rud from Daolat Yar to the defiles above Kamini.

Bandar belongs to Maimana, while Chaharsada is under the Governor of Sar-i-Pul; but the rest of the Firezkohi country belongs to the province of Herat, but no portion except Chakeharan and Kadis is really much under Afghan control. The elevation of the country varies from 11,000 to 2,000, but most of Karjistan lies between 8,000 and 5,000 ; while the Chakeharan valley is from 8,000 to 7,000 above the sea, the passes over the hills to the south being a couple of thousand feet higher.

The general character of Karjistan appears to be a series of undulating plateaux sloping apidly to the Murghab, which flows in a marrow and deep valley bounded by high cliffs. The plateaux are seamed with deep rocky glens and ravines running to the river, the depth of some of these glens is extraordinary and they are extremely difficult to get in and out of. The plateaux are grassy and the pasturage luxuriant.

The Firozkohis raise enough corn for their own consumption without difficulty. Cattle are numerous and are used as pack animals. Sheep too are plentiful. There are no camels. The people live chiefly in the glens, whore irrigated land is available. Juniper grows abundantly on the higher ranges, but the principal fuel of the country appears to be buto (small bushes with woody roots).

The climate of the country is severe in winter; snow falls in November and lies till April, and all the roads are closed; when the snow melts there is heavy rain for some weeks and the country is not fairly open till June. The harvest is generally at the end of August.

The country taken as a whole is very difficult, chiefly owing to the enormous ravines which seam it; but apart from this the mountain slopes secured and the passes are not severe. The Murghab is a formidable obstacle; not only has the descent into its narrow valley to be made by rocky paths, but the river itself is unfordable, being 40 to 70 yards wide and never less than 4' deep, with a very swift current. In spring and early summer it is in flood and totally impassable except at the bridges. There is a wooden bridge near Kala Gaohar in Chabarsada, and one fit for camels near Kala Niaz Khan. There are, it is believed, no others above Darband-i-Kil Hekhta. The only important roads in the Firoxkolic country are the route from Kabul to Herat through Daolat Yar and Chakcharan and the direct road from Herat to Maimana via Kadis, Kala Niaz and the Baraghan pass to Kaisar (vide Boute XIV, Herat series).

The western Firozkohis, who live in Badghis, are known as the Mahmudis. They are men of good physique, resembling Tajiks. The castern Firozkohis or Durazis have a good strong Tatar touch derived from the Hazaras. They live entirely in Chakcharan and Karjistan. The Mahmudis number over 3,000 families, the Darazis about 7,000. The Firozkohis generally have a good reputation for courage, and are very independent.

In the hills south of the Hari Rud is the country of the Taimanis.

THE TAIMANIS.

The Taimanis are one of the Chahar Aimak tribes. They are indeed the most numerous and their country is the most extensive of any. They occup the hilly region south-east of Herat between the Hazarajat and the district of Sabzwar. The average length of this tract is about 120 miles, and the average width esy 90; but the outline of the Taimani country is very irregular. The

total area may be taken at 12,000 square miles. The whole of the Taimani country is south of the Band-i-Baian except Kaminj and the adjacent glens in the valley of the Hari Rud, and the detached district of Daolat Yar which lies about the junction of the Lal and Sar-i-Jangal streams where they combine to form the Hari Rud. The principal portion of the Taimani country is what is known as the Ghorat, so called from the two valleys of Ghor i-Taiwara and Ghor-i-Mushkan, though many others of the surrounding sub-districts are in-cluded in the Ghorat and are under the Taiwara Chief. The general elevation of the Taimani country is about 7,000' though it varies from about 9,000' at the sources of the Farah Rud to under 5,000' in the south-west about Parjuman and Nizgan. The whole region is a sea of brown bare hills, running in a general east and west direction. These hills are of no great height as compared to the general level and are rounded and gravelly rather than steep and rocky; here and there rises a peak. The most notable are Koh-i-Wala south east of Farsi 12,680', Chalep Dalan, north of Taiwara 12,690', and the Koh-i-Jan Kala in the south-cast 13,600', which is a great natural fortress and has been frequently used as a place of refuge. The Taimani bills are bare and stony, low scrub and coarse grass being their only covering. A peculiarity of the Taimani country is the abundance of luxuriant meadow grass that is found along the course of the streams. There is also a considerable amount of alluvial land in the valleys. The Farsi valley is said to be the largest in the country. It is a plain 3 or 4 miles wide and about 10 miles long, but most of it is a stony dasht. It may be mentioned here that large numbers of Alghans from the Pusht-i-Rud districts swarm into the Taimani country from May till Septemher for the purpose of grazing their flocks in the rich pastures of the Taimani valieys.

The whole Taimani country is remarkably destitute of trees and bushes of terrey kind, and even a small party would often find great difficulty in obtaining firewood. The Farah Rud is said to run all the way in a deep and narrow valley, and even high up it is not easy to ford except in autumn. Below the junction of the Ghor stream the Farah Rud is said to widen out and run in a sandy bed. There appears to be no road along the Farah Rud in the Taimani country. When troops have been sent to Taiwara, they have usually entered the Taimani country by the Farah Rud and then marched by Parjuman and Nili or Waras.

The climate of the Taimani country is severe in winter; and snow lies deep in the valleys. From November to May or June the country is quite impracticable for troops either from snow or flood. Summer and autumn are delightful seasons. The harvest is in September, so that September and October are the best months for military operations. There are no camel roads in the Taimani country excepting the Herat-Kabul road, and the bullock is the pack animal mostly used. Taiwara and Farsi are what may be called the strategical points of the country, as here meet most of the roads. At first sight it would seem that the shortest way from Girishk to Herat must lie through the Taimani country, but this is not the case. Regarded as a hill country, it is not very difficult at the proper season for small bodies of troops with suitable transport; but the lie of the country is all against a movement from Girishk to Herat, as that would involve crossing the whole of the drainage. As said above. the only important road is that from Herat to Kabul. This leaves the Hari Rud near Khwaja Chisht, and ascending to the Taimani plateau passes through the whole length of the Shaharak district, de-cending again to the upper Hari Rud in Chakcharan. This route is described elsewhere.

The Taimanis differ from the other Chahar Aimaks in having a large nucleus of Pathan origin and an headdary aristocracy in their Khan Khel, which gives all the Chiefs. Formerly these Chiefs levied small found aloes in their districts and collected the revenue as well, but in 1886 these privileges were only retained by the Chiefs of Ghor and Shaharak. The Taimanis have much in common in physique, dress, appearance and language with the inhabitants of the Herat valley. They are hardy and powerful, but not very warlike and extremely dirty. As a rule, the Taimanis only live in tents or khargaha during the summer. In winter most of them go into mud huts. They are Suni Muhammadans, but

religion sits lightly on them. The Taimanis are not required to find mounted levies like the other Chalar Aimaks. The population of the Taimani country is said to be over 12,000 families, of whom 10,000 at least are Taimanis. The northern districts are catirely Taimani, while the Ghorat contains a large number of Tajiks, Zohris, Mogals, &c. During the spring and summer mouties there is an immense, influx of Duranis from the Pusht-i-Rud and Sabzwar; these people coming to pasture their flocks and herds. The Ghorat is the site of the once famous city of Ghor, the ruins of which still exist.

As regards supplies, there is very little surplus to be obtained; and even this is exhausted by the annual Durani migration. A small column of 2,000 men marching through the country might possibly be subsisted, and from July to October the standing crops would furnish sufficient forage. Meat would at all times be abundant. The Taimanis own no camels, and builocks are the common transport of the country. Dodat Yar, though under a Taimani chief, is mostly inhabited by Firozkolis.

THE HERAT-KABUL ROAD.

Now that the reader can form some idea of the country lying cast of Herat, it will be useful to consider the subject of the Herat-Kabul road which lies through it, mostly along the valley of the Hari Rud. This road has been constructed by the present Amir. It was intended to make it an 18 feet road throughout, but how far this has been carried out is not known. In 1885, in some of the worst places it was only 6 feet broad and some of the gradients were extremely steep, while metalling was required in many soft bits of clayey soil. The road can hardly be considered practicable for artillery, though a battery or two might be got over with considerable delay and trouble. The total distances are:—

Colonel Maitland was of opinion that a British Indian division might cover this distance in somewhat less than three months, provided (1) it started at the propor scason, i.e., between May and November, or more specifically the march should not begin till the end of May and should be brought to a close before the end of October; (2) that previous arrangements had been made for the collection of supplies; (3) that no opposition was encountered. If the artillery consisted entirely of mountain batteries and the troops were inured to hill marching, the time might be reduced to seven weeks. The greatest difficulty would be stocking the country between Daolat Yar and Khwaja Chisht (13 marches) with supplies. Por most of the way in this part of the road there is nothing to be got out of the country but water, wood and grass; and unless supplies could be collected beforehard the troops might have to burden themselves on the march with 15 days' supplies.

It cannot therefore be considered a suitable line for military operations; moreover, it the Russians were at Herat, they could not only prevent food being drawn from thence, but could harass the march of a British column through the Taimani country and oppose it in carnest at any selected point nearer to Herat. A repulse would be disastrous, as the Firodochis would almost certainly fall on the rear and flunks of the beaten force. On the whole, therefore, it would seem most unlikely that the Hazarajat road, even at the very best time of year, could be used by ourselves for an operation of any magnitude. For like reasons it would be of little use to the enemy; so that recept for purposes of reconnaissance, that is, for obtaining information or for except for purposes of reconnaisance, that is, for obtaining information or for covering and protecting certain tribes and districts, such as the Hazaras and the Ghorat, this line of operations is almost useless and may be regarded as of only very secondary importance.

Nor is there any fairly good or direct road through the Taimani country connecting Girishk with Herat, so that it is uscless to speculate on the possibility of intercepting or forestalling a force using the circuitous Farah route by adopting one of the routes through the Ghorat.

In the same way the Firozkohi country may be considered beyond the scope of military operations. There is a route through it from Mamana by Chaharsada to Ahingaran or Puzalich in the Hari Rud valley below Dadula Yar, and another from Sari-Pul by Charas to Daolat Yar, but they are both difficult even for small bodies of troops with mule carriage.

References.

Alghan Boundary Commission Pecords .-

Vol. I. pages 335, 395, 425—465. " II. " 501, 508, 471—575, 605—608.

" IV " 107-204

Afghan Boundary Commission Routes, Herat series, Routes XLVI and subsidiary routes A to II.

CHAPTER VI.

SABZWAR AND THE SOUTHERN APPROACHES TO HERAT.

The Sabzwar division of Herat, unimportant in itself, is strategically of great importance, as through it lie the only practicable roads leading to Herat from Sistan and Kandaha: It may therefore very possibly become some day the scene of military operations.

It may be defined as that part of the basin of the Adraskand or Harut Rud which lies between the Yaimani hills and the Persian frontier. It consists of the town of Sabzwar and the following adjacent districts:—

- (1) Dadgut .- Around and west of the town.
- (2) Azizabad .- North-cast of the town.
- (3) Zawal,-East of Sabzwar.
- (4) Imarat.—To the south.

All these are small districts in close proximity to Sabzwar.

- (5) Karucha. The north-east portion of the district.
- (6) Anardara.-To the south-west,
- (7) Kala Kah.—The extreme south-west of the district.

The town of Sabzwar is in ruins, and the total population is probably under 700 families, nearly all of whom are Parsivans. Sabzwar now consists of a fort about 250 to 300 yards square, which is in good repair. Inside is the residence of the Governor and his officials with a certain number of local sowars and a few shops, but there are no troops and few inhabitants. There is one gate to the south-east and outside that a small bazar. Round about are grouped bamblets and orchards.

Dadgut has about 1,600 families, of whom two-thirds are Afghans. A large percentage of the population lives solely in tents, parturing their sheep on the Sabzwar plain in the winter and migrating to the hills in the summer. Sheep are numerous and large numbers could always be obtained.

Azizabad or Kasawal contains about 27 villages or groups of villages and about 7,000 inhabitants, of whom 5,000 at least are Afghans. Sheep are numerous and the water-supply for irrigation is fairly abundant, so that grain is probably obtainable in fair quantities.

Zaval contains about 1,100 families, of whom over 900 are Afghans. A large proportion are nomads or semi-nomads.

Raikal or Imarat contains about 1,600 families, of whom 1,300 are Afghans; the majority are nomads.

Karucha extends from the Dahan-i-Doab-i-Farsi down to Jamran in Sabzwar (120 miles), and is said to contain 144 villages and 4,000 families, of whom 3,500 are nomad Nurzai Duranis.

It will be noticed that in the above five districts the Afghan population as compared with the Parsiwan is nearly as \$\frac{1}{2}\$ to \$1\$ (8,000 f amilies to \$2,000); and this is a fact of considerable political importance, as it means that Sabzwar is the first tract of country in which an invader from the north might possibly meet with local resistance and opposition. The population is as distinctly Afghan as that of Herat is Persian. The Afghans are nearly all Duranis of the Nurzai, Alizai and Achakzai clans. The supplies obtainable in these districts may be taken at 75.000 manulos of grain and at least 100,000 sheep.

West and north-west of these districts lies a comparatively desert tract which stretches away to the Persian border. This part of the division is subdivided into Kala Kah and Anardara, through which lies the eain road from Sistan to Herat.

KALA KAR.

The Kala Kala district which is the southernmost part of Sabzwar on its western frontier is only of practical importance in connection with military operations based on Sistan, or a turning movement from the direction of Birjand; but as these are both possible conlingencies, some remarks regarding this district may fitly be introduced. The settled part of the district lies between the Khushk and Harut Ruds, the latter being the lower course of the Adraskand. It is divided in two by a range of hills, the part north of which is known as Kala Kala Shab Koh; the latter containing 5 villages, formerly belonged to Lash-Juwain. The total population of the district is don't 1,400 families, of which the majority are Parsiwans. The rainy season in Kala Kala is from December to March when the Harut Rud is much exposed to freshets, and is frequently impassable for several days.

To understand the bearing of Kala Kala on military operations, it is necessary to premise that a force operating there is based on Lash-Juwain, a most important position which not only covers the routes into Sistan and tip the right bank of the Helmand, but threatens the main line Farah-Washir. Between it and Kala Kah are the Dashi-i-Khushk Rud and Dashi-i-Kala Kah on the south and north banks, respectively, of the Khushk Rud; and on either of these plains a defensive position might be taken up almost anywhere to bar a flank movement from Birjand or Persian territory. The netual ground offers no particular advantages, but a good clear front for three miles could be obtained everywhere, and the soil being suitable for field works, a strong position could be made. An attack from Farah by the valley of the Farah Rud along which there is a good road, could be me in the same way.

The plateau of the Dasht-i-Khushk Rud is level and open, covered with a senty scrub. Portions of the surface are soft, and would, especially after rain, be very heavy for guns. The Khushk Rud, where the road crosses it, is about 200 to 250 yards wide, with sloping gravel banks about 40 feet high. Its bed is filled with grass, and water is only to be got by digging or from marby pools. The road from the Khushk Rud to the Harut Rud is casy and level, a good part of it being over a fertile cultivated plain. The only obstacles are the open kareese which would have to be bridged or ramped down for animals to cross. The Harut Rud where crossed by the road is about 150 yards wide, shallow and gravelly, with a belt of jungle on each bank.

ANABDARA

North of Kala Kah comes the small district of Anardara, bordering Persin. The district contains about 1,300 families, nearly all Parsiwans. The important point in the district is the Anardara defile, which is a gap in the Koh-i-Dara, the range bounding the Dasht-i-Babus on the north. This gap is a gorge, with precipitous sides of linestone rock. Its hed is nearly level and from a quarter to half a mile wide. The ascent is exceedingly gentle. A good stream flows down the centre of the gorge over a smooth gravel bed 50 to 75 yards wide; and on either side of this water-course, which serves as the road, a strip of flat fertile ground extends to the side of the gorge. The ground is closely cultivated and enclosed with mud walls about 8 feet high to protect the fruit trees from the strong winds which blow in the gorge. The village lies about the strong and is closely filled with these orchards. The village lies about half war up and consists of well built mud houses. It is the centre of a considerable traffle between Herst and Sistan, Persia and Kandahar, and soveral hundred canels could be hired in the district at any time.

The close and walled nature of the defile would enable a retiring force to dispute every step; while owing to the precipitous nature of the hills it would be difficult for an enough to crown them. The defile can, however, be turned to the north-cast by a road leading from the Dasht-i-Askak to the Harut plain.

North-west of Anardam the villages quite change their character and become small mud walled forts of about 40 yards side, with a tower at one angle. These village forts are, however, few in number, and the population is very scanty; applies would not be obtainable.

It may be mentioned here, that from the lower end of the Anardara defile a good road leads up the Harut valley to Sabzwar, and this might be important as a lateral communication between columns on the Sabzwar and Anardara roads.

The whole of Sabzwar is comparatively level open country, consisting for the most part of broad open dashts, diversified by occasional narrow hill ranges which are prolongations of the Taimani hills. Sabzwar is the chief centre of population, but groups of villages are studded about in most of the plains. With the exception of Sabzwar, these districts cannot be termed productive or capable of furnishing any but trifling aid towards the support of troops. The general drainage is towards the Sistan Hamun, but the streams quickly dwindle wavy or are absorbed by irrigation, and in the dry season do not reach the western tracts.

The vestern parts of Kola Kalı and Anardara are occupied by the salt desert plain of the Dasht-i-Naumed, which impedes all direct communication in that quarter with Persia. The scarcity of sweet water in this direction and as far up as the Ghorian district renders travelling difficult and military morenats impossible. But with the exception of these western desert tracts communication is very easy throughout Sabzwar, and the existing routes require but little improvement to become good roads for wheeled transport; but there is little or no timber of any sort a fact which might impede brigging operations.

COMMUNICATIONS.

The important point as regards the Sabzwar division is, as has already here said, its relation to the roads leading to Herat. There are two important routes, viz.:—

- (1) Kandahar to Herat viá Girishk, Farah and Sabzwar,
- (2) Sistan to Herat viá Lash-Juwain and Anardara.

The first named is the great high road between Khorasan and India and is that always followed by armies or large caravans. It is generally practicable for all arms, and the greater part of it is in fact very good. It has been repeatedly traversed by wheeled artillery. The Adraskand and its large affluent the Bud-i-Gaz, have to be crossed four times. There is also the Inari Rud close to Herat. These are only difficult when in flood, and then only for a few days at a time. The flood season is in March, April and May. The wheat harvest is in June, so that the best season for marching is probably from June after the harvest till autumn. In winter the want of camel-grazing would make the movements of a large force very difficult. In July, and August, however, the heat is considerable. On the whole, September and October may be reckoned the best months. The total distance from Kandahar to Herat by this route is 34 marches or 405 miles, which may be divided up into the followings sections:—

		y	farches.	Miles
Kandahar to Girishk	 		7	77
Girishk to Famb	 ***		14	170
Farali to Sabzwar	 	•••	6	82
Sabzwar to Herat	 •••	• • • • • • • • • • • • • • • • • • • •	7	76
	TOTAL		3+	405

Ayub Khan, advancing leisurely, reached the Helmand from Herat in 50 days; and though the distance is only 31 marches, a large force would probably take seven weeks to cover the distance. There is an alternative or subsidiary route to the main road, which leaves it at Washir and rejoins it at Khwaja Uria, one march (19 miles) north of Sabzwar; and this of course from its relative position to the main road would be of the utmost importance in military operations.

With reference to the portion of the road between Herat and Sabzwar is should be noted that from a few miles out of Sabzwar till Rozabagh is reached there are no villages, so that supplies would have to be carried the whole way between those places or depots formed.

^{*} No reference is here made to the rivers on the Kandahar side of the Sabswar district, which are equal or greater

In the case of an advance from the south, resistance might be expected at the crossing of the Rud-i-Gaz and again at Rozabagh. On the other hand, no particularly good defensive position offers itself with reference to an attack from the north.

As regards the Sistan road, the total distance from Lash-Juwain to Herat viá Anardara and Pahra may be taken at 18 marches or 215 miles, viz.:—

		Marches-	Milos.
Lash-Juwain to Anardara Anardara to Pahra Pahra to Herat		7 9 2	83 107 25
	Total	18	216

West of this road lies the undulating gravelly waterless desert, known as the Dasht-i-Naumed, so that practically it cannot be turned on the west except from Brigand.

This route presents no physical obstacles of any moment after leaving Sistan, but the Anardara defile above described might be a point of considerable military importance.

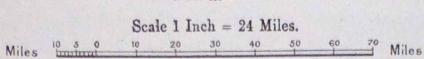
		References.

Afghan .	Doundary	Commission	Records,	Volume I, pages 97-125.
,,	33	n	,,	Volume 11, pages 576-589
**		,,	"	Volume III, pages 37-51.
A. D. C.	, Routes,	Helmand serie	rs, Routes	IIIC, VI and VIB.

MAP TO ILLUSTRATE

THE MILITARY GEOGRAPHY OF AFGHANISTAN.

PART III.-HERAT.





11/15