THE KURDISTAN MOUNTAIN RANGES, CONSIDERED IN REFERENCE TO A RUSSIAN ADVANCE ON THE TIGRIS VALLEY.¹

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PART I.

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At a time when the attention of military students is directed to the movements of the opposing Russian and Turkish armies in the Minor, a fitting opportunity presents itself to examine, by the aid of the map and by the experience of travellers, the serious natural obstacles likely to be opposed to the further progress of Russia towards the Tigris and Euphrates Valleys.

I must here disclaim all pretension to offer to the frequenters of the Royal United Service Institution information which they can find in reference to the travels of which this paper is mainly a compilation, but my object has been to bring within a small compass the observations of a number of travellers, for the benefit of those members of the Society, and of the military profession generally, who, being in remote stations, have not the command of works of reference of which have long ceased to be in general circulation; and the exploration of the mountains of Kurdistan (which was carried on with considerable energy in the earlier half of the century) seen in the exception of Mr. Taylor's, Baron Von Thielman's and Captain Burnaby's contributions, to have been almost discontinued since the Crimean War.

The great mountain system, extending in almost unbroken continuity from Iskanderoon on the Mediterranean to the Persian Gulf (hitherto) perhaps derived its chief interest in modern times from its bounding to the north the rich plains of Mesopotamia, its slopes being drained by, and supplying the sources of, "the River Euphrates."

It seems now destined, within the lifetime of the present generation, to attract the notice both of the statesman and of the soldier.

¹ This paper was chiefly compiled in 1877.—ED.

its position between the tide of Russian advance and power of Turkey.

In order to condense as much as possible the information by a number of authorities, I have thought it more satisfactory to quote verbatim from each some of the most instructive passages on the lines of communication and the relations of several sects, even at the risk of wearying the reader by extracts.¹

While avoiding as far as possible the temptation to lead authors into subjects of general interest, I trust that the here given may perhaps assist some of my readers to study for themselves the physical geography of a country likely to play an important part in the history of the East.

I propose first to confine my attention to the western range comprised within the present limits of the Turkish Empire and therefore more directly affected by the course of the war.²

In considering this subject, it is here assumed that the successes brought such successes to Russia, that Erzeroum has been secured and her frontier, or the territory under the command of the Russian Armenia, has advanced so far as to be represented by the line from Trebisond on the Black Sea, including Gumish and Baïbut, but leaving Erzingan to Turkey; then crossing beyond the Euphrates to the mountain range which forms the northern boundary of Lake Van, and so on to the Persian frontier at the head waters of Zab-Ala tributary of the Tigris.

All this country, except the basin of Lake Van, was recovered by Marshal Paskiewitch in his brilliant campaign of 1829. If it again fall into the power of Russia, it can scarcely be considered that the large Armenian population will ever be handed over to the tender mercies of the Turk.

Once again in possession of Erzeroum and Bayazid and the highlands of Armenia, Russia is not likely long to be able to grasp from Van, the acquisition of which territory is of great strategical importance, as carrying her forward at one stroke to the southward and securing as an outpost, from which to start on her own time for the next move, one of the most favoured regions of Asia; the reputed cradle of the human race, and unrivalled for soil and salubrity of climate by any part of the world. The far-famed vale of Cashmir, perhaps, approaches any other district to the following description of Van. Millingen, who commanded a Turkish force on the Persian frontier after the Crimean War.

("Wild life among the Khoords," by Millingen, p. 152.)—"Not so liberal in its gifts to the District of Van, having endowed it with :

¹ It will be seen, from the same proper name being often spelt in different ways, that I have retained, in each case, the orthography of the author in the original.

² Written 16th January, 1878.

which can ensure prosperity and abundance. Its climate is mild, the season which visit Erzeroum being unknown here. The thermometer rarely Fahrenheit, whereas the utmost heat does not reach higher than from Fahrenheit in the sun.

"The soil is fertile and capable of producing anything

"The apple, the pear, the cherry, the apricot, the fig-tree, the vine, supply the country with their fruits; while the shade of the lime-tree, poplar, elm, and mulberry protects it against the heat of the summer. Varieties of vegetables which are to be found in the kitchen-gardens of Europe are, with one or two exceptions only, supplied by the gardeners of the lake. Wheat and barley are plentiful in the districts surrounding the lake . . .

"The flocks of numberless sheep, bred by the Kurdish shepherds, supply the country with meat, wool, butter, and cheese, but also provide the markets of Asia Minor, Syria, and Constantinople with the means of subsistence.

Although by the scope of this paper we are only directly with the communications from Van to the southward, it is out of place to mention here that Mr. Brant passed over the Range in 1838, and past the sources of the Murad Su Engraving a steep ascent and an almost precipitous descent through Byazid; and that Texier reached the latter town from Van more to the south.

A recent and important addition to the geography of the basin is found in Captain Burnaby's journey last winter from the northern shore of the lake, over the eastern spurs of Ala Dag Mountain to Patnos on a tributary of the Murad Su Engraving. Thence, avoiding the more beaten track by Malazgerd, by an hitherto unexplored country, ascending the course of the river through the Ala Dag range to the main Erzeroum and Bayazid, where he narrowly escaped paying the penalty of his enterprising life from an attack of fever.

Van has also direct communication with Persia through Chöi, which route has been followed by Texier, Major Colonel Shiel, Captain Burnaby, and Dr. Otto Blau. It however, diverged from Kotur southwards to Dilman by a comparatively easy road, past Chani, or Chanzi, at the sources of the Ala.

From thence he mentions that the most direct, but most difficult road to Van leads, through a country hitherto unexplored, to There it joins the route taken by Mr. Layard from Bash-Kal as hereafter noticed.

After this digression, I will now ask my readers to accompany me on the map along the main road from Erzeroum southwards. It leads through Onys, or Kenys, the most southerly point of the Russians in 1829, to Mush, the capital of a Pashalic near the Su branch of the Euphrates, and thence close past the shores of Lake Van to Bitlis. The road then passes out of the basin of Lake Van by a narrow defile, which will be treated of hereafter, to Til on the Taurus, and it has formed through all ages one of the chief trade routes from Trebizond on the Black Sea, to Mosul or Nineveh on the Tigris.

Mr. Layard thus describes the route to the north of Bitlis

"Here and there the ruins of a fine old khan, its dark recesses, vaulted spacious stalls, blackened with the smoke of centuries, seemed to mark

great highways leading in the days of Turkish prosperity from C Bagdad. We had crossed this road on the plain of Hinnis (Chyny Erzeroum to Mush, and thence to Bitlis, leaving to the east th which separates it from the lake of Van. Commerce has deserte years, and its bridges and caravanserais have long fallen into d the restoration of order and tranquillity to this part of Turkey, tr may become once more an important thoroughfare, uniting t southern provinces of the empire."

These khans attracted the special notice of Mr. B accounts for their number on this route ("Journal o Society" vol. x, p. 379):—

"In the course of our descent to Bitlis we met several large k construction, but in a ruined state, and so near each other that imagine the reason, until I learned that in winter in this pass the through the valleys with fearful violence, and, when acco endangers the lives of persons on the road, for advance or retreat impracticable. The khans were built to afford refuge to cara caught in these storms, and the peasantry were bound to reso approach of bad weather, to be at hand as well to give assista supplies during the detention of persons, and to open a way thro their release. The ruin and neglect of these useful buildings proof of the decay of trade and of the indifference of the local go fare of the people."

This road was followed, almost throughout, by the in their celebrated retreat from Arbela to Trebizon scene of their almost daily encounters with the Carducc of the present Kurdish tribes. From Bitlis there is both by the lake and by land with Van, the capital and the centre of an important Armenian community.

The town of Bitlis itself is situated on the banks of the Tigris; but being only a few hours distant from I which it is easily accessible, while it is separated f Valley by deep gorges and rugged passes, it would app fall under the power which shall in future hold the for the latter basin.

The frontier so rectified would show Russia in oc head waters of both branches of the Euphrates, and of tl Van, together with the most considerable towns of Ar nected by an historical highway: and thus directly t two most important strategical positions on the Upp Diarbekr and Mosul.

From this general forecast of Russia's future front Tigris and Euphrates, let us proceed to the consi passes and routes leading to the plains.

Beginning with Diarbekr, as Russia's most wes point, we find that it is separated from Erzeroum by Anti-Taurus range, known by the local names of Khosma Dagh, Dushook Dagh, and Mesoor Dagh, w whole country between the northern and southern l Euphrates for upwards of 150 miles above their junct caravans have been obliged for several centuries

circuitous routes, either by Mush to the east or by Egin and to the west.

With the latter route I propose to begin this notice, as most westerly line of communication between Erzeroum and of the lower Euphrates, and I will quote the authority of A British Consul at Erzeroum, who made the journey to D 1835 ("Journey through Armenia and Asia Minor"—"J Geographical Society," vol. vi, p. 201):—

Route 1. "The distance from Erzeroum to Karghan may be about 5 west-south-west direction. Between the plains of Terjan and Erzingan range intervenes with many very strong passes easily defensible. It is i Kurds, and forms part of the Dujik range. The river makes a circuit mountains. Its channel is said to be full of rocks and rapids. It i route as we entered the plain of Erzingan. The Dujik mountains are pe by Kurds who inhabit villages in winter and cultivate the land. They sented as rich, pay no sort of contributions to the Sultan, lose no op lerying them on passengers they meet, and are in the constant habit o their neighbours

"The climate here (Erzingan) is never severe in winter, and it is v that of Erzeroum in summer.

"The harvest was ready (6th July) for the sickle, and the season was backward than usual. On the northern side of the plain the bases of the bounding it are covered with villages, surrounded by very extensive gar furnish, in great abundance, excellent fruit to the circumjacent districts as Erzeroum, Baibut, and Gumish Khaneh. Grapes and melons are fruits produced. The fields bore the most abundant crops I had anywhe: The wheat was heavy and the straw much longer than in the Erzeroum In no part of Asia Minor did I see a plain with more luxuriant vegeta appearance of more careful cultivation.

"Crossing the plain in a southerly direction, in about an hour an entered a very narrow defile through which the Kara Su flows. This whole length to Kemach is very strong and presents innumerable positions. The river was on my left, running at the foot of the Dujik mo my right were mountains all but precipitous. The river is fordable i places, with some difficulty, during the dry season. It took me ten hour Erzingan to Kemach, but from the nature of the road I should not distance to be above 26 miles.

"I entered Kemach by a bridge of wood thrown over a deep chasm i tain through which the river has forced its way

"On quitting Kemach I recrossed the bridge by which I had entered i course more westerly than the river, crossing mountains which here ar sented strong positions

"After crossing to the left bank of the river, I continued along it for miles, till I reached a village below which the stream again enters a vas mountains, the precipices on either side rising to 1,000 or 1,500 feet . . is said to be a better, though a longer, road by keeping along the right river, but it could only be better by comparison—good it could not be .

"After quitting Egin, we continued on the western bank of the river of following the windings of the stream we crossed several steep me deep valleys. The road is less difficult than that by which I approached

"The distance from Egin to Arabgir may be about 30 miles in a c south and then south-west. There was stated to be a better road i Orah, avoiding Egin and keeping at a distance from the river

"The road from Arabgir to Kebán Maden lies over an undulating, and uncultivated country, affording only a scanty herbage to a few cattl. Between Arabgir and the Euphrates, a distance of about twenty m but one village with a little cultivation around it. Before reaching th into the military road, constructed from Samsun by order of Reshid Moha:

it appeared to have been made with too great haste and too little durability. I crossed the Euphrates by a ferry; there are three constructed but adroitly managed. The stream is about 120 yards rapid.

(P. 208). "Descending from the eminence on which the town is situated we crossed the plain in an oblique direction, and ascended the mountain, on the face of which the military road has been constructed, but is still very difficult, on account of the extreme rapidity of the descent. It took us two hours to accomplish

"We then crossed a beautiful but small plain with two villages engaged in a succession of very difficult mountain passes; here the military road is lost. In these barren mountains are situated Tigris and the copper mine of Aghana

"From the mine to the town, a distance of about ten miles, in an eastward of south, the road lies over steep, difficult, and barren mountains.

I have dwelt at such length on the conditions of this route, which is the main trade route from Erzeroum and Erzincan to Diarbekr, but with Aleppo and Syria.

From the survey of the Kara Su valley let us turn to the main track, noticed above, separating it from the southern branch.

Upon this district, until then supposed to form a barrier and inhabited by savage tribes, Mr. Layard, British Ambassador at Constantinople, was the first to throw light. The following passage ("Nineveh and its Remains," p. 9) :-

"With him" (Mr. Brant, British Consul at Erzeroum, 8th Nov. 1840) "I visited the Commander-in-Chief of the Turkish Forces in Armenia, who recently returned from a successful expedition against the wild tribes of Central Armenia

"His last expedition had been the subjugation of the tribes in the Taurus mountains, to the south-west of Erzeroum, long in open rebellion against the Sultan. The account which he gave me of the country and its condition excited a curiosity which the limited time at my command did not gratify.

"According to the Pasha, the tribes are idolatrous, worship great trees, huge solitary rocks, and the grand features of nature

"The direct road between Trebizond and Mesopotamia once passed through these districts, and the remains of spacious and well-built khans are still to be seen at intervals on the remains of the old causeway. But from a recent war the country had been closed against the strongest caravans, and the trade had fallen into the power of tribes notorious for their cruelty and lawlessness.

"The Pasha spoke of re-opening the road, re-building the khans, and restoring trade to its ancient channel."

Nearly 20 years elapsed without anything more being heard of this most important district till Mr. Colburn, British Consul at Diarbekr, communicated in 1868 to the Geographic Society the result of his explorations.

Route 2. Leaving Erzengân Mr. Taylor made his way to Philamier at the foot of the snow-capped Deyrism Hill, but was unable to bar all further progress. From this point the road is described in the following abstract ("Proceedings of Royal Society," vol. xii, p. 203) :-

"From Philamier Mr. Taylor was surprised to find a good road leading through the Koozichan district as far as the Deyrihan, which, though popular error represented it as inaccessible, a rem-

exists all the way to Masgerd, never he believed, since the days of the traversed by civilized beings, and which the jealousy of the Kurds had concealed from foreigners—for the obvious reason that the former do not know that so easy a route exists through their formidable mountains.

"It passes through undulating valleys, studded with thriving villages, country on either side is beautifully wooded with oak, pine, and poplar here and there into fine level, well-watered plains. Two considerable tributaries of the Mesoor Su, that great tributary of the Tigris, rise in these valleys . . .

"These valleys are inhabited by a numerous population of Kurds. The Kurds appear well off, and the seclusion which they enjoy protects them from the impositions and taxes laid on their less fortunate neighbours."

Route 3. Besides this long forgotten and important route Taylor explored in 1866 two other tracts through Deyrism. The first crosses the Kara Su Euphrates by a bridge at Erzingan, the Mesoor Dag by the course of the Boghaz river to the Tuffan, or "beard plucking" (so called from the robberies committed there), then crosses the Mesoor Su and reaches Kozat in five days where there is a permanent Turkish barracks, occupied by 100 and 6 guns.

Route 4. The other route crosses the Kara Su by a bridge at Komach, 20 miles below Erzingan, passes the Mesoor Dag Ziarat pass, 8,000 feet high, which was found so difficult that mules had to be unloaded and the baggage carried by hand the whole distance. This route joins the last-mentioned at Kozat and marches.

The tenor of these two itineraries shows that these last roads can only be regarded as subsidiary lines of communication.

But it will be seen from the survey of these four passes, and the valleys of the northern and southern Euphrates, that the entrances are all commanded by the town of Erzingan, which becomes a position of vital importance to Turkey against an enemy advancing southwards from Erzeroum.

From Mr. Taylor we gain the first authentic information as to the strange religious tenets of the pagan Yezede or Kissilbash of the Dujook Dag, alluded to by Mr. Layard, and their hatred of orthodox Mussulman (See also Mr. Brant, "Journal of Geographical Society," vol. x, p. 354).

His paper further establishes the fact, that not only is the Mesoor Euphrates navigable for rafts from its junction with the Mesoor above Peyrtek to the silver mines of Kebban Maaden, but the latter tributary is also navigable for some distance into the Mesoor, as corroborated below by Von Moltke.

Route 5, Mr. Brant.—Next in order to the eastward was Mr. Brant's return journey (p. 366), in company with Dr. Dietrich in 1838, from Kharput to Mush, following the left bank of the Mesoor Chai to Palu, where he passed to the northern bank by a stone bridge, fixed on the old stone piers. There is nothing of special interest in this road to the point where it joins that taken by Taylor two marches further east (Route 8), but the fact that Mr. Brant was encumbered by a large part of his attendants who fell prostrate from fever that they had to begin the journey in the autumn proves that the road must have been an exceptionally good one.

But the most important fact is established that Mr. B. for five miles out of Palu, on the direct road to Erzeroum notice of it is unfortunately confined to the following line

"The direct road to Erzeroum is closed by snow during three months and eight caravan days and 42 post hours."

This is, as far as I am aware, the only notice by a record of one of the most important routes in Armenia, for which we must refer 170 years back to the narrative of who travelled on behalf of the King of France in south Armenia shortly before Tournefort's visit to the districts of Erzeroum and Kars. In the short interval which elapsed between Ryswick and the war of the Spanish succession, the Grand Seignior appears as the patron of these pioneer explorers.

How complete was the ignorance till then prevailing of Armenian geography is proved by the fact that who followed a tributary of the Murad Su Euphrates from its source, and then crossed the watershed to Melican on the northern, or Kara Su, branch, he in each case believed he was on the main stream, and did not discover his error until he had piled his narrative, as shown by the following extract from "Levant," Paul Lucas, à la Haye, 1700, vol. i, p. 196) :—

Route 6, September 11th. "The mountains over which we passed were covered with large round stones, which caused our horses to stumble every where having descended a high mountain, we arrived near a village situated where we encamped.

12th September. "After twelve hours of fatiguing march, we arrived at the foot of one of these mountains near the Euphrates.

13th September. "A similar road over mountains which extend to the sea. These heights are passed by a little path cut in the rock, over which, precipices, eagles built their nests.

14th September. "After six hours' marching along the Euphrates, we forded four times, owing to its windings, we passed by precipices which must be seen to be imagined. Conceive a wall of rock, higher than the tower of Notre Dame at Paris, along the banks of the Euphrates over which a little path a foot in width, and in many places broken away, and if one made the least false step he would fall into the precipice. that our horses and mules escaped. We passed the Euphrates on a bridge of arches, and, after having ascended a highish mountain, we encamped surrounded still by very high mountains.

15th September. "We did nothing but descend, during seven hours the Euphrates is again forded, the water being low at this season. almost nothing at this spot, and sometimes it only appeared a ramped about a quarter of a league after having passed the Euphrates named Melican, where also another caravan was halted, which was a slave market at Erzeroum."

From Melican he found the journey a "promenade among small hills to Erzeroum."

Paul Lucas describes the town of Palu as—

"Situated on a hill very steep on all sides, with narrow streets on the edge of frightful precipices. There is also on the top of the hill a rampart to support a small garrison. The Euphrates passes along the foot of the hill, and its situation has rendered it impregnable to the very last. The Grand Seignior has sent against it, and which have only been per-

The eminent German geographer, Karl Ritter, gives ("Comparative Geography" by Karl Ritter, vol. vii. p. 717), on Niebuhr's account which has also been accepted by Dr. Kiepert, a direct route marches from Palu to Diarbekr; and the fact that it is the point at which the two last-mentioned roads meet, viz., those from Erzeroum, and that it commands the valley of the Euphrates, constitutes Palu a most important strategical position.

Let us now cross to the southern bank of the Murad (now Field Marshal Count) Von Moltke in company with him in 1838. His narrative ("Zustände und Begebenheiten in der Türkei von Moltke, Berlin, 1875 (Condition of and Occurrences in Turkey), p. 287), is unfortunately very meagre regarding the natural history of the road.

Having arrived the previous day from Mayafarkin to the Taurus, he writes:—

"On the following day we rode through the mountain to Hlydscha, and in the evening after a forced march, we arrived at Sivan Maaden. Only the half of the day was kept even near the excellent Arab mare of the Pasha; full the half of his left behind, and the worst part of them sank under the effort. Scarcely richer iron mine be found, or one easier to work than this. You need not touch the surface of the earth, for hills and valleys are covered far and wide with iron and large blocks of stone of a black colour. You need only take these stones in your hand to be quite convinced by the mere weight of them how full of metal they are."

"While we rode up one of the affluents of the Tigris we reached the watershed between this stream and the Euphrates or Murad; but it is very high, and how near the sources of the former and the banks of the latter lie, at a point where it has grown into a great stream. The interval scarcely exceeds more than 1,000 or 1,500 paces."

Regarding the descent to the banks of the Euphrates watershed, Von Moltke is unfortunately silent, but the omission is partly supplied by Von Mülbach, as cited by Karl Ritter in "Comparative Geography," vol. vii, p. 710):—

"From Palu Von Mülbach, after a march of six hours, on the road to Sivan Maaden, pitched his camp, on 18th February, at the Kurdish village of Ak-Sivan, close to the southern bank of the Euphrates. The path from thence along the slope of the banks of the Murad, and was dangerous to pass in places of the still frozen places, and the cascades which spouted from the precipitous southern faces of the mountains.

"On 19th February he could only climb on foot to the watershed between the Murad and the Tigris, to the village of Sheik Ismael-an, in order from the Sivan Maaden, for which eight hours were required, on account of the snow, and the absence of any track over the mountain tops, although the journey is only half as much."

Karl Ritter attaches the highest importance to the iron mines of Sivan Maaden as furnishing abundant supplies of iron for the defence of the fortress of Diarbekr (vol. vii, p. 711); and Von Moltke shows the possibility of, but the dangers attending the navigation of the Euphrates in his narrative of his descent from Palu to Erzeroum on a raft, a distance of about 400 miles, down a succession of dangerous rapids, which may perhaps be regarded as not the least adventurous exploit of an eventful career (p. 289).

Route 8. Passing on to the east, we find from Mr. T communicated to the Geographical Society (p. 448), Diarbekr has communication with Mush by a road which the Murad Su Euphrates from the latter town, passes to northern bank, then following the fruitful Boglan Val the Tchabakchoor plain, crosses again at Dyg to the se Mr. Taylor is unfortunately silent as to the character from the channel of the Murad Su to the head-waters of Su tributary of the Tigris; but from the fact that on no difficulties such as he encountered in Routes 3 matters of archaeological or geological interest are fully may infer that the obstacles encountered were less serious

From Heyni to the town of Dibench he describes the road as "the beautiful valley of Pelishka, close to the low range of hills valley of Nerib on this side. It is inhabited by a set of Kurds (a lion) living in their secluded and inaccessible valley, which still ruins of a very ancient date."

From the pretty little town of Heyni, Mr. Taylor we populated country and frequent villages with extensive to the town of Khuzru, at which also converge the t by Von Moltke from the head-waters of the Dibench that taken by Lord Pollington over the Chulp Dagh Pass Nerjki.

Kazru seems therefore to be a place of considerable importance, as the point of junction of three passes leading also that to the east by Mayafarkin and Arzen to Sart an also from its situation in the great undulating plain extending the Tigris to the Garzan Dagh, with direct communication Diarbekr and Maaden.

We have already noticed in Route No. 5, Mr. B. journey from Karput to Mush, in 1838. On his journey which we have now to consider, he chose the more frequently frequented track which crosses the mountains directly from Mush, and joins at Heyni Mr. Taylor's Route described.

Route 9 (July 3rd, 1838, "Journal of Geographical Society," vol. x, Kizil Arghai we ascended the mountains. After reaching the sun range, called Koshm Tagh, at about 6,800 feet we saw two others; the Antogh Tagh, had a good deal of snow on it, but it does not remain this mountain appeared the centre of the group, the ranges on lower . . . We descended into a deep ravine, and after a few ascents not very long nor steep, reached a valley called Shin . . .

(July 4th). "Immediately on mounting, we commenced ascending Tagh. It took us one and a half hour to reach the highest pass which we crossed at 6,490 feet above the sea, and immediately descent by the most difficult path I ever went over; sometimes precipitous hollows in the hills; sometimes it came down, in a of a nearly perpendicular rock; our horses, though led, often uneven narrow path, and risked being precipitated into the abysses in depth, and it was by great caution alone that a person, could keep his path . . . After a difficult and fatiguing wall (for riding was seldom possible) we found ourselves opposite to we had crossed, and scarcely a mile distant from it. We waited tw

after what he had encountered in the Nestorian district Zab-Ala.

"At Kufra (going northwards) commences the most difficult pass, mountains present on this line of road, and which Kinneir describes as *met with*. What would he have said to the passes in the Tiyari coun carried along the side of a hill composed of sandstones, with limestone cliffs above."

The distance from Bitlis to Til at the junction of the two of the Tigris is estimated at from 64 to 80 miles.

Mr. Layard ("Nineveh and Babylon," p. 37) pronounces the following opinion on the merits of the several routes from Bitlis

"There are three roads from Bitlis to Jezireh, two over the mountains generally frequented by caravans, but very difficult and precipitous; a circuitous and winding through the valleys of the eastern branch of the Tigris, which chose the last, as it enabled me to visit the Yezedi villages of the district.

Route 13. "We left Bitlis on 20th September. Soon issuing from the town, we found ourselves amidst a forest of oaks of various sizes, the valleys were one of those deep, narrow and rocky valleys abounding in Kur foaming torrents dashing through it, to be crossed and recrossed, to the comfort of the laden mules, almost at every hundred yards, and, for bridges,¹ generally impassable during the spring and after rains . . .

"Several bridges and spacious khans, whose ruins still attest the ancient commerce and intercourse carried on through these mountains, are attributed to other public works in this country, to Shah Murad, during his memorable reign against Bagdad, A.D. 1638. About five miles from Bitlis the road is a tunnel about 20 feet in length through a mass of calcareous rock, projecting like a rib from the mountain's side.

"There are many such in the mountains,² and the remains of the ruins are evidently of great antiquity, in many places cut out of the solid rock, as in the valley.

(P. 63.) "The direct and most practicable road (for the 10,000 Greeks) have been along the river banks to Bitlis. That by Sert is over very high mountains and is only now taken by caravans, because it is more secret than the others and leads through a town where there is some trade."

Mr. Layard reached Redwan, where these three routes join. From Redwan and Til, roads branch out in all directions to Diarbekr in the west and to Mosul in the south.

The strategical importance of Diarbekr to an army operating from Erzeroum and Van towards Aleppo and Mosul, can scarcely be overestimated, and Colonel Chesney's description ("Chesney's Tigris," p. 15) of its former commercial importance is as showing its future capabilities under fair conditions.

"Diarbekr in its prosperity contained 40,000 inhabitants, with numerous looms constantly at work, and it enjoyed an active trade in gall nuts, in Kurdistan but also with India on one side through Bagdad, and with Aleppo on the other."

Colonel Chesney's testimony is amply confirmed by the late Lieut. Brant ("Journal of Geographical Society," vol. vi, p. 209)

"The town (Diarbekr) in its prosperity contained 40,000 families, or numberless looms in constant work; it enjoyed an active trade with India, and with Aleppo in European produce, and was one of the most

¹ Bridges found in good order by Colonel Shiel, see above, in 1

² See Colonel Shiel's Memoir above.

and wealthy cities in Asia. The plain was cultivated in every part with villages, and within three miles of the gates there were several containing from 400 to 500 houses, and more than one Christian Church. The number of houses or families in the city is reduced to about 8 exist but a few hundred looms, half employed; the trade with annihilated, and that with Aleppo is reduced to insignificance A lation and depopulation was produced by the Kurds, and that too in the my informant, within 25 years.

"The situation of Diarbekr is admirably calculated for that of a great city, and, nothing appears necessary to revive its ancient importance but of the causes which have produced its decline, namely, insecurity and tion of its communication with Bagdad."

Passing still further east, we find that the mount separating Lake Van from the valley of the Tigris, was, till Mr. Taylor in 1862, one of the least known parts of the gre

Route 14. Mr. Taylor, in ascending the Bhotan Su T Sert, reached Kosheyer, the capital of the Möx or Mukus dist Mr. Layard gives below as three marches, in seventeen hours of Geographical Society," vol. xxxv, p. 47) "through spl mountain scenery," passing two large Christian villages,

"Situated on either side of a deep ravine absolutely choked with enor trees, and luxuriant fruit gardens and cultivation . . . Each bend reveals new beauties, and the traveller while contemplating these peaceful-looking spots, can hardly reconcile their existence with the law of the savage country and of the people who tenant them. A closer dispels much of this delightful illusion and reveals a state of poverty, anarchy, and ruthless despotism hardly credible to any but those who h trouble to step out of their path to judge of things with their own eye is several hundred feet above the river, and the slope to it is covered w carefully cultivated gardens, yielding the finest peaches, grapes, fig sultana raisins I ever saw or tasted.

"The town itself contained, four years ago, 260 houses, at present there and of this small number 50 had been gutted and burned a few da arrival, in a conflict between two local hostile parties, whose chiefs v before the Turkish governor at Sert. The Kurds here belong to a Yezid, descendants as they say of the real Sheik Adi, the saint of those people."

At the risk of wearying the reader I must give one more c Mr. Taylor's paper (*idem*, p. 50) to show of what heterog unsettled elements the population of these upland valleys i

"All the working and industrious portion of the population of districts here, and generally throughout Kurdistan, are Armenian a Christians, living in a state of serfage, they being the property of the chiefs, who call them their Zeer Kurlees, a term signifying bought wil meaning gold, as in fact they are bought in the same manner as sheep :

This account is confirmed in a remarkable manner by I ("Nineveh and its Remains," p. 419) in describing thi point at which their routes joined.

"Shattak is a small town rather than a village. It is chiefly Armenians, an industrious and hardy race, cultivating the sides of the which are built their villages, and weaving in considerable quantities, th woollen stuffs so much esteemed by the Kurds. In nearly every hous and the rattle of the shuttle came from nearly every door. The large a Armenian communities inhabiting the valleys between lake Van and . to be unknown to modern geographers, and are unnoticed in our best r

"The difficulties and dangers of the road have hitherto deterred travel entering their mountains. The existence of this people in the heart of the night, if taken advantage of by the Porte, be the means of establishing an trade, and quieting and civilising a country but recently brought under its

Unfortunately for the cause of geography the details of Mr. journey from the Mokus district southward across the Dj Range to Jezireh have not been communicated to the public.

Route 15. Mr. Layard, on his return journey from Van to Most the Achorar Pass into the valley of the Bhotan Su and turned directly eastwards into the Hakhiari mountains. The pass itself be better described than in his own words (Layard's "Nine Babylon," abridged edition, p. 219):—

"We had now (12th August) left the lake (Van) and our track led in a ravine, which gradually became more narrow as we came nigh to the mountains that separated it from the unexplored district of Mukus and Bhotan both sides of the ravine were villages and ruined castles, numerous stream mountains irrigated plots of cultivated ground. Ere long we entered a track, patched here and there by fragrant Alpine flowers. After climbing a declivity of loose stones, like the moraine of a Swiss glacier, and dragging with much difficulty after us, we found ourselves amidst eternal snow, and we toiled for nearly two hours until we reached the crest of the mountain by Kiepert as 13,000 feet) and looked down on the valley of Mukus considered one of the highest passes in Kurdistan, and one of the most dangerous for beasts of burden . . . The descent was almost more rapid and precipitous than the ascent, and we could scarcely prevent our weary horses from rolling down the ravine with the loose stones we put in motion at every step." (An easy march).

("Nineveh and its Remains," p. 418). (From Mukus). "The path follows the course of the river leads to Sert, Jezireh, and the Assyrian plains. (From Jezireh there are five caravan days' journey, and to Sert three, by difficult roads)."

("Nineveh and Babylon," p. 221.) "The district of Mukus, anciently Mozi of the provinces of the Armenian kingdom, had only lately been brought under the authority of the Sultan. Like the rest of this part of Kurdistan, it maintained its independence under hereditary chiefs, the last of whom, after several times defeating the Turkish troops sent against him, was captured as he was flying into Persia."

Following up the valley of the Shattak Su tributary, which will be perhaps hereafter recognized as the true Tigris, the route led through formidable passes, one of which Kiepert gives as 12,000 feet, upland valleys of great richness, alternating with ravines of snow, where it was wearisome and dangerous to ride, and in which the horses had to be dragged over the rocks; till, crossing the watershed at the Kurdish summer encampment at Billi, it descended into Zabala Valley at Julmerg.

Route 16. Directly to the north of the above route, and almost parallel with it, is another mountain track by which Mr. Layard entered the Van district in 1850 from the headwaters of the Zab-Ala, and which he thus describes ("Nineveh and Babylon," p. 199):—

"A dell near our path was pointed out to me as the spot where the untravelled Schultz was murdered by Mir Ullah Bey, the Kurdish chief of the Turning, up a narrow pass (from the valley of the Zab-Ala) toward

mountains, we came suddenly in sight of the castle of Bash-Kaleh (7,800 ft.) of the ancient strongholds of Kurdistan . . .

"Bash-Kaleh was formerly the residence of Mir Ullah Bey. He was Khan Bey in the great massacre of the Nestorians (1846), and for many years vexed those Christians who were within his rule . . .

"On resuming our journey after a day's rest, we took the direct track to Van, only open in the middle of summer.

"Following a small stream, we entered a ravine leading into the very heart of the mountains. Three hours' ride, always rapidly ascending along the bank of the stream, brought us to a large encampment (of Jews carried away captive in the 19th century A.D.) . . .

"We had now reached the higher regions of Kurdistan (9,076 ft.). In the morning we soon left the narrow flowery vale and the brawling stream, and entered an undulating upland covered with deep snow, considerably more than 10,000 feet above the level of the sea. On all sides of us were towering peaks, and a perfect sea of mountains, including the lofty ranges of Hakkari. Descending rapidly (from the watershed into the basin of Lake Van) and after two miserable, half deserted Kurdish hamlets, we entered a long narrow valley shut in by perpendicular cliffs of sandstone and conglomerate. This mountain stream opens into the valley of Mahmoudiyah, in the centre of an isolated rock, crowned with the picturesque castle of Kosh-ab."

Of the two last described routes from the Van district the first presents a succession of such formidable passes and intricate tracks that it may be almost left out of our consideration as an alternative to the Zab-Ala valley; but until further particulars are known of Taylor's route from the Shattak Su to Jezireh, and in connection with the large Kurdish and Armenian population, virtually in the hands of the Porte, in the valleys of the Bhotan Su and Tigris, it would be premature to exclude the Achovar pass from the lines of summer communication between Van and the Tigris Valley.

The other route just described through Bash-Kaleh and though passing over an upland of 10,000 feet, is the direct caravan route between the city of Van and the lower Tigris.

Having brought the reader by these two routes from the Van district into the Zab-Ala Valley, it remains to consider the tracks through the basin of this important tributary to Mosul on the Tigris.

Route 17. Mr. Ainsworth appears to be the only traveller who has given us any description of the course of the river from near Van to Amadiyah. In 1843, in company with Mr. Mitchell, Mr. Rassam, he ascended the right bank of the Zab-Ala through the most difficult region, in comparison with which he might well call the pass of the Ali-Tagh, near Bitlis, as child's play. Of it he gives the following description ("Travels in Asia Minor," p. 250). "The approach to the Tiyari county may be taken as an example.

June 15th. "Passing the Tura Duri we gained the crest of the Duralina Mountains, the view from the summit of which was truly Alpine. We stood at an altitude of 5,811 feet above the level of the sea, and the valley immediately below us was nearly filled up with snow, upon which in one spot lay a whole grove of cedars had been carried down by an avalanche; but below the valley descended a steep precipice over the deep ravine of the Zab. Beyond these, other valleys and their tributaries, of many miles of length and width, reached upwards to the snow-clad summits of the Tura Shina. . . .

"The descent from the Duralina Mountains was steep and tedious. By our Greek servant, I started on foot and gained the last village of

towards the Tiyari country, and at the foot of a range of hills called her Tiyari. It appeared from the crest of the mountains to be just beneath a took us a long hour and a half to reach it, half walking, half running. had to wait upwards of an hour before the party had assembled. Mr. Ras Darud had attempted to ride down, and had both had falls, by which the ir had so hurt his back that we were obliged to have a little longer respite . path, or mule-way, for it was never anything more, took us round the slope of the Karasi Tiyari, where its huge shoulder presses down upon the the Zab. This rapid river rolled along amid impracticable precipice 1,000 feet below us. . . .

(P. 228.) "At Murah we commenced the ascent of the mountain. The sun rendered the toil most severe. In one hour's time we reached the cliffs, the mules working up behind; we then turned along the precipice its foot. The road was so bad that we had twice to load and unload the length we reached a gap in the rocks, which led us to a vast growth of fern announced proximity to the snow line. . . . On two occasions they had loaded. . . .

(P. 235.) "We got down the valley of the Itha by means of a glacier, about length by 300 yards in width. It sloped more gently than the preceding one although perforated by a mountain torrent, it bore mules and men in safety commencing too precipitately, I got into a rate of descent which soon a celerity that threatened disastrous results. I endeavoured in vain to bring by thrusting my stick into the snow between my legs, for I was sliding down the momentarily increasing velocity I was gaining, with nothing but before me, when I made a last and desperate effort to fix my stick deep in the snow to arrest my body, and this time, to my infinite satisfaction, I When I regained composure, I found myself half a mile from my comrade bottom of the glacier, covered with perspiration and trembling all over."

From this point northwards Mr. Ainsworth found a marked difference in the features and scenery of the hills.

"The country towards the head-waters of the Zab (p. 292), beyond changed its character. There were still a few mountain points with a bold rock, called the Rock of Fire; but the outline of the chains is now tame and the ranges being neither serrated nor boldly defined, and rising so little above the level of the uplands as to have the appearance rather of hills than mountains.

This may be accepted as the general character of the country which lies along the western side of the watershed separating the basin of Lake Urumiah from the basin of Lake Van, and traversed by Mr. Laya's journey already mentioned to Lake Van, in company with Mr. Ainsworth in 1850. (Route 16.) On these upland downs extending to the residence of the Chaldean Bishop at Mar Hananisho on the frontier to the head of the Zab-Ala, herds of horses and cattle led to the summer encampments of Kurds were met with; the natural difficulties had in a great measure disappeared, which his party had encountered in the lower valley of the Zab-Ala during the earlier part of this expedition to Van, and also in that of the Chaldean Christians of the Tiyari district.

His track in 1850 lead from Mosul straight in the direction of the town of Urumiah to Mar Hananisho, while that of 1846 kept nearer the main stream of the Zab-Ala, though on the opposite side to that taken by Mr. Ainsworth a few years before, till the two routes joined at Julamerick.

Mr. Sandreski ("Journey to Mosul and through Kurdistan to Urumiah." Stuttgart, 1857, by Sandreski), travelling on

the Church Missionary Society in 1850, followed the same route as Mr. Layard took in that year (though it does not appear he travelled in company) until he diverged at the village of ... the track leading direct to the town of Urumiah.

The general character of this part of Kurdistan is described in the following extract:—

“These Kurdistan Highlands present innumerable valleys, gorges, mountain passes, very difficult to cross, and capable of being easily defended, are wedged in between the two rival powers, Turkey and Persia, with the influence of both heavily on both; and are sparsely peopled by wild Kurdish tribes of mostly at feud with each other; but ever ready to form temporary alliances against either of the foreign states. They have been kept in subjection by the exile or imprisonment of their chiefs; but their hearts are filled with hatred to the Turk, for whom their highlands must ever remain a dangerous volcanic and combustible materials. The tribes are only awaiting a favourable opportunity to throw off the Turkish yoke, such as an invasion of Turkey by Persia or Russia.”

Elsewhere, however, he describes the tribes as equally influenced by Russia, and they generally felt greatly relieved when assured by a traveller that he was not a Muscovite.

In endeavouring, however, to form a true estimate of the situation, it is only fair to bear in mind that the Kurdish chiefs, whom he met as Mr. Layard's guides during his second journey, were not invariably to have accompanied him mounted.

We have, moreover, the significant admission of Mr. W. G. Allen in his description of this journey (“The Ansayrii and further up the Tigris”) that, though racked with fever and so weakly that he was incapable of walking, and able only with difficulty and great pain to sit his horse, he was still able to complete his journey with Mr. Layard and his party.

PART II.

No. 17. Ainsworth.		No. 21. Ker Por
„ 18. Sandreski.		„ 22. Mignan.
„ 19. Ainsworth.		„ 23. Mr. Rich.
„ 20. Von Thielman.		„ 24. Do.

THE first part of this paper treats of the passes leading from the Turkish territory; but any consideration of routes that have been taken by the Russians to the Tigris Valley must be incomplete if it omits to take into account the passes leading from Persia into Kurdistan by the basin of Lake Urumiyah, and through ... to Sulimaniah; since the Persian province of Azerbijan, with its capital, Tabreez, lies completely at the mercy of Russia, and may suit the latter's convenience either to annex it permanently or to occupy it temporarily for the purpose of making operations against Mosul or Baghdad.

The testimony of Bellew, Monnsey, Arnold, and other travellers, proves that Persia has been reduced by the late fanatical and systematic misgovernment to a state of abject misery.

ultimate, or perhaps early, absorption of this province regarded as no flight of imagination when we remember that was occupied by Marshal Paskiewitch in 1827, and that in 1828 campaign he advanced in three columns to the Kaflan Ku rar overrunning the whole province. ("Chesney's Russian C of 1828 and 1829.")

A full appreciation of the critical position of Russia's neighbours may perhaps be most easily obtained by Stanford's map of the acquisitions of Russia, showing her from neighbouring states, beginning with that from Sweden ground on which St. Petersburg stands in 1721, to her latest acquisition of Kokand, or Ferghana, in 1876.

Let us therefore, for the sake of argument, suppose the acquisition accomplished which may at any moment be resolved on, and the Russian frontier as passing from the head-waters of the Volga along the present Turco-Persian boundary by the western shore of Lake Urumiyah, as far as Bistan, and then sweeping round north of Senneh towards the Port of Rescht on the Caspian Sea embracing the basin of the Kizil Uzan river together with that of Bidjar and Sultaniyah.

This acquisition of territory by Russia would put her in possession of the entrance of all the passes leading from the basin of Urumiyah to the Turko-Kurdish towns of Rewanduz and Sulaimaniyah and it would threaten the main trade and pilgrim routes coming from Baghdad through Senneh, Kermanshah, and Zorab.

We need not here contemplate the actual occupation by Russia of Teheran; but the immediate consequence of the loss of Azam Khan's Persia in her next war with Russia would be the removal of the capital to its ancient site at Ispahan, and her virtual withdrawal from the basin of the Caspian to the great plateau of Central Persia.

Assuming, then, Russia to be in occupation of the eastern part of the Kurdistan range, as far as Mount Zagros in the south, we begin with the consideration of the passes leading into the Chaldean Nestorian districts from the east, as we have already considered those from the north.

Route 17. The most northerly of these, leading from the headwaters of the Zab-Ala to Dilman at the north-western corner of the Urumiah was traversed by Mr. Ainsworth, on 25th June, 1840, was estimated at about 7,000 feet in elevation. The general character of this upland has been already given on p. 17, and seems to correspond to the description by Mr. Layard of that crossed by him a little further south, viz., "low hills rising from fine pasturing valleys with occasional ravines in limestone." The descent into the plain is smiling with gardens and villages, occupied three long hours to reach the Chaldean village of Khosran.

The western shores of Lake Urumiyah are not unlikely to form a base for future operations to the south-west, and are well described by Mr. Ainsworth ("Travels in Asia Minor," p. 30).

"The district of Urumiah presents an extraordinary scene to a person coming from the treeless monotony of the plains of Mesopotamia. A more fertile

scarcely be imagined—one vast extent of groves, orchards, vineyards, grounds, and villages; sometimes with a village common. It much resembles parts of Lombardy, between Milan and Lago Maggiore. All the latter journey was carried for many hours over the same plain of exuberant verdure; fruitful fields, gardens, and vineyards, streams of pure water from the adjacent mountains. The landscape is most lovely in the East; and the effect is not a little heightened by the such surprising fertility with the stern aspect of the surrounding heights. Not a solitary tree is to be seen; while in the plain, the willows, poplars, and reeds by the water courses; the peach, apricot, pear, plum, cherry, and vine in the orchards, impart to large sections the appearance of a rich forest."

Following to the south we find the pass leading over the frontier direct to Urumiyah, from the village of Neri, where seen above that Mr. Saudreski left Mr. Layard's route for the south. The following is a summary of his narrative ("Journey to Kurdistan to Urumiyah," Saudreski):—

Route 18. Passing the spurs of the Shiah Resh (Black Mountain) to the true watershed of this region at a point above the village of Neri. The pass is perched on a well-wooded height, growing fine walnut-trees, poplars, and mandarin orange-trees. Beyond the snowfields on the eastern slopes of the Shiah Resh a steep and very zigzag path, scarcely more than two feet wide, leads down through a mountain pass and countless windings to a wild arid valley. Four hours were consumed in traversing the pass, which brought us to the Nestorian village of Holaneh. Beyond this place is the pass leading to Persia, but trending east by north the route now lay across a bleak ridge of vegetation, 6,000 feet above the level of the sea. The hills themselves attain an altitude of at least 8,000 or 9,000 feet, and are covered with snow on their southern slopes. Here another pass, an hour long, leads to a wide valley, encircled by hills on all sides, except towards the north, where it is open.

The road crossing it, still to the north-east, passes several streams melting snows, and all falling into a little river winding through the valley. These streams belong to the water system of Lake Urumiyah, but on the whole well-cultivated, plain of Mergov, the gloomy pass is now traversed, enclosed by bare, craggy hills, and a winding gradually widening towards the north-east, where the hills drop off, and the country becomes more inhabited and better cultivated, trending directly into the plain of Lake Urumiyah, of which it affords a view with its gardens, groves, and the glassy surface of its brackish waters, rising in the distant background beyond it.

I have deemed this route worthy of close attention, inasmuch as it offers a natural obstacles which it presents, because it offers the shortest communication between Urumiyah and Mosul, while avoiding the more difficult districts of Hakhari and Tiari to the north, before as visited by Layard and Ainsworth, and that of Bagdad to the south.

Route 19. Mr. Ainsworth ("Ainsworth's Travels in Asia," p. 309), returned to Mosul by the pass of Keli-Shin, direct from the Persian town of Ushnei to Rewanduz, Shiek Iwa Mountain, commonly called the Peak of Ruzbeh, in three days' journey.

After noticing another track, or great ancient road,

Ushnei, past an ancient monument and across the Keli-Sh describes the formidable difficulties which he encountered:-

(P. 310.) *2nd July.* "We started at an early hour for the ascent of which was performed on foot. . . . We then proceeded on our crossing the first range, gained a country with less snow and more many flocks of sheep and goats feeding on the mountain sides. We soon, to another range with glaciers, the slope of which created some anxiety three of these, however, in safety; it was more fearful to look at another than to venture oneself; a single slip would infallibly have been person to eternity. . . . We now continued our ascent of the mountain piles of snow, accumulated by the drift winds to a depth of many hundred only broken through by bold and sharp rocky pinnacles of grey and green broken off abruptly over dark precipices of brown or blue schists. . . .

(P. 311.) "Proceeding over the first mountain we had a descent to a ravine filled with snow, then another ascent, steep and rocky, and at last till hope deferred made the heart sick. At length we came to a precipice a vast dyke of sienites, which crossed the whole crest, and constituted Rowandiz, or Sheik Iwa, as it is called by the Kurds. . . .

"The elevation of Rowandiz by boiling point thermometer was 10,568 feet. . . .

(P. 314.) "After half running, half sliding, we found ourselves in an ably seated just below the inferior limits of snow, where a fire had been breakfast was prepared to reward us for our toil. . . .

"A large caravan passed along the road in the course of the morning notwithstanding the predatory habits of the Kurds, this is in summer the most frequented passes in this part of the country, the same men recourse in severer seasons to the road by Rowandiz to So-uk-bulak. all roads are equally impassable.

(P. 315.) "The elevation of our halting place was 8,568 feet. . . . four long hours' ride to descend from our station to the head of the valley or Sidek. . . . Although the present castle is a comparatively modern the rock on which it stands appears to have been chiselled at a date. . . .

"There is every reason to believe from the peculiarity of its position from its antique appearance, that it was a station or fort at the time of the great road from Nineveh to Ecbatana. . . .

(P. 318.) "It took us five hours to accomplish a distance of 18 miles nearly round one-half of the mountain's circumference. We then began towards the vale of Rowandiz, by a difficult pathway, carried over a shelving schists, and on which we were obliged to walk. It constitutes the second difficulties of this road, which are three in number, viz., the snows on the passes the descent on slates at the foot of Ser-i-bund, and the vast limestone peaks of Rowandiz. . . .

(P. 324.) "Passing the gardens of the town (Rowandiz), we made a deep valley with a gap through the lime ridge into the bed of the Rowan then ascended one hour and a half to the crest of the shoulder of Sir. We descended from hence one of the most remarkable precipices I have seen a road carried down. It was not so lofty as many in the Tiyari; but vertical, and upwards of 800 feet in perpendicular depth, and yet the road in the face of this precipice, along which it wound round and round a gradual descent that it might be effected safely on horseback. We were thirsty, and the windings must have been six or seven miles in

Sir Henry Rawlinson ("Journal of Geographical Society, p. 20), visited the ancient inscribed pillar Keli-Shin (alluded to by Mr. Ainsworth above, and which gives its name to the pass, on the 27th October, 1838.

¹ Described below by Sir H. Rawlinson.

"This morning accordingly, when the weather fortunately cleared, and which had been blowing furiously for the two preceding days, appeared exhausted itself, I set out, attended by two horsemen, well mounted, and up, and with every defence against the snow drift, which I was to certainly encounter at the summit. For five miles I wound slowly up the mountain, pursuing a broad open track, neither steep nor difficult, and of a huge shoulder which juts out from the great range. At this point snow, and the difficulties commenced; the ravines which indented the shoulder became, as we ascended higher, choked with snow, and in one narrowly escaped being engulfed. At length however, alternately walking, as the nature of the ground admitted, we gained a more open mountain; and then, pushing rapidly on, gained the summit of the pass four hours from leaving the fortress at its foot. The distance I should about 10 miles. I here found, upon a little eminence by the side of the famous Keli-Shin, the stories of which had long excited my curiosity . . .

"At the distance of five hours from the pass (p. 22) which I ascend precisely similar pillar, denominated also Keli-Shin, on the summit of a range which overlooks the town and district of Sidek . . . But the which I attach at present to these two ancient relics of antiquity is the position which they afford of a great line of communication existing in across this range of mountains. This line could only have been to great capitals, and these capitals must then have been necessarily Ecbatana . . .

"During the troubles of modern times (p. 23) the track has been of the transit of merchandise, but Ali Pasha, in his late attack upon it found it practicable for artillery a long way beyond Herir, and on the it is known to be open to guns, almost to the very fort of Rowanduz from the Kurds that the only really difficult part is between Rowanduz

Although Sir Henry Rawlinson does not speak of the last of this route from personal experience, his opinion on the military position in the Persian service, and traversed this range in directions in command of a mixed force, accompanied by five

Route 20. Next in order comes the Souk-Bulak route, above by Mr. Ainsworth as being easier than that of Kalat described.

This road was taken by Baron Thielman, the well-known diplomat, a few years ago, and is named the Garuschin I thus described by him ("Thielman's Caucasus, Persia, and vol. ii, p. 88):—

"A choice of two routes exists to get from Souk-Bulak to Mosti Rewanduz. The northern route leads through the district of Sulduz, Lake Urumiyah, to Ushni (called also Ushnin), and thence crossing the Garuschin, said to be 1,000 feet in height . . . then traversing the valley of S Rewanduz"¹

Of the southern route which he followed, Baron v. Thielman

"Mahmoud (the guide) called it (the present route) the pass of Garuschin described the route as easy and comfortable.

(P. 91.) "Our road led (at first) up the valley of the river of Souk-Bulak ascended the barren and totally uninhabited mountains on the left before we rode for hours through desolate mountain regions without either variety or interest. It was late in the afternoon when we reached the watershed of the high altitude of 6,180 feet, and from here we had a beautiful parting glance of (Urumiyah) and snow-crowned Sahend mountains . . . The district

¹ That last described by Ainsworth.

inhabited by the tribe of Balbas Kurds, and watered by the little Zai, elevation of 5,650 feet, and our descent from the watershed to the fortress was a very rapid one. Kiepert's map shows a shorter route, but across a leading thither from Souk-Bulak, by way of Legwin. Paschy (which the map gives as Passoa, whilst Kiepert gives it Pisan or Peshwa) seemed, at a distance, to possess a very defiant-looking castle. But all magnificence vanished on approaching the spot, and there only remained a crum encircling a large open space, and protecting the little house of the Khan.

(P. 94.) "According to the description (*vide* Butler's Geo. vol. ix, p. 100) former traveller, who had crossed the Zagros chain to the south of the ravine which the little Zab flows, we now looked forward to a most difficult passage. To our great surprise we reached the Turkish frontier after an hour of a steep but not otherwise arduous path, leading across a ridge some 1,000 feet in height above the valley. The actual watershed lay lower down . . . After an hour's ride through a grand but yet lovely valley, we reached Rajat, the frontier village . . .

(P. 96.) "To-day's journey conducted us through the most romantic which I saw between the Caspian and the Mediterranean. The valley of Rewanduzschai abounded in beautiful views. At one time lofty snow-capped peaks pierced through side ravines of wild grandeur, then the valley widened into recesses, in which nestled pleasant villages with rich gardens, half concealed by the shade of planes and elms, and encircled by neatly tilled fields; the country was more than twenty different kinds . . .

(P. 97.) "We inferred that the lofty snow-capped cone visible through the valley on our right, and which was not unlike the Matterhorn, must be the Sheikh Mountain, on the northern side of which is crossed by the pass of Killischin . . . The road and the bridges over the roaring Rewanduzschai, which we had several times crossed, were in fair condition, the last bridge merely consisted of two stones resting on one pillar, but our horses stepped along it without the least hesitation.

(P. 98.) "The next morning a steep and tortuous path brought us to the heights which enclose the hollow of Dergala, and thence down into the valley of the affluent of the Rewanduzschai. The latter descent over a path scarcely a yard wide, and bordered by a precipice, was the only passage during the whole journey from Tabreez to Mosul; in rainy weather it would be quite impracticable. We prudently dismounted and left our horses to their own way down. They picked their way very quietly and sagaciously down the narrow path . . .

(P. 99.) "The valley was enlivened by large flocks of sheep and goats who, by curiosity, ran after us. Shortly afterwards we reached the main road, which continued along it, till we arrived at the town of Rewanduz.

"We left the town (p. 104) by the elevated southern extremity, and descended into a very peculiar oval-shaped hollow of the rocks, which communicated with the valley, or rather the ravine of Rewanduz, by a perpendicular crevice a few feet broad.¹ A steep and stony path led out of the hollow to the left, and the Rewanduzschai . . .

"A narrow but tolerably good foot-path brought us down to the ravine, which is the only means of communication between the district of Rewanduz and the outer world."

The next group of passes which claim our attention are those which lead from Persian territory through the Zagros range, and converge at Sulimaniyah, an important Turkish frontier town, from which new roads diverge to Mosul and Baghdad.

Sulimaniyah has, like Amadiya and Rowanduz, been reduced in the present century, from an independent Kurdish district under a hereditary feudal chieftain, to a tributary Pachalik of the province of Baghdad.

¹ See Ainsworth's description of his descent by an ancient road on the face of

Route 21. The most westerly of these passes was taken by Sir James Ker Porter ("Travels in Georgia, Persia Armenia, &c.") on his return journey to Souk-Bulak in December, 1822.

Leaving Sulimaniyah on 12th December, just as the winter was setting in, he started on his adventurous journey. After two days to Marut, the serious difficulties began in surmounting the spur which separates the Kyzylchy Chai from the Banna Rud River—

The following is his description of the two days' march from Mosnair over the Daroo Mountain (p. 463):—

"Words cannot paint the difficulties of this pass. The road over which we clambered was actually over naked and slippery marble rocks . . . Every mountain I had hitherto crossed, through the whole range of Caucasus was security and ease of travelling compared with the actual dangers of this. One slip of man or beast was destruction; yet to my unceasing astonishment, notwithstanding the nature of these obstacles, even our laden mules made their way with an ease and sure-footedness which seemed miraculous.

(p. 473) "December 16th. From Baytoosh over Daroopeak. Had I been aloft in a balloon, I could hardly have felt more abandoned to the great gulf of air above the clouds; all around was so steep and bottomless . . .

"We cautiously followed each other over these points of particular danger, but most of the Kurds undauntedly kept their saddles, passing over our fearful impediments with a firmness and lightness which could not fail reassuring our resolution."

The gathering snow storms which threatened to break over the travellers, and might have caused their destruction in the mountains, fortunately held off till they gained the plains of Persia.

Route 22. We have now to notice an adventure more daring even than the last, of which Mount Zagros, a little further east, was the scene. Captain (afterwards Major-General) Mignan, of the Indian army, returning to India in 1839, travelled across Russia with his wife, two children, and an English maid. After narrowly escaping being lost in a snow storm in the Vladikaukas Pass in December, which destroyed a large Russian detachment, they pushed on through Tabreez, down the eastern side of Lake Urumiyah, past Bogaun (Burchan) to Miraady (Miradeh). Thence by Banna and Beestan to the capital Sulimaniyah (where he arrived early in April) by the only pass open in winter, his family accompanying him in mule panniers.

He thus describes ("Winter Tour into Kurdistan," by Captain Mignan, p 277) the passage of Mount Zagros, which he found far more difficult than any part of the Dariel (or Vladikaukas) Pass:—

"We started soon after daybreak to cross Zagros and proceed to the capital of the kingdom. The morning was unusually sultry, and during our journey a dreadful storm of rain, hail, and sleet, accompanied by violent gusts of wind, thunder and lightning, broke upon us. We were soon enveloped in a thick fog which reminded me of the situation of the 10,000 Greeks under Zenophon during their ever-memorable retreat over these very mountains. They were hidden from the enemy by a mist similar in density to the one which we now experienced; for we could not see the road-side although we were only two yards distant . . . The road was so slippery as to render the utmost caution necessary, as all around was Stygian darkness . . . Having reached an immense height, the clouds suddenly swept away, and a vast extent of mountain ravine and glen lay exposed to our glance, but they were again as quickly obscured by the passing clouds."

Three separate ranges had to be crossed before reaching

Sulimaniyah, the capital of the kingdom, each pass occupying a day, the second of which was enlivened by an encounter with armed mountaineers, who barred the way and resisted his s Captain Mignan only forced a passage pistol in hand.

It is worth while to notice here in passing, the effect of southern climate in reducing the close season in these mountains about four months, whereas in the neighbourhood of Lake Van probably be extended at least a month longer both in autumn and

It only remains now to notice the journeys of Mr. Rich, our at Baghdad in the early part of this century, who travelled in of health through Sulimaniyah to Senneli in Persia, accompanied Mrs. Rich and a retinue of Baghdad and Indian servants, during summer of 1820.

Route 23. His party being worn out by fever in the hot v Sulimaniyah, he started, on 17th July, over the Gioszeli I being the easiest by which to cross the chain, or rather bare hills which bounds Sulimaniyah on the east. ("Rich's R in Koordistan and Nineveh," p. 159.)

"We reached the foot of the hills by a gentle rise all the way up from a little after 4 A.M., and immediately began the ascent, first in the dry torrent, and then along the steep face of the hill, by a very narrow and path . . . It (the baggage) had had a difficult passage over Gioszeli, as three of the baggage mules got a roll down, but fortunately no serious occurred.

(P. 162.) "As we had been told at Sulimania that the roads over which to pass were very steep, rough, and precipitous, and in some places in the so narrow that two horses could not go abreast, we were obliged to ab Takht-revan (mule litter) and mohaffas on this excursion, leaving them bel Sulimania. The women servants were sent off on horseback last night tents and baggage. Mrs. Rich accompanied us on her pony, a present from Bey, which carried her over the mountains admirably . . .

(P. 166.) "From the banks of the Tenzuzhee, we rose immediately steep ascent, which occupied thirty minutes, at a good hard pull . . . the road to-day excellent, and much better than I had seen in any part Minor. Some of the views down into the valley reminded me of the Jura

(From Doladreich.) (P. 188.) "We soon began a very steep ascent, I highest and steepest I had yet seen, but the road was excellent. We at summit at six, the ascent having occupied about forty minutes, for half which it seemed, as we toiled up, to be almost perpendicular . . . We in began to descend by a beautiful and excellent road, among a thick forest through which it ran in a zig-zag direction, and was not so steep as the a Penjineen is the emporium of the wandering tribes.

(P. 184.) "Caravans go from hence to Hamadan in eight days, to Sir . . . There are some families of Jews here, who trade in gall nuts, hide Sinna and Hamadan. Many hides are exported to the latter place. Jews of Koordistan are also dyers . . .

(P. 191. From Guetzawera.) "We were off at 5 A.M., and proceeded a hilly but open country till six, when we came to the entrance of a narrow formed by two stupendous cliffs, which reared their bare heads above the that cover their declivities. The small river of Ascrabad, or Gurren, flows the pass, and is crossed by a neat bridge of three arches . . . the road beautiful, through woods of oak, ash, wild pear, vine and tehinar, or oric which cover the hills almost to their summits, and among them we no thorn and gigantic wild rose. It was enlivened by a large division of proceeding to the plains of Zeribar, with their families and flocks. They were loaded on bullocks . . .

(P. 192). "The road was excellent, the vale through which we as narrow. At ten minutes before eight we came to the foot of a very steep the same direction, the road not winding much; at a slow progress it forty-five minutes in ascending. The mountains were gypsous and slate we reached the top of the Col, and saw higher summits on either hand. We almost immediately began descending by a steep path, the wood being rare, and was confined to the dwarf oak . . . At five minutes past nine the foot of the pass. This pass of Zagros is called Garran, the name saint, as I am informed, though it is certainly no Mahometan name. Ardbaba to Bauna is reckoned easier."¹

I have given extracts from this itinerary at considerable intervals to show the importance of this route, the chief and easiest communication between Sulimaniyah and Senneh, from which roads diverge to various parts of Persia, including Rescht, Teheran, Kermanshah, and . . .

The last route which we have to notice is that by which we returned to Sulimaniyah from Senneh. Leaving the plateau on which we crossed the head-waters of the Kysyl Uzen River he entered the mountains at Kara-Bokra. At Banna he crossed the route of Captain Mignan, then, following the Banna Rud River to Merwa, he turned due south to Sulimaniyah.

After stating that "from Kara-Bokra to Serkhuan-i-Sulimaniyah, capital of Teratul, is four hours, thence to Beestan four hours," he thus describes his road from Kara-Bokra:—

(P. 233.) "At five minutes past seven we began to descend by a good road, reaching the bottom we found ourselves in a narrow, rocky valley, or rather among the hills, in which we continued the rest of the day, to our infinite fatigue. The road continually ascended and descended along the steep sides of slate. The path was narrow and shelving; indeed it was nothing more than a path, with a precipice on the left hand. The Koords even confessed that it was the most disagreeable road they had ever travelled over, and, for the first time, I saw them dismount. Omar Aga's horse fell with him once, on the edge of the precipice; he very adroitly threw himself off at the moment with the bridle, otherwise horse and man must have been killed. My horse was so much that I was obliged to walk the whole way from the foot of the mountain to the end of the march . . .

(P. 234.) "From the mountain we saw Mount Kelli Khan, and Mount Banna a part of it. We reached the foot of the mountain at 7.35 A.M.; and came to a miserable little village named Hajee Mahommed. Thence, for a short distance, we dropped at once on the village of Soota, by a most horrible break-neck descent with a precipice on our left hand.

(P. 235.) "At 2 P.M. we mounted, I may say, for I did not take a rest, the whole way on account of the precipices, which were too much for my horse."

(P. 239.) (From Meek.) "At 11.45, without having ascended, we reached the top of a very steep descent, I think the steepest we had yet met with; it occupied half an hour, and is called Kelleh Balin. Both Omar and Abdullah Bey agreed in saying it was a pass of Zagros."

From this pass the road presented few difficulties of a serious nature until within a few miles of Sulimania, where a part of the route to Mount Azmir was found out of repair, and a party passed over, leaving their horses to follow alone. The general nature of the Sulimania district, after turning south from Merwa, formed a sharp contrast to the inhospitable mountains of Persia. All along the route innumerable springs gushed from the mountains, which we

¹ Described above by Captain Mignan as very difficult.

with forests of oak, while the villages, surrounded with walnut gardens, and vineyards, made up a scene at once grand and beautiful.

With regard to this last group of passes leading to Sulim will be observed that three out of the four have been crossed by English ladies, and we may therefore infer that they would be found impassable by mountain artillery. And in endeavouring to form a just estimate of the difficulties described by travellers, we should fail to remember that the impression left on the mind by mountains, gorges, precipices, and glaciers, more especially if approached from the plains, depends to a great extent on the state of the observer's health and nerves, as affected by such climates as those of Mesopotamia and Assyria.

Where we hear of caravans of laden mules and cattle passing, and of the natives making their journeys on horseback, it may be presumed that a well equipped mountain column could follow.

And here the survey of the passes of Kurdistan may be fitly brought to a close, as the great trade and caravan routes converging on Baghdad from the plains of Persia, through Kermanshah and Hamadan, are too well known to require special notice.

In this region the mountain barrier sinks nearly to the level of the great plateau of Persia, 5,000 feet in elevation, offering no obstacle to a descent into the plain of Baghdad.

Nor does it come within the scope of this article to discuss a question of Imperial policy as where, or how, the defence of Bagdad may be conducted, should the command of the Persian Corridor hereafter be threatened.

Let us, therefore, turn to the consideration of the physical influences which might be found to favour a Russian descent into the Tigris Valley.

There is first the important fact that the level of Lake Urmiah is upwards of 5,000 feet, and that of Lake Urumiyah 4,000 feet above the sea; while the following are the elevations of the principal passes from which an immediate advance would probably be made upwards.

Erzingan	..	..	..	4,200 feet.
Mush ..	..	..	..	4,200 "
Bitlis ..	..	..	..	5,100 "
Ushnu..	..	..	..	4,900 "
Souk Bulak	..	..	..	4,400 "
Sakkyz	..	..	..	5,300 "
Senneh	..	..	..	5,800 "

Thus, as a rule, the greater half of the ascent would be gained, leaving from 3,000 to 5,000 feet to be surmounted.

The climate, too, may be considered an important ally of the invader who might choose for the beginning of their operations those of the summer when the northern valleys would be bearably cool and actually pleasant; while the bulk of the defenders would be exposed to oppressive heat, at elevations of 2,000 or 3,000 feet on the

slopes; or the actual passage might be deferred till the climate of the lower plains becomes suitable for operations in the autumn.

Nor need the question of supplies present insuperable difficulties. The sympathy of a portion of the population were secured; and it has been computed by Major Millingan that the Kurdistan Range contains no less than (40,000,000) forty millions of sheep, from which Baghdad, and the other cities of the plains derive their supplies. The valleys we know to be of great richness and often well cultivated.

No advance would of course be attempted by Russia until time to organize her communications with the above on the means of serviceable roads—from Georgia through Erzerum, Tabreez, and from the Caspian by Rescht.

But Russia might hope to find her most powerful ally in the prevailing animosity among the various races and creeds, and the bit of hatred entertained alike by Kurdish clans, Kissilbash or Yezedi people, and by Chaldean and Armenian Christians, towards the Ottomans who are regarded by one and all as foreign oppressors.

The works which have been quoted above show that throughout the whole range, the independent tribes have been only brought under the authority of the Ottoman Government during the present century, and in many cases during the last thirty years; and that this has been effected by the usual agency of fomenting the jealousies of the tribes and by inciting them to mutual extermination.

Mr. Taylor has told us of the Kissilbash tribes maintaining their independence in the fastnesses of the Deyrism Dagh and on the Dibench Su; while both he and Mr. Layard noticed the fertile and industrious Armenian population ground down by the oppression of their Kurdish masters in the remote valleys south of the range. Both Mr. Layard and Mr. Rich seem to have interested themselves in the condition of the Yezedies, scattered through the districts of Mosul and Erzerum—a sect who have survived the systematic persecution which they have been subjected through the detestation in which their peculiar heresy is held by Kurd and Turk alike.

Russia has taken advantage of these persecutions to give the Yezedi fugitives an asylum on the northern slopes of Mount Ararat, where they guard the frontier against the incursions of the Kurds, and she has thus secured to herself allies far within the Turkish frontier.

It is sad to contemplate the change in the condition of the Christians of the Zab-Ala Valley, since 1843. Mr. Rich speaks of them in 1820 as a formidable independent tribe holding the Kurds in awe; and Mr. Ainsworth had proof of their numbers in 1843, while the first massacre was hourly expected.

For the account of the massacre of 1846, by Beder Khan at Rowanduz, I would refer my readers to "Nineveh and its Remains," (ii, Chapter VII), which brings forcibly to mind the state of the Balkan Valleys when the Balkan Valleys were the scene of similar outbreaks. The deplorable state of the district is also forcibly described by ("Nineveh and Babylon" abridged edition, pp. 232-233) in revisiting the tribes in 1850. And this, be it remembered

coloured picture drawn by a Russophile partisan in the heat of controversy, but the dispassionate narrative of a distinguished artist whose knowledge of Asiatic Turkey is probably unequalled of any living Englishman.

The total population of the independent Chaldean Tribes, was given on the authority of their Patriarch ("Missionary Report in Armenia," Messrs. Smith and Dwight, p. 294), at 70,000 so this was held by the English Consul at Tabreez at the time under-estimate. Their present numbers have been given by authority at 100,000.¹

These primitive Christians do not appear to extend to the Rewanduz district; but we have ample testimony from the disaffection which was openly expressed by the Kurdish chiefs round Sulimaniyah towards the Turkish Government during their sojourn among them in 1820.

Captain Mignan, however, found the district of Sulimaniyah still cally independent nineteen years later; for writing in 1839 ("Tour into Kurdistan," Mignan, p. 285) he says:—

"The government of Sulimaniyah is administered by a Pasha who is Kurd, subject to neither Turk nor Persian. To please the Russians he has lately sent a present in cash to the Prince Royal of Persia; and Marshal Fraser is desirous of taking him under his especial protection that, in case of need, he may be induced to furnish cavalry to harass, by their repeated incursions, the frontiers of those countries by which they are bounded. For such duty they are well fitted. A Kurdish chief assured Fraser that if 1,000 Europeans, of a similar make to those who made their appearance amongst them, 20,000 Kurds would immediately join them."

It may thus be said that the sound of Marshal Paskiewitch's columns, advancing through Azerbyan, penetrated the fastnesses of Mount Zagros and found an echo 200 miles off, beyond the frontier.

Mr. Fraser ("Historical and Descriptive Account of Persia," p. 100), in 1834, in his journey from Souk-Boulak to Sulimaniyah, seems to have followed almost the same route as that followed by Sir James Kerr Porter, twelve years before, *via* Seradust. He found the Pashalic in the occupation of the Persians, who had overrun and almost depopulated it. At Seradust alone 1,000 inhabitants had perished from cold and famine, and it has never recovered the prosperity which it enjoyed at the time of Sir Rich's visit.

History would seem to teach us that the true value of an mountain range, as a barrier to invasion, rests chiefly on the willingness of the defenders can adopt to strengthen it by their own resources, or by the active co-operation of the inhabitants.

What resources Turkey may hereafter command on this part of the Asiatic frontier, it is not our province here to discuss, but from the concurrent testimony of all the travellers who have means of forming an opinion, that Russia, once in possession of the northern outlets of the mountains, would find ample mater-

¹ Sir G. Campbell.

to her hand for alliances and intrigues among the act-
recently, independent tribes along the whole length of the

Nor must we lose sight of the fact, an instance of which
seen in the long-concealed highway through Deyrism. De-
exactions of such a government as Turkey may make it to
the mountain tribes to oppose, rather than to facilitate, the
their passes. We have therefore probably no right to
because only certain practicable roads are known to the
authorities, there may not be others equally practicable
equally numerous, which they have either never heard
dared to explore, but which would be disclosed to an
manding the sympathies of the inhabitants.

It is obvious that, for many years after reaching
indicated, it would be neither in the interest nor the power
to attempt a descent on the plains of the Tigris; but it
in accordance with her practice in Asia to endeavour, un-
encouraging trade, to improve the tracks on her side
and to send forward agents to establish friendly intercourse
eventually a protectorate over, her neighbours on the south.

Separate or simultaneous encroachments might then
forward upon such important strategical points as Am-
and Husru, threatening Diarbekr; Saert and Julame
west of Mosul; or upon Rowanduz and Sulimani-
Baghdad.

Once in possession of these intermediate places Russia
her leisure to improve the roads and to profit by the
Turkey before venturing on more important acquisitions.

16th January, 1878.