## PROCEEDINGS

# ROYAL GEOGRAPHICAL SOCIETY AND MONTHLY RECORD OF GEOGRAPHY. 

Countries and Tribes bordering on the Koh-i-Baba Range. By Major-General Sir Petrr Lumsden, x.c.b.<br>(Read at the Evening Meeting, June 22nd, 1885.)<br>Map, p. 624.

On the 25th November last, the Afghan Boundary Commission crossed over the Koh-i-Babs Mountains by the Chashma Sabz Pass, and it is to the country, and also to the tribes inhabiting the northern slopes of this range that I desire to draw your attention this evening. The general character of all the countries in the vicinity of Herat has lately been placed before you by General Walker, I shall therefore confine myself as far as possible to the relation of such matter as has not hitherto been brought before the public, and to the correctness of which $I$ and those officers whom I quote, can from personal experience testify.

To you accustomed to dwell in England, and happily ignorant of all the horrors involved in the dreaded "Alaman," or Turkoman raid, a map of a country swept by these raids is difficult to comprehend; in such a district names do not signify towns or villages, but merely the sites where they once existed, marked perhaps by mounds delineating the ground-plan of forts, caravanserais, houses, or tanks, but of which no other traces now remain. Of the former inhabitants, frequently the the only records are the tombstones of their burial-places, from some of which data may be secured in marking the period when they were swept into slavery or destroyed. For instance, in the tract of country between Gulran and the Kushk river, the last inhabitants were Uzbeg and Hazara, and on the tombstones of their dead were dates extending as nearly as possible over a century, viz. from A.D. 1650 to 1750.

Another difficulty to the geographer is, that there are generally two names for each stream or location; the first, the traditional one known to Afghan and Persian, and frequently of Arab or Persian origin, the second that by which it may be known to the Turkoman shepherds, or sirdars, who alone traverse these little frequented routes. Thus the

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valley which carries down the collected drainage of the Gulran and Assya Deb plateaus is called Dahna Islim by the Afghans, and Yegri Gueuk by the Turkomans; the Pul-i-Khisti, in the same way, of the Afghans is the Tache Keupri of the Turkomans.

Along the northern base of the Koh-i-Baba are a succession of once fertile valleys, through which run streams formerly used for irrigation. The marks of watercourses point out the lines of ancient channels, whilst in many places karezes, that is subterranean canals, indicate a state of past prosperity, and extensive cultivation. Towers and walls still existing of forts, show that even in those far distant days property required protection; and, as on the site of the old castle of Gulran, the skulls and skeletons scattered over it seem to indicate that indiscriminate slaughter must frequently have attended the destruction of localities long since untenanted.

Leaving Gulran to the left, the valleys of Assya Deb, Karabagh, Ak-tachi, Tu-tachi, and Kara-su succeed each other along the route to Kara-tepeh on the river Kushk.

The small streams which issue from springs in the mountains supply excellent fresh water; but the water becomes salt and brackish so soon as it touches a stratum of salt deposit which crops up some 10 or 15 miles north of and parallel to the range; thus below Gulran and from thence to Chaman-i-Bed at the junction of the Dahna Islim with the Kushk, the water is salt and undrinkable, and but one fresh-water spring presents itself at Chashma Islim. All this country is grazed over by the Afghan flocks from Kuzan and the valley of the Heri-rud south of Koh-i-Baba, and by those of the Hazaras of Kala Nau and Jamshidis of Kushk. It is a portion of Badghis.

The valley in which the Jamshidi settlement of Kushk is situated is about 14 miles long, of an average width of three-quarters of a mile; the hills are of low rounded clay, bare of trees, their sides dotted with villages of domed mud cabins. The irrigation from the river is profuse, and there is much cultivation on the top and sides of the hills, where rain crops are grown. Some 20 miles to the eastward of Kushk runs the watershed dividing the Jamshidi from the Hazara country. From the top of the Zindah Hashim Pass, about 6000 feet above the sea, we had a very fine view. The Hazara country, a vast plain inclining towards the north, eroded by the Murghab drainage into a ohaos of steep hillocks and hollows, lay at our feet, stretching away in wild confusion to the foot of the Tirband-i-Turkistan. The view was weird and desolate. As we descended the sides of the mountains, well clothed with juniper, we saw that the soil was excellent, and that manual labour alone was required to turn much of this sterile waste into luxuriant fertility. The valley of Kiala Nau very much resembles that of Kushk, except that it is smaller and more healthy. 'The villages are partly mud houses and partly kibitkas, and as in Kushk, the chief
lives in a fort. The Hazaras are very prosperous-their land is exceedingly fertile, they have not much more to do than to sprinkle seed on the hill-tops and wait for the friendly rain ; and then, as they say, reap a hundredfold. Their chief wealth is, however, in cattle; of sheep they have enormous flocks. Perhaps I cannot better make you realise the view and general aspect of Badghis, than by giving you a description, penned at the time by Captain Durand, of a visit made by me with a small party in December last to the summit of the Karajungul, a peak of the Tirband-i-Turkistan, some 20 miles distant from our camp at Bala Murghab : it is as follows:-
"On Monday, December 22nd, the Persian mules came jingling up for the light tents, and the caravan was soon on its way. These mules are grand beasts; each lot of them has a pony as leader with great bells on him, and the mules having a wonderfully musical ear, discriminate at once between their leader's bells and any others, and they follow at such a pace that they do the march as quickly as you do.
"People here say we may possibly have only one fall of snow, and that it should come soon and practically end the winter before all the little crocuses come out, which they are doing fast-delicate little yellow fellows with their transversely ribbed spiky leaves. We are promised that we shall have a garden of wild flowers all round us in a few days without the trouble of tilling the soil, and I have no doubt the promise will come off.
"A ride of 15 or 16 miles up a narrow valley going east from Bala Murghab landed us at a group of kibitkas, curiously enough just undergoing the change into house formation, which would no doubt have interested Mr. Fergusson. But cave dwellings were also in the same group, and little boys and girls came bolting out of the sandhills like rabbits. Here we found water and pitahed our camp.
"The next morning we started about 7 o'clock, and rode up the streamlet for a mile, noticing what looked very like blackberry brambles, and rose trees, and we heard a little fraud of a nightingale imitating at some distance the song of the Persian one, who again is only Brummagem when compared with the real article. The little impostor called himself Bulbul-i-Sang-Shikan. Then we saw some blackbirds, quite life-like, only bluer, and a very big black robin. Luckily for these, our naturalist was not of the party. After getting into the mouth of the pass we began to ascend the hills and to see game at once, and before we had gone a mile all the advanced guard were off their horses, and stalking wild sheep. This range of hills is called the Karajungul, and its summits are probably some 7500 feet above sea-level. We rode up it all.
" Pistachio trees and junipers were the commonest trees, though there were a few firs, and the grass was delicate turf and apparently excellent grazing ground. I saw assafœetida also in one or two places. The plateau was covered with herds of ibex and wild sheep, and we saw a
drove of about forty boar, great big fellows not running violently down any steep places at all, but going sulkily across our line. Then we had our guns placed along the top of a perpendicular cliff and waitedsome of us waited a long time, for nothing came our way at all, the wind setting from us to the west, but we saw the herds of animals crossing the amphitheatre below us, and ascending the cliffs further on, make over the plateau and break away safely; that is the bulk of them did so, but the guns at the further end had some good sport. It was an add sight, wild sheep and ibex, pigs, wild Jamshidis, Persian servants, and breakfast all on the plateau at the same time.
"After breakfast we strolled across the heights and enjoyed a magnificent and curious view.
"The sheer cliffs of the Karajungul, facing south, went down below us, whilst the long range of the Paropamisus, or more properly the Elburz, stretched along the whole southern horizon from west to east, where it appeared to close on to a high snow-covered mountain, a hundred miles at least away, called Ischalup or Band-i-Sakha, supposed to be the cradle of the Murghab and Heri-rud. The former we saw as a silver thread breaking through a black gap in a range to the southwest of us, but it must turn there as we saw gap after gap in other ranges all leading up towards the high mountain.
"That same white mountain must be one of the highest peaks of the watershed between the Aralo-Caspian basin and the Bay of Bengal. Between us and the Elburz range, some eighty miles south, were crowded masses of lower ranges and sometimes apparently parallel ranges, the country of the Feruzkohi, probably never before looked down upon by Europeans. Turning to the north showed you, beyond the plateau itself, nothing but endless waves of sandhills going away into the dim horizon. It looked as if the goddess Kali had spread her pock-marked pinions over all to the northwards; no peaks stood prominently out anywhere, but pitted sandhills going on for ever. When we were quite tired of asking questions and looking at the magnificent panorama, we all took different ways and strolled down the hill-side to our camp."

Between the valley of the Murghab and that of the Kushk a tributary stream rums down the valley of Kushān, which is usually brackish and sometimes dry, but in February, when we crossed, it was carrying along a considerable body of water. The valley at that season was literally covered with Turkomans with their ploughs, turning over the soil. I was assured that here, as in many other places, cultivators of unirrigated land got a return of seventy to a hundredfold. Yet, with all this return, it is stated that Penjdeh does not produce sufficient for the requirements of its own home consumption, and that grain can generally be imported at a cheaper rate from Maimana and Afghan Turkistan than it can be grown on the spot.

In the lower valley of the Kushk cultivation scarcely extends up to Chaman-i-bed, though there may be a few fields turned over in Kara-tepeh.

Badghis has been, as far back as even the earliest periods of Arabic history, a province of, or connected with Herat.

It comprises the lands watered by the Murghab river, including the Kushk and all other tributaries, together with grazing lands extending from the Heri-rud river on the west, to a day's journey for flocks to the east of the Murghab.

In earlier times it included Yulatan, but since the time of Khivan supremacy, when the cities were destroyed, the tract of cultivation between Penjdeh and Yulatan has remained fallow, and beyond the traces of early canals presents no vestige of former occupation, and has become desert. Penjdeh is the principal valley of Badghis, and may be described as that portion of it watered by an extensive system of canals, which formerly issued from the dam known as the Band-i-Nadir, some eight miles north of Maruchak on the Murghab river.

The Marghab is a beantiful river, flowing in deep beds of sand and alluvial deposit, with an average width of 60 to 80 yards, and only fordable, even in winter, in a few places.

The Afghan forts of Bala Murghab and Maruchak are the only modern buildings north of the debouch of the river from the gorge in the Tirband-i-Turkistan. The cave habitations existing near Bala Murghab, and those extensively excavated and explored by Captain de Laessoé at Bash-do-Shik and elsewhere point to times of Buddhistic occupation. At Bala Murghab, Karawal Khana, Maruchak, and Penjdeh, besides in several other places, there are foundations marking the existence of former permanent bridges across the Murghab; and extensive remains of large towns at Penjdeh, Kala-i-Maur, Maruchak, and Karawal Khana indicate a state of prosperity once existing in these valleys whioh has long passed away.

Maruchak at one time must have been a much larger place than it is now. It is supposed by some to indicate the position of the ancient Merv-i-rud; and notwithstanding the fact that philologists have deduced various learned derivations for its name, I think ordinary individuals. may accept the origin as given to me by a learned Eastern authority as derived from maru, the Turki for "lady," and chak, "fat;" and that the fair daughter of the Persian monarch, after whom it was named, must have been a damsel of no mean proportions.

Burnes, in his 'Bokhara,' quotes a Persian proverb reflecting on the proverbial insalubrity of this Naboth's vineyard, "Maruchak": "Before the Almighty can get intelligence, the waters of Maruchak have killed the stranger."

The Jamshidi and Saryk Turkoman population of the Murghab valley live entirely in kibitkas, or felt tents. Kibitka is the Russian name;
they are called eo by the Turkomans, and khirga by the Afghans, and they form a very roomy, comfortable substitute for tents, as experienced by many of the officers who lived in them throughont the rigorous winter. A collapsible lattice-work ring, some five feet in height, is set up, and to this are attached supports for the roof, all tending inwards and all joined by a crown, which acts in the same manner as the keystone of an arch; the whole structure is then covered with thick and durable felt, impervious to wind and wet.

It is some twenty-eight years since the Saryks, having been driven out of Merv by the Tekkeh Turkomans, received the sanction of the Jamshidi chief, and located themselves in Penjdeh. There are some 7300 families settled in Penjdeh, with about 4000 in Yulatan; they are subdivided into six factions--Sukhti, Hazurghi, Dudakli, Khorasanli, Alishah, and Biraj. Their encampments of kibitkas present the appearance of beehives or wigwams, and are anything but pioturesque; the dwelling of the chief is distinguished by a scroll, some two feet deep, worked in carpet work, and placed round the top. The entrances to these kibitkas are olosed by a purdah, whilst inside, the kibitka is generally adorned by carpets on the ground, a dado of carpet-work running round the walls at a height of from three to five feet, and begs of the like material to contain the work of the fair (!) inhabitants hung on the walls: these bags are from four to six feet long and two to three feet deep. All the carpets, \&c., I have mentioned are the work of the women. I think you will all agree that they are very beautiful, and I believe for taste in their execation and for durability of material they are not to be surpassed.

There is a marked difference between the Afghans and Tarkomans. In Penjdeh we scarcely ever saw an armed man, and found the Saryks, instead of being the dreaded alaman-sweeping and slave-dealing people we came to see, an industrious hard-working race, at that time busy from morning to night in the excavation and clearing of their canals, always moving about with a spade having a somewhat triangalar shaped blade continually across their shoulders. The Saryks are stalwart men of good physique, resembling very much in character the Turks. They are a shrewd, hard-headed, practical people, and continually expressed their desire for security and permanent settloment.

These Baryks, along with their brethren of the Tekke, Salar, and other Turkoman tribes, had been for a century the scourge of Northern Persia; they had swept the inhabitants away from valley after valley down the Heri-rud, almost as far as Seistan and westward, within 150 miles of Teheran itself. From the slave trade and plunder seoured in these raids they had amassed comparatively great wealth, and they certainly seemed better off than most Asiatic races.

The slave trade and raiding having been entirely abolished owing to the action of Russia, and the closing of the markets, these Turkomans
now eagerly seek for a source from which they can secure wealth, and maintain their present prosperity. They own great herds of sheep. amonnting in 1884 to an aggregate of 194,250, divided into flocks of from 700 to 1500 each, for which there is a herdsman who gets 10 tillas half-yearly, whilst assistants, according to the strength of the flocks, get 4 tillas each.

They have hitherto generally disposed of their sheep in the Bokhara and Urgunj markets. On the spot the price of sheep is from 4s. to 8s. $6 d$., according to age and quality, the latter sum being the price for a four-year old ; camels fetch about 6l. 108. ; horses from 13l. to 25l.; bullocks $2 l .108$. to $3 l$. ; cows $2 l$. . to $2 l .10 \mathrm{~s}$. ; and goats from 4s. $6 d$. to 68. In summer their camels suffer from the sting of a fly called googweer; which apparently poisons the blood, the animals fall off in condition. and die in the ensuing spring.

The trade of Penjdeh is carried on entirely by Jews, of which there are some twenty families settled there; they are offshoots from the Jewish colony at Herat. About 350 families form this colony; some 200 of these sought refuge in Herat from the persecutions carried on against their tribe at Meshed in 1862; theyiare known as Kasvini Jews, having criginally been deported by Nadir Shah from Kasvin to Meshed. The remaining families are said to have been in Herat for many generations, they have generally been well treated there. Many of them about the beginning of the century came from Yezd and other parts of Southern Persia. They have in their hands most of the trade with Balkh, Bokhara, Khiva, and Merv. When the slave trade prospered they were the agents through whom all transactions for ransoms used to be effected, and they still continue to hold the property of many members of the tribes in pledge, in return for ransoms-that is, if the tales of respectable gentlemen whom we not unfrequently met in our rides were to be believed, and who, putting on a woful aspect, used to address us with the petition, "Help me! I am unhappy, I am in debt, owing to having had to borrow money for the redemption from slavery of myself," or sometimes it would vary and be for a wife or daughter.

We were altogether disappointed in the Turkoman horses, and endeavoured in vain to procure or see any valuable animals. The Turkoman horse has secured a reputation for great endurance from the distances they were known to have traversed in the raids, and which average fifty or sixty miles a day, for some days; but to effect this the horses were carefully trained to the hardest condition, and moved at a pace rarely exceeding four miles an hour, by. which means they were enabled to travel from sixty to seventy miles in sixteen hours, and I am convinced that any horses can accomplish the same feat under similar conditions. It is accepted that the best of these horses are to be found with the Alhals and near the Caspian Sea, and that the breed deteriorates in quality as you proceed eastward, the Tekke being superior to the

Saryk, and the Saryk to the Ersari horses. I think the value of the breed depends entirely upon the amount of Arab blood in its veins, and that the possible decrease in the quality eastward may be ascribed to increasing distance from the centre which has given all the value attributed to these horses, namely from Arab stock. The Turkomans give their horses water as often as they will drink, but at all times after drinking put them into a galop until perspiration breaks out. They cover them summer and winter with great quantities of felt clothing, which has a tendency to make them delicate and invariably wears off their manes, and from their being brought up on a sandy soil, their hoofs are brittle and come to pieces on rooky or hard surfaces. Altogether the conclusion arrived at by the officers with me, and I believe also by the Russians, is that the Turkoman horse has altogether been overrated, and that in many respects he is inferior to the numerous herds bred in more mountainous tracts such as the Kuttighani of Afghan Turkistan.

The Turkomani women do a vast amount of work: they fabricate carpets, purdahs for doors, work bags, horse-olothing, nummads and blankets, and when a young woman is engaged it is thought to be the right thing for her to work all the kibitka domestic carpets and other household requisites before she is married. When, however, they do marry without having completed this task, it is expected from them that as soon as practicable by their own labour they may refund in cash, or kind to their husbands, the dowry paid to parents on marriage. Such dowry generally consists of 100 sheep and 40 tillas, which the bridegroom either pays down in a lump sum to the parents of the bride or by stipulated instalments.

Before a wedding it is customary for the bridegroom, after having arranged for the dowry to be paid to the parents of the bride, to collect his friends for a succession of horse races and other sports, as also to secure and decorate a camel with the handsomest trappings, which is sent to the bride's kibitka, and on which she mounts and goes forth to receive the congratulations of her own relations.

On the appointed day of the wedding the bride seats herself on a carpet outside her tent, surrounded by her own people, and the female relations of the bridegroom go down to receive and take her away. This is immediately. resisted by the young ladies' party, who offer resistance by the discharge of raw eggs, \&c., at the assistants, on which a general egg fight is entered into by the young women present, whilst the older dames carry on the engagement with almonds and raisins.

In the meantime the bridegroom rushes into the mêlée, walks off his beloved, and puts her upon the kajour or camel-saddle, when the matter is concluded.

Another sort of marriage called gulcha, where the girl of her own accord runs off with the young man, without reference to parents, is
accepted as all correct, provided he is of a like social position and duly pays up the prescribed dowry.

On the 26th of January last, Captains Maitland and Yate left Bala Murghab to report on the country between the Murghab and Heri-rud rivers along the Gumbezli route, hitherto unexplored. I cannot do better than give Captain Maitland's description of this portion of Badghis in his own words. He says:-
"The hitherto little-known tract lying between the Murghab river, with its affluent the Kushk-rud on the east and the Heri-rud or Tejend on the west, has a breadth of about 90 miles between Ak-tepeh and Pul-i-Khatun, which are nearly in the same latitnde. It may be generally described as a great expanse of undulating and broken ground, rising into gently sloping heights and high plateaux to the south, and subsiding into nearly level plains to the north-west.
"The term 'Chol' is applied to the greater portion of it by the Turkomans. This is an Arabic word signifying a desert, and is commonly used in Afghanistan and Beluchistan as synonymous, or nearly, so with ' registan.'
"The 'Chol' of the Turkomans is not, however, by any means a sand desert, for which they have another word, chagah. Its soil is very light and sandy, such as is termed in the Usbek dialect kum, a word which has been hitherto translated by European travellers as sand. For instance, we have always understood that the 'Kizil Kum' and ' Kara Kum' meant respectively, the red sand desert and the black sand desert. It would now seem probable that these tracts are not sand deserts, but resemble the Turkoman 'Chol.' The Saryk word for the light sandy soil of the latter is not kum, but kirach.
"There are, it seems, real sands between the 'Chol' and the Merv oasis, but nothing of the sort was met with in the country between Ak-tepeh and Garmäb. The term 'Chol' is applied to the tracts east of the Murghab, as well as to those on the west, and in fact to all country of a similar description.
"The border of the 'Chol' towards Penjdeh, where we entered it, is so sandy as to be little removed from actual sand; but after a mile or two the soil becomes firmer, and does not alter much until the Tejend is approached. The country is a mass-it might almost be said a labyrinth-of low ridges, hillocks, undulations, and hollows, and without the faintest trace of a drainage channel anywhere. In this it resembles a real sand desert, and the light porous soil absorbs all the rain and snow which falls on it as quickly as if it were actual sand.
" Various distinctly marked and well-known routes lead through the 'Chol,' both from east to west and from north to south. Although the country appears so open at the first glance, these tracks are by no means straight. On the contrary, they wind surprisingly, to avoid patches of sandy broken ground, which are of frequent appearance. The whole
of the ground is sufficiently soft to cause travellers;' whether on foot or horseback, to prefer a beaten track wherever such is available, but a much more serious obstacle to moving off the road is the enormous number of holes made by sand-rats, marmots, and foxes, which literally honeycomb the ground, so that it is frequently impossible for a horse to go even a few yards from the path without putting his foot into ane of them. To ride straight over the country at any rate of speed is more troublesome and fatiguing than to keep to the more oircuitons but broader tracks, and to gallop is almost dangerous. For this reason even the alamans of the Saryks and Tekke kept as much as possible to the regular paths. These are not numerous in the eastern half of the country, but as the Tejend is neared they become more frequent, untilabout Kaiun-Kui-usi, Adam Ulan, Kungrueli, \&c., tracks may be found leading in almost every direction. Many of them, however, are already getting very old and faint.
"The light soil of the Chol is by no means wanting in fertility of a kind. It is not strong enough to bear crops, which would at once be parched up by the sun when the spring rains were at an end. But short grass appears to grow on it almost everywhere. When we passed through the country the grass was but just springing; however there is sheep grazing of one kind or another right through the winter: The grass in the ohol itself soon withers after the dry eeason has set in; but the tirkha (wild thyme, or southernwood) lasts much longer. In parts there is a good deal of what may be termed thin jungle of kundum and other bushes, among which the barjak, resembling broom, is conspicuous. We saw very few bushes of any sort until the neighbourhood of Gumbezli Saryk was reached. About here the country changed its aspeot to some extent. Considerable tracts from Gumberli weetwards are pretty thickly covered with bushes, kundum being elways the most common, while low tirkha scrub is very general. On the other hand there seems to be less grass, and as usual where the latter is best, not a bush, however small, can be seen. Generally it may be taken for granted, that the sandier the soil the more bushes and less grass will be found growing on it. This applies to the Chol generally. There are some tracts near the Murghab where there is:a good deal of wood in the shape of kundum, \&c. The assafcetida plant, called by the Turkomans purs kamak, is abundant in many places, growing most thickly in the sounder grassy ground. The people of the country seem unaware of its value.
" Not unfrequently the country rises into elevations which may be dignified by the name of hills, that is to say they rise from 400 to 700 feet above the general.level of the Chol ; their slopee are invariably very gentle, and their summits nearly flat. Some of these elevations are well known by name, probably the shepherds have names for all of them. Among those we saw are the following:-
"Birwat Guzlan, about 12 miles west of the Murghab and north of our road. It is from this hill, or hills, for there is said to be group of three, that the people of Penjdeh obtain their supply of wood. Geok Chelar, a ridge 24 to 30 miles from the Murghab and not far from. our route. Khan Kiri, the Khan's hill, the khan being a leader of shepherds, so styled. Kaik Kiri, "deer hill," part of the same range as Khan Kiri. The hill of Kaiun-Kui-usi, which is a fairly good landmark, 600 feet high. North-west of it are hills known as Karau-ung-Kiri, " the hills of the black visaged one "; the road to Sarakhs passes by these hills. North-west of Kaiun-Kui-usi is a hill called Taoghar, a word said to signify a peak. There is an old well near its foot, and it is a good landmark. There are other small hills to the north and north-east of those mentioned, but looking from the top of the hill near Gumbezli Taka, the country to the north and west appears to be an almost open plain, with no hills except a line of low heights in the neighbourhood of the river; but there is-doubtless a good deal of broken ground not distinguishable from a distance.
"A long ridge runs south of the road by which we travelled and parallel to it. It commences near the river, where it is known as the Baganj Kiri, and extends westward to the neighbourhood of Tátung Ori. Without entering into the details of wells and halting-places on this Gumbezli route it may be well to note this Tátung Ori as one of the most interesting points on it.
" At a spot as nearly as possible 40 miles from Ak Tepeh, a few bricks were lying about, and the neighbourhood bore traces of cultivation, whilst at about two miles further on was Tátung Ori or Or Mahomed Amin. Or is Turki for a ditch or intrenchment: Tátung Ori is "the intrenchment of the Tátar." The Tátar alluded-to is Mahomed Amin, Khan of Khiva, who made a great foray on Penjdeh and the tribes on the Oxus some thirty years ago.
"One of the gaides, Anak Sirdar, was with Mahomed Amin's force. He states it consisted of 10,000 horsemen, and the same number of others, principally camel-drivers. Every two horsemen were provided with a camel-load of water and a camel-load of grain, so there must have been at least 10,000 camels. They took no " bhusa," the horses living on their grain rations and what they could pick up. As it was the month of February there could have been only the smallest amount of grass just springing up, and wormwood scrub then dry and withered. On the other hand patches of snow, as now, removed all anxiety on the score of water. The expedition was five days in moving from the neighbourhood of Sarakhs to the spot with which Mahomed Amin Khan's name is. now associated, and five days more to Pul-i-Khishti, near which is an intrenchment similar to that of Tatung Ori. It is said to have been the custom of the Khivans, like the Romans of old, to intrench their encampments every night. The slowness of the march was intentional, as
it was the Khan's object to sweep off the flocks of the Tekke, who at that time occupied the Sarakhs district and had permanent camps at Gumbezli and the two Kiris. The Saryks had not then been dispossessed of Merv, and were nominally subjects of Khiva. About one hundred of them served with the expedition, which was principally composed of Khivan Turkomans. There were also a considerable number of Jamshidis, it being the time when that tribe were refugees at Khiva.
"The slopes of Baganj Kiri range, if it can be so called, are extremels gentle. It throws out ill-defined projections or spurs to the northward, which are crossed by the road. One of the last of these, 33 miles from Ak Tepeh, was the highest point on the route between the Murghab and the Tejend, and from it a view is obtained of the hills in the neighbourhood of Pul-i-Khatun, including those on the Persian side of the river. Its elevation is about 900 feet above our camp at Ak Tepeh, and therefore about 1450 feet above sea-level.
"To the south of this ridge is open country, extending some half-dozen miles or more to the spurs and lower slopes of another and much more important ridge or line of heights which stretches almost all across the space between the rivers, and may be considered, topographically, as a continuation of the Kara Dagh Mountains whioh extend to Pul-i-Khatun. In old maps a range of hills is depicted running eastward from that place. In most of the later compilations these have disappeared, but they nevertheless exist in the modified form above mentioned. From Pul-i-Khatun they incline south-east, presenting a scarped face towards the river. The scarp is continued southwards, and is the bigh oliff which incloses the valley of the Heri-rud, or Tejend, on the right bank of that river. The slope from the top of this cliff towards the interior of the country is extremely gentle, but at its northern end a fairly well defined ridge runs eastward, and bounds the Adam Ulan valley on the south.
"This range is known as the Askhar Lilang Dagh. It terminates in high ground, which appears to turn abruptly south. At all events the watershed is orossed between Agar-i-Chashma and Kungrueli at only a few miles from the latter. From this point northwards to Adam Ulan and the plain south of Kaiun-Kui-usi, the country is a mass of broken grassy ridges and undulations divided by small but beautiful valloys. Near the watershed, outcrops of rocks are sufficiently frequent to diversify the country and add to its charm, and the hills are in many places covered with pistachio trees. It seems strange there should not be more surface water in this country. Agár-i-Chashma is the only spring any of the guides knew of, and that is very small. But rock and gravel are so near the surface in most places, especially as the watershed is approached, that water could doubtless be obtained in some of the ravines by digging a few feet.
" From north of Kungrueli the watershed apparently bends north-
east, and then turning eastward passes south of Elibir, and so along the hills until these terminate some eight to twelve miles short of the Kushkrud, at or near a place called Kagazli. I gather from Captain Yate that about Elibir there are valleys similar to those in the neighbourhood of Agar-i-Chashma, but it is probable that further east the north slopes of the hills are similar to those of the ridge south of the Ak Tepeh-Kainn-Kui-usi road.
"No general name could be got for the hills, but when we obtained our first glimpses of them, on our second day's march from Ak Tepeh, I was informed they were known as the Duzang Kiri, that is the "hills of the salt," from the salt-beds of Yar-oilan, which lie to their south.
"On the south side of the hills is a great platean, 10 or 12 miles wide, and little, if at all, inferior in height to the hills themselves, which may be considered the northern slope of this tableland. The exact topography of the country is still doubtful, although we can now speak with confidence as to its main features. However, there is a distinct dip from the summit line of the Duzang Kiri, and then a gentle rise to the top of the plateau. It is in this hollow that the second wells passed by Captain Yate are situated, and it appears to drain eastward. The plateau itself is a beautifully grassed table-land, about 2000 feet high, that is, 700 to 1000 feet higher than the country to the north, and 1300 to 1400 feet above the salt lakes of Yar-oilan.
" Very few birds or animals were seen in the "Chol." Of the former, ravens and a few small birds alone presented themselves, until we approached the Heri-rud, when a few sand-grouse and large flights of ruddy sheldrake and geese passed overhead daily. Deer are said to be numerous, together with the goorkhur, or wild donkey, of which there was a herd of over 100 in the Adam Ulan valley. Both deer and wild asses, particularly the former, are regularly hunted by the Turkomans for the sake of their flesh and skins. Many foxes are also trapped every year; wild pigs are common in the Chol; the only other animal we came across was a porcupine."

There is no more interesting natural feature in this part of the world than the Nimaksar, or salt lakes of Yar-oilan, visited and described as follows by Captain Yate :-
"Yar-oilan means 'the sunken ground,' and no word can better describe the general appearance of the valley of these lakes. The country around consists of undulating downs, the height of the road over the last ridge immediately to the north of the valley being some 2550 feet, and over the Band-i-Duzang, on the ridge forming the eastern end of the valley, some 257 C feet above sea-level. The crest of the plateau at the commencement of the descent into the valley is about 2390 feet.
"The total length of the valley from the Kungrueli road on the west to the Band-i-Duzang which bounds it on the east, is about 30 miles, and its greatest breadth about 11 miles, divided into two parts by a connecting
ridge which runs across from north to south, with an average height of about 1800 feet, but has a narrow hill, which rises to some 400 feet above the general average.
"To the west of this ridge lies the lake from which the Tekke Turkomans from Merv get their salt. The valley of this lake is some six miles square, and is surrounded on all sides by a steep, almost precipitous descent, impassable for baggage animals, so far as I am aware, except by the Merv road in the north-east corner. The level of the lake I made to be about 1430 feet above sea-level, which gives it a descent of some 400 feet from the level of the connecting ridge, and of some 950 feet below the general platean above. The lake itself lies in the centre of the basin above described, and the supply of salt in it is apparently unlimited. The bed of the lake is one solid mass of hard salt, perfectly level, and covered by only an inch or two of water. To ride over it was like riding over ice or cement: the bottom was covered with a slight sediment, but when that was scraped away the pure white salt shone out below. How deep this deposit may be it is impossible to say, for no one has yet got to the bottom of it.
"To the east of the dividing ridge is the second lake, from which the Saryks of Penjdeh take their salt. The valley in which this lake is situated is much the larger of the two-without noticing the sloping downs at the eastern end, the valley proper is itself some 15 miles in length by about 10 miles in breadth. The descent to it is precipitous on the north and west sides only, the eastern and south-eastern end sloping gradually up in a succession of undulations. The level of this lake is apparently lower than that of the other; I made it out to be some 800 feet above sea-level. The salt in this lake is not so smooth as in the other, and did not look so pure. It is dug out in flakes or strata, generally of some four inohes in thickness, is loaded into bags, and carried off on camels for sale without further preparation. The Saryks of Yulatan, too, seem still to take their salt from this second lake, as I heard on my arrival of a party of them having just left.
"A large party of Tekke from Merv had been down for salt ten days or a fortnight before.
"The road from Yulatan to the salt lakes, which the Saryks use, runs for three marches up the banks of the Murghab to Aigri Tapi, thence four marches across the desert without water to Gumbezli (Saryk), from which place it joins into the Merv road at Elibir, though there is also an old track which runs direct to the road on the orest of the plateau just before the commencement of the desert.
"Some 200 yards above the point where the road to the western lake turns off to the right, the road to the eastern lake turns off to the left, and winds down into the valley below, and round the southern edge of the lake to the camping ground, which is on a sandy mound to the south-east.
"Elsewhere, with the exception of one spot on the northern side, the
banks of the lake are too soft and muddy to permit of near approach. Curiously enough, I found the ahore of the lake at this camping place strewn with fossil cockle and oyster shells, and bits of flint.
"The road from Penjdeh is another well-worn track-six ordinary marches, with little or no water.
"The Penjdeh salt is usually carried during the three autumn months. In the early spring the male population are busy sowing. During the summer the desert-fly, whose bite is fatal to camels, is on the wing, and all camels are kept in the oasis of Penjdeh, they being only taken out to graze in the cool hours. As soon as the crops have been reaped and the men are at leisure, trade commences and is carried on till winter sets in. Salt, I am told, sells in the Penjdeh bazaar at the average rate of 20 lbs. for 10d.
"The old Nimak-sar and Maruchak road runs off from the Penjdeh road at the top of the ascent at Duzang Japithi, and though now quite unused, its course can be traced across the downs in an easterly direction towards Kala-i-Maur. Another road runs off from the banks of the lake in a south-easterly direction to Islim; it is also a well-worn road, as by it all the salt is taken to supply the Hazaras at Kala Nau, and the Jamshidis at Kushk. It appears these two tribes do not carry their own salt, but are supplied by the Saryks of Penjdeh. Salt fetches at Kala Nau and Kushk double the price it does in Penjdeh. The Salors from Sarakhs take their salt from the western lake. One other important road from the Nimak-sar remains to be noted, namely, the one running southwards to Ak Robat, 13 or 14 miles distant. The salt at Nimak-sar is entirely untaxed. The lakes are looked upon as a provision of nature, free to all, and anybody may go and dig as much as he pleases. The same rule prevails, $I$ am told, with reference to the saltmines near Herat; and no taxes on salt, I believe, are anywhere levied by the Herat Government. In past. years both the Tekke and the Saryks only came for salt in large well-armed parties, and no one else, I fancy, dared to come at all. Each party was afraid of the other, and by tacit agreement each did its best to avoid the other, neither side ever crossing the dividing ridge between the two lakes or attempting to interfere with the other."

All the tract along the foot of the Koh-i-Baba, which in November was bleak and desolate, in spring burst out into a garden of crocuses,. hyacinths, tulips, and every species of bulbous plant indigenous to that sandy soil, mingled with an endless variety of flowers and grasses. Our enthusiastic botanist Dr. Aitchison was in the seventh heaven, as he gloated over the product of a ten days' expedition, and the hundred new species added to the list of plants. But then comes the question, Had any explorer, the Russian Regel or other, been before him, and would futurity accept this or that specimen as Aitchisoniana or Regeliana, or some other jana?

I have made the endeavour in the short time at our disposal, by the aid of copious extracts to draw your attention to the main general features of the country which forms the subject of my lecture, and to the salient characteristics of the people inhabiting those countries. I have touched on the principal drainage system and the one great and important natural feature, namely, the salt lakes. From what I have said, you will no doubt have gathered that the country is one capable of great resources. The climate is good, the winter is cold, and great storms are not unfrequent during the winter months, indeed we experienced one as late as the 2nd of April; the spring and autumn, however, are beautiful; and the sammer, though hot, is nothing to the extremes of heat to which we are accustomed in the plains of India. With a settled government and increased population, there is no reason why this should not become one of the most prosperous tracts of Central Asia.

I would like to conclude with some incidents illustrative of the Turkomans. Having had no mercantile transactions except with Jews, they are rather difficult gentlemen to deal with, and very avaricious. On one occasion, when some forty of them attended a Durbar at Bala Murghab and were all offered tea and Huntley and Palmer's sweet biscuits, they partook of the same with becoming gravity; the elders, in prominent places and very much on their best behaviour, helped themselves sparingly, whilst the gentlemen in the corners and out of sight did as a sailor would express it, "clear the decks," their leader "Aman Geldi," invoking a blessing on the repast before they commenced, and a thanksgiving afterwards; but scarcely was the latter concluded, when with a somewhat knowing look of his wicked old eye, he inquired what was to be done with the biscuits still remaining on the plates. I of course remarked that they were at their disposal. The words were hardly out of my lips when the whole august assembly were on the floor scrambling for the victuals.

It may interest some here to know that whilst at Penjdeh in December, a venerable old Moolla of the name of Rahman Mahdi, a son of the late Khalifah of Merv, and himself the Khalifah of Penjdeh, brought me testimonials given to him in Herat by Dr. J. S. Login, and a certificate signed Joseph Wolff, the well-known Bokhara traveller, "dated 14th of April, 1844, saying that the said "Rahman Mahdi" had been very kind to him.

I must not, however, leave you with the impression that the Turkoman is altogether the innocent peasant he on first acquaintance appears to be.

I can never forget that look of utter contempt with which a Sirdar (the title accorded to every successful leader of an alaman) eyed me on one occasion when I was attempting to impress on the elders of his tribe the necessity for settling down to peaceful avocations.

I believe in their hearts these Turkomans entirely share the feelings of a grand old border soldier, Kurban Ali Beg Mervi, who with fifty Turkoman horsemen formed my escort on the way to Meshed, and who along with the free lances of Timouri, Hazara, and Khorassani, had, in troubled times, for many a day kept watch and ward on the Persian side of the border.

Kurban Ali Beg had accompanicd many a successful foray on Penjdeh, and fallen on many a wearied Tekke and Saryk when returning homewards loaded with plunder.

I picture him to myself now as I used to see him on the early march, as light came creeping upon the Eastern sky, pointing down in the valley to corners where he had once smitten the Tekke, and the passes by which different bodies of horse emerged and juined to the number of some hundreds to intercept Turkomans on their homeward journeyhow they recovered from them, captives, men and women, besides flocks, horses, \&c., and left so many of their bodies on the plain.
"Those were days," said old Kurban ; " I was then a poor man, but on one day twenty-three horses came to my share, and after twelve years of constant care, without a night in bed, by the blessing of Providence I acquired flocks of sheep, and thirty Bokhara camels, and the means to maintain a bunch of horsemen at my back.
"Now, all that has changed; bad times have come, alamans have ceased; never again will I feel that excitement which no one can express, of listening to the tread of the Tekke horse as wearied and tired they pushed along in the valley below, and the certainty that these exhausted men and steeds would have to make a struggle for existence or remain captive in your hands; and when the strife was over and the Tekke fled or captured, to listen to the joyful exclamations of the released captives, and their asseverations that so long as life should remain you should ever be accepted as the most welcome of guests.
"Sons of burnt fathers! had you occasion ever to return there, they would know you not, or take care not to be at home when you might have to seek their hospitality."

Previous to the paper,
The President said the Royal Geographical Society had now the pleasure and the honour of welcoming one of its oldest members, namely, Sir Peter Lumsden, who, having just returned from Central Asia, where he had prosecuted very important geographical researches, had, like the good soldier that he was, obeyed the orders of the officers of the Geographical Societ5, and kindly consented to read a papar upon the country to the north of Herat, and the Koh-i-Baba range. No further words were needed in introducing him to the meeting.

After the paper,
Sir Henry Rawlinson said he appeared before the meeting in deference to the bidding of the President, but he did so with some apprehension, as he was afraid that the remarks he might hare the honour of offering would appear some-

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what incongruous after the interesting narrative to which they had listened. He had never visited the country described by Sir Peter Lumsden, and was therefore unable to afford any additional information with regard to its physical condition, while the political questions involved in the dependency of the region in question, to which he had paid some attention, were according to the rules of the Society tabooed, with certain reservations. He therefore could only make a few remarks on the ancient geography and history of the country. It was not as lively a subject as that to which the meeting had just listened; still it was of some importance and almost necessary to a due understanding of the country. He believed there was a good deal of misapprehension abroad with regard to the general subject of the Merv frontier. Many persons were hardly aware that there were in antiquity two distinct cities of the name of Merv, one 140 miles from the other. He had, however, written out his remarks in order that they might not appear unnecessarily desuliory, aud he would therefore, with the permission of the meeting, read the following notes.

There were two cities known by the name of Merv. The greater Merv, which now forms the Russian capital in Trans-Caspia, was a city dating from pro-historic times. In conjunction with Balkh and Herat it had formed the tripolis of primitive Aryan civilisation, the three cities being mentioned in the Vendidad, which is the Genesis of the Parsees, among the earliest creations of Ormazd. In Persian romance, the citadel of Merv was supposed to have been built by Tahmurath, one of the earliest kings, and a building is said to have survived in the city up to the time of the Arab conquest, which was called Kai Marzaban, and was of so stupendous a character as to be regarded as a talisman. It is very doubtful if Alexander ever visited Merv. He certainly left the city far to the east on his march from Khorassan to Herat after the murder of Darius, and his asserted return to Merv from Samarcand before proceeding to India rests on insufficient authority. There was, no doubt, a tradition of his having founded a city on the Margus which he called Alexandria, and which, being destroyed by the Nomades, was subsequently rebuilt by Antiochus Soter, under the name of Antiocheia; but it is more probable that the latter was really the only Greek restoration. As to the derivation of the name, which appliod equally to the river, the country, and the city, there is some uncertainty. Bournouf compared the Sanscrit Maru, "a desert," whence Marwar, and referred the name to the notoriously barren steppes surrounding the oasis; but I would myself rather compare the old Persian Marj or Marz, "a limit," as the Margus was in very early times the Aryan limit to the west. In the inscriptions of Darius, the satrapy of Margush is often mentioned, which the Greeks rendered by Margus applied to the river and Margiana to the district. The modern $v$ represents the old $g$, according to the laws of euphonic change; but in the ethnic title Marízi, "a Mervian," we trace the form through Marz and Marj to the original Marg.

The first important historical event we know of in connection with Merv is the fact of Orodes, the Parthian king, having transported to this remote locality the Roman soldiers whom he had taken prisoners in his victory over Crassus. They were 10,000 in number, and seem to bave formed a flourishing colony which exercised a powerful influence on the civilisation of the surrounding region. It is true that Mr. E. Thomas, who first drew attention to the subject and who thus explained the Roman character of the Indo-Scythic coins of the period, confounded the two Mervs, and placed the foreign colony in the southern raiher than the northern capital; but this confusion of sites was after all of no great historic importance. About 200 years after Christ, Christianity is believed to have been introduced into Merv by Bereshiya, a Syrian priest, the day of whose arrival was accordingly long kept among the festivals of the Eastern Church ; and Christian congregations, both Jacobite and Nestorian,
flourished at Morv through all subsequent history. It is asserted indeed by Ibn A'thir,' that whent the last Sassanian king Yezdijerd was slain, in A.b. 651, by the miller of Zerk, a village on the Rezik canal outside Merv, the Christian Mitran (or Metropolitan) obtained leave to perform his obsequies out of gratitade for the many benefits conferred on his co-religionists in Persis by the monarohs of that dynasty. Since the Arab invasion of Persia, Merv has gone through many vicissitudes. Lying in the direct track of the Turkish nomades who burst into Khorassan in the early centuries of Islam, it was repeatedly devastated; but owing to the natural fertility of the soil and the abundant means of irrigation furnished by the Murgháb it'soon recovered from each surcessive ruin, and onder the Seljukian kings, Alp Arslan, Bultan Sanjar, and Malek Shah, it became the capital of the Persian empire. The later history of Merv, from the time of Chenghiz Khan to the present day, is too well known to require any detailed notice. The site of the fortress has been repeatedly changed, and it is understood that the Russians are now laying out a new city to be fortified according to the rules of modern engineering science, and which may be expected in the near fature to become one of the most important positions in Central Asia. The Governor of Merv is said before Islam to have had the title of Mahavieh, which I cannot explain, but which was probably derived from the Hiyatheleh, who at that epoch exercised supreme control. Another title was Khodá Kushán, supposed to mean "the king killer," from the murder of Yezdijerd, bat more probably signifying merely "king of the Kushán or Tokhari."

The smaller Merv, which is sometimes called Merv-el-'Alá, or " the Upper Merv," from its position higher up the river, or more generally Merv-er-Rad, "Merv of the river," was about 140 miles sonth of the greater capital. The city is said to have been founded by Kesra Anushirwán in the fifth century of Christ, who sent architects from Babylonia for the purpose, and at the time of the Arabinvasion, a century and a hulf later, it was certainly a flourishing place. At that time the whole of the region on the Upper Oxus and as far west as Nishapár was held by the Hiyátheleh or White Huns, whose capital was at Talikán, near the junction of the Kaisar river with the Murgbáb.* These Hiyátheleh were not Turks, but ScythoAryans, of the same race indeed as the ancient Sacæ, and were named indifferently Tokhari and Kusbán. They spread into Persia from Badgheis in the early ages of Islam, being noted for their barbarons dialect, whilst sojourning in Kohistan and south-western Khorassan, and were finally absorbed in the mass of the Persian population.

A question has arisen of some geographical interest, as to the identification of the site of this city of Merv-er-Rád. In Major Holdich's paper which was read before the Geographical Society some months ago, it was said that Sir Peter Lumsden's officers had fixed on Bala Murgháb; where the General passed the winter, as the modern representative of Merv-er-Rúd. I was inclined myself, at an carly stage of my inquiries into the subject, to identify the old capital with Ak-Tepeh, both from the appearance of the ruins and because Ak -Tepeh suited the indication of being in the direct line between the greater Merv and Herat; but further research has satisfied me that Merv-er-Rud must really have been either on the site, or in the immediate vicinity, of Meruchak (Maruchak), the highroad from Herat having made a detour to the east in order to pass through this city. Of the arguments which prove this identifi-

[^0]cation I will only mention a few. (a) Merv-er-Rúd was certainly on the Murgháb, a few miles higher up than Penjdeh; the villages along the river between the two sites, which were nine in number, being assigned by the geographers as dependencies sometimes of one town and sometimes of the other.* (b) The recorded distances to Merv-erRúd, both from old Merv and from Herat, will alone suit Meruchak; 37 farsakhs, or 111 miles, being assigned to the former interval, and 47 farsakhs, or 141 miles, to the latter, which are the true measurements. (c) The most important argument, however, is the following. Up to the reign of the Amir Timúr, at the end of the fourteenth century of Christ, Merv-er-Rúd is the only great city named in history on the Upper Murgbáb above Penjdeh; but immediately after that date, that is in the reign of Timúr's son, Shah Rokh, the name of Merv-er-Rúd disappears and Meruchak takes its place in all the geographical notices of the region, the inference being that either there was a direct change of name at that period, or that Merv-er-Rúd having been destroyed in Timúr's wars, the new city of Meruchak was built by his successor in its immediate neighbourhood. $\dagger$ (d) The cross route also given by Hamdullah Mustowfi from Sarakhs to Balkh confirms, I think, the identification of Merv-er-Rad with Meruchak; for after crossing the desert from the Heri-Rád to the Murgháb, a distance of 30 farsakhs, estimated by Captain Maitland at 90 miles, the road continues from Dizeh, adjoining Penjdeh, 15 miles up the river to Merv-er-Rad, and then strikes into the Chol or desert, eastward along the route recently followed by Captain Peacock in his excursion to the Oxus.

Before quitting the subject of Meruchak, which is probably a mere diminative, signifying the lesser Merv, it may be interesting to note that the position is one of much strategical importance, owing to its close proximity to the mouth of the valley through which the Kaisar river debouches on the Murgháb, and along which is the only convenient route leading from Herat to Afghan Tarkistán. The importance of this route was shown in antiquity by the Hiyátheleh placing their capital of Talikan in the middle of the valley, near the modern position of Kileh Wali, and it need not therefore surprise us that Russia is now making strenuous endeavours to attach Meruchak to Penjdeh so as to include it in the territory of the greater Merv. Between Meruchak and Penjdeh must also be noticed the Dizeh or Dizeh-Rud of the geographers. This was an important town bisected by the Murgháb, the two divisions being connected by a bridge of which the ruins are still to be seen. $\ddagger$ I cannot determine the exact heap of mounds which marks the site either of the Upper or the Lower Dizah, as the old names are locally lost. According to the account of Captain de Laessö̈, which I hold in my hand, both banks of the river from Ak-Tepeh to near Meruchak are studded with ruins, which must represent the various towns noticed by the geographers, including Kasr-i-Ahnef, built by one of the $\Lambda$ rabian generals § at the time of

* The names of these villages were Behvaneh, Khuzan-probably at Ak-Tepeh, Lower Dizek, Upper Dizek (modern Dishek), Fulghar, Marast, Aighan, Madúveh, Zaghul-the famous Mohallib Ibn Sufrá buried here. In the time of the great Timur Bey (a.i. 784) Penjdeh is said to have been called Yendi, which is a name that I cannot explain. See Hist. de Timúr, vol. i. p. 359.
$\dagger$ Merv-er-Rud is constantly mentioned in the wars of Timur, in the notice of his marches from the Oxus to Herat, and in one passage (Hist. de Timúr Bey, tom. i. p. 317) the phrase occurs-"Merv-er-rúd 'appelle ordinairement Morgháb." This refers to A.H. 782 ; but in A.E. 820, Hafiz Abru says that the district called Morgháb contained three cities, Pul-i-Taban (Derbend), Meruchak, and Penjdeh.
$\ddagger$ The older form was Dizek, "the little fort." There was here a bridge across the Murgháb from the earliest times, which bridge was apparently twice repaired by Timur in $1 . \mathrm{H} .782$ and 785. See Hist. de Timúr, vol. i. pp. 315 and 365.
§ The town built by Ahnef was about 12 miles from Khuzan (or Ak-Tepeh) and 15
the first invasion of the Mahommedans, and the five, or rather nine, villages composing at different times the township of Penjdeh. Ak-Tepeh was, I think, Khuzan,* and the name of Dizeh or Dizeh-Rúd, as it was often called, is probably preserved in the title of Dishek, which now applies to some excavated cliffs in the neighbourhood. These cliffs, which are honeycombed with caves, inhabited at one time by Buddhist ascetics, are very interesting, and have been minutely described in a paper by Captain de Laessoë, which I hold in my hand, and which may be published in the 'Proceedings' of the Society, but is too long to be read to the meeting. Similar excavations have been examined in other parts of the mountains, and indeed may be said to be the chief object of interest in every river valley extending from Bamiyán to Herat, but especially in the valleys of the Helmund, the Heri-Rud, the Arghendáb, and the Murgháb. The majority of the caves in question probably date from the first century of Christ, when the great immigration took place of the Indo-Scythic tribes, who were all zealous Buddhists; but it is possible that some of the excavations may be still older ; for there were Sacæ in the mountains as early as the time of Darius, and the Chinese pilgrims refer to monuments at Balkh which dated from Kasyapa, who was the Buddha preceding Sakya Múní.

I wish now to offer a few observations with regard to the nomenclature of the country which Sir Peter Lumsden has described. He very properly applies to each chain or part of a chain the name by which it is known in the country, but this is not the usual practice. The hills, for instance, which bound the district of Badgheis to the south, and which Russia thinks would be her most convenient frontier, are commonly called the Paropamisus; but this is a complete misnomer. The Paropamisus, as known to the Greek geographers, extended no further westward than Herat, the continuation of the chain being termed Sariphi, equal to the Zend Erezifya and Persian Arsif. $\dagger$ Paropamisus is in the inscriptions of Darius, ParuParaesin, "the mountain of Parsin," which was the local name of the great range, the modern Sufid Koh, up to the time of the Arab conquest.t

Another interesting illustration refers to the Tejend river. This name of Tejend is a mere hardening of the original, "Zend" or "Zendik," which is the name applied to the lower part of the Heri-Rúd in the Bundehesh, and which is at least as old as the time of Tacitus, who tells us that the Sinde divides the Arians and the Daha, "disterminat Arios Dahasque," that is, is the boundary between the Arians of Badgheis and the Dahoo of the Akhal steppes. And there is a further explanation afforded by the name, which solves a puzzle that has long perplexed Oriental scholars. It is well known that when Manichæism was expelled from Persia by the Sassanian kings, the heresy twok refuge in Central Asia, where it flourished among the nomadic tribes, and especially among the Taghazghuz, who formed the advance wave of the approaching Turkish immigration. These Taghazghuz soon after the
from Merv-er-rud (or Maruchak), and must have been situated, therefore, a few miles east of Bend-i-Nadir, where the desert roed to Balkh entered the hills. Before the Arab invasion the Persians bad a fort on the spot called Sincán.

* Ak-Tepeh must have been a place of great importance in antiquity, though it did not survive to Arab times. I conjecture it to represent the Candake of Lsidore between Merv and Herat, the name alluding probably to the trench or khandak which stretched from the Kushls to the Murghab and formed its southern defence.
$\dagger$ The name of $\Delta$ rsif was applied by the Persians to Bamiyan, but did not extend further to the west.
$\ddagger$ The Bundehesh would seem to indicate that the Persian race came originally from this region, but such a derivation is not supported by any Zend authority. The name of Parsin was still in use at the time of the visit of the Chinese pilgrims, but does not appear in any of the Arab geographers.

Arab conquest crossed the desert and settled at Sarakbs and along the course of the Tejend; where they formed the dominant tribe for several centuries; hence then, probably, arose the name of Zendik, which is applied to the Manichwans in general, by the early Arabs (Ibn Khurdadbeh, the postmaster of Khorassan, and his followers), and also in the contemporary Pehlevi tracts, and which has hitherto not been satisfactorily explained. There was also a large village on the river near Sarakbs, which retained the name of Zendikan from these sectaries as late as the time of Yactit. The Manichæans of Sarakhs in the ninth century infected Magism, and almost caused a schism among the followers of Zoroaster.*

And it may here be noted that the borderland of Eastern Khorassan was a very hotbed of heresy during the early ages of Islam, almost all the impostors who distracted the Mahommedan world from the eighth to the tenth and eleventh centuries having issued from this region. And I may especially notice Mokanna, t the hero of Moore's poem of the "Veiled Prophet of Khorassan," who was a native either of Merv or of Badgheis, though he afterwards migrated across the Oxus, and was finally besieged and slain in the fortress of Sinám near "the Iron Gates," south of Shahar-i-Sabz. It may be remembered too that as late as the time of Marco Polo the Maláhideh heretics, better known as Ismaelis or Assassins, held possession of a great part of Khorassan, and set at naught the power of the Mongol sovereigns.
M. Lebsar, addressing the meeting in French, said:-Circumstances caused him to be the first explorer of the country between the Heri-rud and the Murghab. He was very happy to have this occasion to express the sentiment of gratification for the encouragement which he received from the kind reception accorded by the Royal Geographical Society to his travels. But these travels were simple reconnaissances, and the country remained very little known. It is easy to understand with what interest he received every news from the spot when last year the Commission of General Sir P. Lumsden began its work. Unfortunately the bringing together and realising of extensive, exact surveys and explorations always require much time. But from the little that is known as yet from the preliminary reports of the Commission and from correspondences in newspapers it is seen that very much has been done. The knowledge of the country derived from rapid reconnaissances is now replaced by that from exact and various study of it, and his (M. Lessar's) pride now is to be in a position to understand the value of the good work carried out by Sir P. Lumsden and the Commission of which he was the head, and express the great admiration of that work, prosecuted, as it has been, under such difficult circumstances.

The Prisident, in asking Colonel Stewart to make a few observations, said that his services would be fresh in the recollection of the Society. Some years ago, in the guise of an Armenian horse-dealer, he traversed the frontiers of the Persian and Turkoman country and obtained most valuable information, which he communicated to the Society in a paper published, with a valuable map, in the 'Proceedings' for 1881.

Colonel C. E. Stewart said be came to the meeting quite unprepared to speak. He had accompanied Sir Peter Lumsden on a part of his journey, and he had also visited Badghis or the country between the Heri-rud and Murghab rivers some two years previously, in fact shortly after that country had been visited by M. Lessar. He then went over the very Chol described by Sir Peter Lumsden. The geography

## - See 'Sacred Books of the East,' vol. xviii. p. 329.

$\dagger$ Mokanna's native place was Kahriz in Badgheis, according to the best authorities, but whether by this name is meant the town west of the Heri-Rud near Kohsan, or some other famous subterranean aqueduct of the period, it is impossible to say.
of the district had been so ably treated by Sir Peter Lumsden that he would not further refer to it, but would tell a few of his personal adventures to illustrate what the Turkomans were doing at that time. No sooner had he started from a Persian village near the frontier Afghan village of Kuhsan than he came on the tracks of a large alaman or raiding party. He had on several occasions joined the Persian troops in pursuing parties of raiding Tarkomans. On this day he was most anxious to discover whether the Turkomans were hunting him or whether he was hunting the Turkomans. It was very doubtful whether they were in front of or behind him, for some time it appeared that some were in front and others behind. A bright look-out was kept, as the party with him was a very small one of seven men, while the tracks showed the presence of some thirty-five Turkoman robbers. Fortunately he discorered that the Turkomans had a number of captives and had gone on ahead. At another place between Kariz Elias and Agar Chasma his escort showed him where they had on a former journey had a fight, and pointed to some skulls on the ground and to a grave to prove their assertion. During his residence of some ten months at the village of Mobsinabad near the banks of the Heri-rud, some thirtysix people were carried off from that neighbourhood and sold into slavery by the Turkomans, some of these having been carried off so lately as the end of March 1884. On several occasions he was himself in cousiderable danger of being carried off. While with Sir Peter Lamsden, having a strong escort, there were none of these exciting scenes, and the whole party were better able to attend to geography than had been in his power in his ride through a considerable portion of Badghis in 1883.

The Prisidesnt, in moving a vote of thanks to Sir Peter Lumsden, said the meeting must have been interested in the manner in which he had shown that the advance of Russian civilisation had at all events wiped out the romance of Turkoman raids. It was to be hoped that in the future nothing would be used in combat of a more serious character than the egg fights that Sir Peter Lumsden had described. Sir Peter had vivified the dry bones of geographical discussion by relating the customs of the tribes, and by referring to the zoology of the country and the vestiges of ancient civilisation. They would all welcome him back with the greatest cordiality to the meetings of the Society and to the headquarters of "Big Maps."

## Caves and Ruins at Penjdeh. By Captain F. de LarssoĖ.

Communicated by Major-Gen. Sir H. C. Rawlisson, $\mathrm{k} . \mathrm{c} . \mathrm{b} . *$
Caves.-On the right bank of the Murghab the sandstone, which scems to form the base of the hills bordering the valley, frequently comes to the surface, and some former inhabitants of Penjdeh have taken advantage of this to excavate a number of caves of different dimensions, but all excavated on the eame principle and evidently for the purpose of habitation.

When I came to Penjdeh in February last I had heard that caves were found there, and an old Sarik told me that as a boy he had crept through a hole leading to a very long passage, which he, however, was afraid of exploring. At my request he led me to the spot, a prominent hill called Yaki Deshik, situated on the right bank of the Murghab near

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[^0]:    * The kings of Merv-er-Rud before Islam are said to have been termed Gilán, in reference, I presume, to the royal tribe of the White Huns. Is not this then the explanation of the epithet Gileki, attached to Tabas, one of the Hisatheleh settlements in Persia, and was not the name inherited from the AEgli, whom Herodotus associated with the Bactrians ?

[^1]:    * This is the paper referred to by Sir Henry Rawlinson, in the discussion on Sir Peter Lumsden's address, aute pp. 580-1.

