

any insuperable difficulty in overcoming the want of fresh water in the Desert of Turr.

The PRESIDENT said, when Sir Charles Napier won his great victory at Meeanee he sent Major Vickery from the edge of the Runn of Cutch across to the great chain of mountains, and he returned with a collection of fossils, which, for the first time, showed clearly the true structure of that prolongation of the Suliman range.

Seventh Meeting, 28th February, 1870.

SIR RODERICK I. MURCHISON, BART., K.C.B., PRESIDENT, in the Chair.

PRESENTATIONS.—*James Nisbet Robertson, Esq.*; *Arthur Laing, Esq.*; *F. F. Searle, Esq.*; *John Markham, Esq.*

ELECTIONS.—*Donald Buler, Esq., M.D.*; *Commander G. M. Balfour, R.N.*; *William A. Morgan Browne, Esq.*; *William L. Barclay, Esq., B.A.*; *Francis W. Buxton, Esq., B.A.*; *E. F. Chapman, Esq., Lieutenant R.A.*; *Colonel Dudley Carleton*; *R. Harvey Hilliard, Esq., M.D.*; *R. Alexander Hankay, Esq.*; *William Morris James, Esq.*; *Colonel Charles E. Law*; *The Hon. Henry Littleton*; *John Markham, Esq.* (H.M. Consul at Chifu); *William Colpoys Midwinter, Esq.*; *Major-Gen. W. C. McLeod, (Madras Army)*; *Lieut.-Colonel George W. Raika*; *The Right Hon. Sir John Rose*; *W. Anthony Whyte, Esq.*

ACCESSIONS TO THE LIBRARY FROM 14TH TO 28TH FEBRUARY.—
 ‘Across Mexico in 1864-5.’ By W. H. Bullock. Donor, the author.
 ‘The Denver Pacific Railway.’ By T. Collinson and W. A. Bell. Donors, the authors. ‘Memoir sur le Tacuy de Barros.’ By W. D. Cooley. Paris, 1869. Donor, the author. ‘Path of the Total Phase of the Solar Eclipse, December 21-22, 1870.’ By J. R. Hind.
 ‘South Australia Illustrated.’ 1847. By G. F. Angas. ‘New Zealanders.’ 1847. By the same author, Purchased. ‘Mexico in 1861.’ By C. Lempriere. Purchased. ‘South Australia, 1848.’ By G. B. Wilkinson. Purchased. ‘Village Life in Egypt.’ By B. St. John. 1852. ‘Travels in China, &c., 1853.’ By W. Tyrone Power. ‘Sardinia in 1849.’ By J. W. Tyndale. Purchased. ‘Six Years in India.’ 1854. By Mrs. C. Mackenzie. ‘Trade and Travel in the Far East.’ 1846. By G. F. Davidson. Purchased. ‘Afghanistan,’ 1842. By J. Atkinson. Purchased.

The following paper was read by the author:—

A Visit to Yarkand and Kashgar. By R. B. SHAW, F.R.G.S.

[EXTRACTS.]

THE common idea of Tartary is, I think, that of a vast succession of plains, over which hordes of barbarians wander at will with their

cattle and tents. We are hardly prepared to hear of a well-cultivated country full of settled habitations, and containing flourishing cities of more than 100,000 inhabitants, where many of the arts of civilisation are carried on. Security of life and property exists; commerce is protected; light carts drawn by horses frequent the roads; markets are held on a fixed day of the week even in the smallest villages. In the towns extensive bazars, covered in against the rays of the sun, contain rows of shops where goods of every sort and from every country are exhibited. In Yarkand alone there are sixty colleges, with endowments in land, for the education of students of Mussulman law and divinity, while every street contains a primary school attached to a mosque, where turbaned rows of young true believers may be seen and heard daily at their first lessons of reading and writing. Different quarters of the town are set apart for the sale of different wares. In one street will be found spread out the silks of China, in another the cotton goods and prints of Russia, while a third will contain the robes made up of both materials, three or four of which form the ordinary dress of the Turkis. Further on you meet with sugar from Russia, tea, spices, and all kinds of foreign produce. In another part are the butchers, who offer a choice of horse-flesh, camel, beef, or mutton. The first is rather a luxury, but the two last are most abundant, selling at about one penny a pound. Next are the bakers, who make most excellent light loaves by a process of steaming the bread. The sellers of country produce supply vegetables of many kinds; such as cabbage, turnip, lettuce, carrots, &c., besides cream, nearly as thick as that of Devonshire, also a peculiar preparation of curds, and delicious cream-cheeses. At another place you can get sherbet made of fruit, which you can cool at every street corner from stalls for the sale of ice, which has been pitted in the winter. There are tea-shops where the great urns are ever steaming, and eating-houses where business-men can get their midday pilao. Elsewhere are horse and cattle markets; in fact it would be impossible to enumerate all.

Such is the condition of this hitherto little-known nation, which, while Europe ignores its existence, is living a life of its own, making history very fast, and looking upon European politics with the same indifference with which its own have been regarded by us. But I must now say a few words regarding the shape and position of the country.

Eastern Turkistan (or, as it used to be called on our maps, Chinese Tartary) resembles a huge bay, with its mouth turned to the east, and shut in on every other side by gigantic chains of mountains. A broad desert, thirty days' journey in extent, occupies its

mouth, and separates it from China, of which empire it was, until recently, a possession. This desert sucks up all the rivers of Turkistan, which die away in marshes and lakes, or form a vast jungle of scrub-wood, where they disappear under the sand.

Both the northern range, which is a continuation of the Thian-Shan, and the southern, which may be called the Himalayan, converge towards one another as they run westward, and are united by a cross-range, supporting the high plateau of Pamir, which the Natives call the "Bâm-i-dunya," or "Upper Floor of the World."

This cross-range, however, is of irregular shape, and its northern half is thrown very much back, forming a kind of secondary bay, at the upper corner of the great bay, to which I have likened Eastern Turkistan. At the mouth of this inner bay stand the town of Yunghissar, and the city of Kâshgar, the political capital of the country, as Yarkand is its commercial capital. Two long arms are pushed out under the northern and southern ranges of mountains, between them and the great desert. These arms are formed by the province of Khoten, on the south, and those of Ush-Turfân, Aksu, Kuché, &c., on the north. Thus the inhabited country resembles a crescent in general form, its convex side guarded by mountains, and the concave occupied by desert. Its general elevation is 4000 or 5000 feet above the sea-level, while some of the peaks around rise to an altitude of more than 20,000 feet, as well as can be judged without actual measurement.

In talking of the northern and southern boundaries of Eastern Turkistan, we must remember that they are by no means simple ranges, like the Alps or the Pyrenees, which can be crossed by a single pass. They are rather complex systems of mountains, composed of many chains, and enclosing considerable countries within their valleys. Thibet and Cashmere are examples of this. Eleven high passes have to be crossed in travelling from India to Turkistan by the usual trade-route, and of these passes only two are lower than the summit of Mont Blanc.

The rivers rising in this part of the Himalaya have the peculiarity, that, instead of finding their way at once to the plains, they often run for several hundred miles in the longitudinal valleys between the chains and parallel to them, until, at last, they seem to muster strength to break out of their imprisonment and burst forth through some rent in the mountain-barrier that confined them. The most signal instance of this is the Indus, which, rising in Chinese territory, runs north-westward behind five ranges of the Himalayas until it reaches its turning-point, when it breaks through them all, and issues into the plains of India southward. In this vast

sweep it encloses the whole course of its five great tributaries, which give the Punjab its name. These each imitate its example in a less degree, and the gorges by which they cut through the chains exhibit the wildest scenery in the Himalaya. It is interesting to find this peculiarity repeated on the north of the great watershed. The Karakash River runs for 80 miles along the southern flank of the Kuen-lun Range, before it can escape through the Gorge of Shahdulla by a sudden turn. And the Yarkand River, rising near the Karakorum Pass, makes a great sweep behind another portion of the same Kuen-lun Range before turning towards Yarkand. It begins by running nearly west, and finishes by a long course eastward into the Takla-Makán Desert. It is this configuration of the country which forms the chief difficulty in crossing it; for it is found easier and shorter to take the trade-routes across all the ranges in succession, than to turn these ranges by following the devious course of any of the rivers which drain them.

The northern mountain boundary of Eastern Turkistan is almost equally complex, excepting towards its western end, where only a single wall of mountain is left between the Kashgar territories and the upper valleys of the River Jaxartes, whose lower course is now held by the Russians. Advancing on another line of operations, from Siberia, Russia has lately placed a fort in one of these upper valleys, called that of the Nareen. The intermediate portion of the Jaxartes is, therefore, all that now retains independence of the former khanate of Khokand.

You thus see that Eastern Turkistan is a very compact state, being cut off from all her neighbours by high mountains and immense deserts. The physical consequence of its position is that the region is almost rainless. All the clouds laden with rain from the Indian Ocean exhaust themselves on the outer ranges of the Himalaya, where in places the rainfall amounts to as much as 300 inches in a year; the second and third ranges get much less, and beyond that comes the region of sterility called Thibet. Here we see the phenomenon of the line of perpetual snow becoming *higher* as we advance northward, and even of its being, in certain parts, *lower* on the south side than on the north of the same range, according to a law enunciated by Dr. Thomson, in his 'Western Himalaya.' While the southern ranges are blocked annually with such masses of snow that the sun cannot fully melt them away till late in the spring, or rather summer, the more northern ranges in Ladak or Thibet receive a comparatively small sprinkling of snow in winter, which the intensely hot sun of those uplands can soon cope with. Thus the traffic is scarcely interrupted in Thibet at

elevations of 17,000 and 18,000 feet, while nearer India the passes of 11,000 and 12,000 feet are blocked for many months. It will easily be imagined that very little rain-cloud penetrates beyond Thibet again across the still higher ranges northward into Turkistan.

The other mountain boundaries form similar obstacles to the clouds on the north and west, while the enormous distance to the China Sea on the east acts as a bar in that direction. It actually takes two several river-systems to reach the sea from Eastern Turkistan: the first losing itself in the desert, while a second set rises in the eastern parts of China and runs through that country to the ocean.

Thus, although the first appearance of Central Asia, viewed from the crest of the Kuen-lun, recalls the aspect of the open plains of India which have been left behind, yet no sooner do we begin to descend towards it than we perceive a vital difference. Here no forests clothe the hill-sides, no verdure rejoices the eye tired of the perpetual glare of the naked gravel. The plain, where we first enter it, is as bare as the mountains we have left. It is, therefore, the more surprising to see the rich cultivation which the hand of man has produced on its surface. Once past the band of desert (varying from 10 to 20 miles in width) which slopes down from the foot of the mountains, the traveller enters a cultivated country, where in spring—as I saw it on my return—a broad sea of green wheat stretches right and left, running into little bays and arms between the scattered farmhouses and hamlets, each surrounded by its orchard in full blossom. So numerous are these orchards that they close the view a few hundred yards from the eye. The productions are nearly the same as those of Cashmere. Apples, pears, apricots, peaches, mulberries, walnuts, melons, and even grapes, grow to perfection (the vines being buried in winter on account of the frost); while the chief crops are wheat, barley, Indian corn, and lucerne, which two latter are the universal feed of the horses. Cotton, flax, and hemp are also much cultivated, though neither of the latter for their fibre.

The roads are often crowded with people. I left the town of Kargalik on the morning of the weekly market, which is held in every village and town of Turkistan. The country people were flocking in from all directions, bringing the produce of their farms for sale. There was hardly one of all the multitude that was not mounted, even though it were upon a donkey. Rosy-cheeked farmers' wives and daughters, sometimes two on a horse, or mounted behind their husbands or fathers, and carrying their

baskets of eggs or of butter : boys driving their files of donkeys, and always riding on the hindmost ; farm-servants, taking in horses or cows for sale ; merchants, with bales of goods ; covered carts, with one horse in the shafts and two or three abreast as leaders ; beggars with their tall caps, and calabash by their side (even they often beg on horseback !) ; all these poured past us in a continuous stream for several miles. Then the crowd on the road began to get less dense, but we could still see parties of people in single file converging along bye-paths towards the road. Now, all this population is supported on land which but for artificial watering would be a bare desert. The country is a perfect network of canals, great and small. Many of the rivers are absolutely drained of their water for the benefit of the thirsty fields, even before reaching the great Desert, which would, at any rate, engulf them. I have often seen three several channels of water crossing one another at different levels. Canals are the life of the country, and are felt to be so important that even the ruler himself, Yakoob Beg, was, during my stay at Kashgar, engaged personally in the construction of one. He used to visit it daily, working often with his own hands at the excavation, to encourage his soldiers who were employed at the work. His care is not confined to canals ; new roads are being made and bridges erected by his orders ; rest-houses for travellers and wells in the desert are being constructed. At the same time he propitiates the religious classes of his subjects by a strict enforcement of the laws of Islâm, and by the building and endowment of colleges and mosques.

Such is the ruler who now governs Eastern Turkistan. I may briefly remind you how he obtained possession. Up to within five or six years ago the Chinese held the country. They had dispossessed the native Mussulman rulers, a family called "Toorra," who claim descent from the conqueror Jenghis Khan. After repeated attempts to recover their lost sovereignty, the Toorras made a last and more successful incursion in 1864, assisted by an auxiliary force of Andijanians from the neighbouring kingdom of Khokan, who were headed by Yakoob Beg. The occasion was favourable, for a mutiny had occurred among the mercenary troops of the Chinese. The invasion of the Toorras was successful, but its fruits were gathered by Yakoob Beg, the leader of the auxiliaries, who has since then exiled and otherwise disposed of the chiefs of the Toorra family. His followers, the Andijanians, now occupy the chief places in the administration, and form the strength of his army. Originally few in number, their ranks have been swollen by thousands who have fled from their homes before the advance of the

Russians; but their attitude towards the native Yarkandis is very conciliatory, and, on the whole, they are looked upon not in the light of conquerors, but as brothers in faith and in blood who have delivered them from the yoke of the unbelievers and idolaters. The disposition of the Yarkandis leads them to commerce and the arts of peace, while the Usbeks of Andijan find their most congenial occupation in administration and soldiering. Both nations talk the same language, with merely provincial variations, and it is essentially the same as the Turkish of Constantinople.

The official classes generally live outside the towns in a kind of fortified cantonment, originally built by the Chinese for their own protection. There is one of these fortresses near every large city, and they all go by the name of Yungshahr, or "New-town." The dwelling-houses of the upper classes contain two or three courtyards, surrounded by rooms, of which the doors open on to a carpeted verandah. The inner court is generally assigned to the women; the outer one often contains a kind of open pavilion, where the master of the house receives the visits of his acquaintance. If it is winter, the visitor is taken into a room, of which the floor is covered with soft Bokhara or Khoten carpets, while a bright wood-fire burns in the open fire-place.

The amount of etiquette observed at such visits is considerable. At my first introduction to the Governor of Yarkand, who is the Vizier of the kingdom, and who afterwards became my firm friend, he advanced to meet me with outspread arms. The embrace consists in clasping the other man round the body, and placing your chin on his shoulder, while he does the same to you. In this position you pour forth a long string of complimentary phrases without listening to those of your friend. This completed, I am led to the fire, on each side of which a cushion is placed. No sooner have I sat down on one of these, than, according to custom, I rise again to enquire after my host's distinguished health. This obliges him to rise too, and reply in the stereotyped form, that, "Thanks be to God, it is well." After a few minutes' conversation a servant is summoned, who enters, carrying a silk table-cloth, and followed by a procession of others bearing fruit of all kinds, bread and preserves in china bowls and on trays. The cloth is spread between the host and the visitor, and tea is poured out in small china cups for each. The master of the house then breaks off a small piece of bread, which he places before his guest. This the latter is bound to taste, as a sign that he accepts the hospitality. But, as he does so, he says "Bismilla," "In the name of God." Finally the cloth is removed, and I carefully pick up and replace

any crumb of bread that may have fallen from it. To allow the least crumb to remain on the ground is looked upon as most irreligious neglect. When the cloth is removed, another servant brings in a silk robe of honour, which is placed over the visitor's shoulders, and the master of the house then conducts him out by another door to a distance varying with their relative ranks.

My friend Mohamud Yoonas was originally a Persian writer in the service of the Khan of Khokand. This Chief having occasion to write a letter to the King of Bokhara, employed Mohamud Yoonas to do so. This letter proved to be so full of Arabic terms and high-flown expressions, that when it reached Bokhara there was not a savant in that learned city who could read it. This was the foundation of Mohamud Yoonas's fortune. He was immediately promoted to be Chief Secretary of the Khan of Khokand, and eventually came over into Eastern Turkistan, when he was made Governor of Yarkand by the present ruler Yakoob Beg.

This Chief is certainly a fine fellow, and no one can come into contact with Yakoob Beg without recognizing his remarkable character. I have before mentioned his energy in all matters affecting the progress of the country. His mastery of it is a standing miracle. Six years ago he was a petty Governor of a town in Khokand, threatened by the Russians, with whom he had already had many fights, and in disgrace with his own ruler, being the adherent of a rival to the throne. In six years he has become absolute despot of a country two or three times the extent of Great Britain, and of the most unruly people in Central Asia. It used to be a common saying in that region, that never a year elapsed without a rising in Kashgar. The Chinese maintained a large force near that city, which had to be reinforced periodically from Peking. But since Yakoob Beg has been master, not a soul dares stir. Of course he has obtained this power partly by terror, and by what we should call barbarous executions. But it is wonderful that with him this terrorism should never have become a habit, as with most Oriental despots. Yakoob Beg has drawn the line exactly at the point where severity ceased to be a necessity of his position. He has produced perfect order and security, without alienating the mass of his subjects. They feel that these exhibitions of force are, as a rule, exerted on their side and in their interests. He sits every day in the gateway of Kashgar for two or three hours to hear complaints; and it is a common occurrence for some old woman or countryman with a grievance to use reproaches and strong language in stating their case, at which he only smiles. He thus cultivates the affections of the people, the priesthood, and the

army, to whom he is prodigal of gifts. But the gallows are a great institution in the country, and the great gateway of Kashgar, of which I could see the top from my house, was frequently the scene of executions.

My first presentation to him was rather an effective scene. I was preceded by men carrying my presents on trays. After them came a troop of long-robed ushers with white wands, then two officers of high rank, who had come as a deputation to fetch me. Dressed in the costume of the country, I followed them with my Persian writer and servants. A long avenue was formed up to the palace by soldiers, who kept back the people. Three or four pieces of artillery stood on either side of the gateway. The large quadrangle into which we then entered was lined with rows upon rows of guards, dressed in the brightest coloured robes, and sitting in solemn silence with their eyes cast on the ground and their hands folded in front of them. A second quadrangle presented the same spectacle; but the robes were richer than before, and the men seemed of higher rank. The stillness of these numbers (there were nearly 3000 we calculated), the regularity of their order, and the brightness of their clothing, produced a most striking effect. At the entrance of an inner quadrangle all my servants were stopped, even my Persian writer, on whom I had counted to interpret for me. Preceded by one official, I crossed this silent and almost empty court towards a long pavilion at the end. After pointing to a door, my guide disappeared. I entered, and saw, at the further end of a long room, a man sitting alone near a window. When I approached him he put out his hands to greet me, smiling pleasantly, and pulled my robe to make me sit down on a cushion opposite him. Yakoob Beg is a man of about forty-five, short and stoutly built, with a very broad forehead. After the first salutations, we kept silence for a minute or two. Then he commenced again with a remark about the weather. I answered, and asked for an interpreter; but he laughed, and said he could understand me quite well enough, and that between friends no third person was required. He then bid me welcome to his country as the first Englishman that had ever been there, and said that God put it into his heart to accept my arrival as a favourable omen to himself.

I had several conversations with him afterwards, in all of which he expressed his great desire to be friends with the English. He often repeated: "Your Queen is like the sun, which warms every thing it shines upon. I am in the cold, and desire that some of its rays should fall upon me. I am very small (showing the tip of his finger), a man of yesterday. In these few years God has given me

this great country. I am very glad that you have come. Whatever services I can render you here, you may command, and you must do the same for me. Come, what account will you give of me in your own country, when you get back?" This he said, laughing. I replied: "I shall say that what had already been heard of you was not half of what I found the reality to be." He laughed again, and stretched out his hand to shake mine.

At our last interview he took quite an affectionate farewell, taking my hand in both of his, and holding it while he wished me a safe return home, putting me under God's care. Then, with outspread hands, as their manner is, he repeated a prayer in Arabic for my safety and success, drawing his hands over his face and down to the tip of his beard afterwards, saying, "Allaho Akber," "God is great."

On previous occasions he expressed himself as very anxious to encourage trade between India and Turkistan, and to establish intercourse between the Governments. His acts, however, are of more value than his words in this respect, and completely bear them out. Merchants from India are beginning to frequent Yarkand, and it only requires the removal of a few obstacles which exist in the hill countries subject to our own influence, to open out a field for trade of which it would be difficult to over-rate the importance. The Russian estimates of the population to which Yarkand is the door of access vary between 20 and 60 millions. Russian manufactures are taking possession of the field, notwithstanding the fact that the transport of goods from England to Yarkand costs 13s. a cwt. less than from Moscow to Yarkand. The Russian tea-merchants send tea from China through Siberia into Central Asia, over a road 4000 miles in length, although our tea plantations in India are only 700 miles from the tea-market of Yarkand. It need not be supposed that the consumption of Central Asia is small. Every man of these millions wears at least two, and often five or six, large robes made out of, or at least lined with, printed cotton. They would certainly consume more calico in a year than the same number of average Europeans. As for tea, they never leave off drinking it, although the ordinary quality costs as much as 10s. a pound. I have seen a group of soldiers sitting round their camp, adding fresh boiling water to their exhausted tea-pot, until almost every vestige of colour had disappeared from the decoction. They *must* have their tea, though it be only in name. One of themselves, describing their love for it, said that unless you finished a whole tea-pot full before sunrise, you were not considered a man in Yarkand; and that, as a rule, every one took his share in at least

ten in the day. The annual consumption in the Governor of Yarkand's household, including guards and dependents, was said to be 3000 tillahs' worth, equal to 1800*l.* sterling.

In great contrast to their friendly behaviour, and to the really excessive amount of attention and honour which they bestowed on me, was the close confinement to which we were subjected while in the cities. Even my friend Mr. Hayward, who entered the country a short time after me, was not allowed to visit me, nor did we meet until we were on our return. They used no force, nor show of force, to me; but, as they themselves expressed it, "The chains of wisdom are better than those of iron." My servants, on the other hand, were free to come and go as they would. It is undoubtedly a great step in advance for Englishmen to have lived six months in safety and honour in the heart of Central Asia, but I trust the day will come before long when they will be able to traverse it as freely as they do Europe. The absence of any ill result from the visit of the first Englishman, now the barrier is once broken, will, I hope, produce this result. The nightmare of Central Asiatic rulers, and the cause of nearly all the ill-treatment which European travellers have experienced, is the dread of their being spies. By some magic the explorer is supposed to carry off a plan of the roads, and by those roads a European army follows. Of course there is some truth in this view, and the great secret of success is to have a distinct object, which will be sufficient, judged by an Asiatic standard, to account for your proceedings.

After parting from Yakoob Beg at Kaahgar, I returned to Yarkand, when I was further detained until the roads should be quite free from snow. At last, on the 30th of May, we started, and for some part of the way I had the pleasure of talking English again, and comparing notes with Mr. Hayward regarding the treatment which we had experienced. Further on, however, we again separated, in order to explore different roads. I returned by the Karakorum Pass, which is the ordinary trade-route. I wished to compare it with the new route by Chang Chenmo, which I had taken in going.

The first range of mountains which has to be crossed is the Kuen-lun. This, although we call it by a Chinese name which no native of Turkistan has ever heard of, is in reality a portion of the Himalayan system of mountains. The other ranges of which the Himalaya consist are as much and as little separated from one another as this is from the rest. In shape you must imagine it to be like a letter *Y* laid on its side, or rather like a spur of which the rowel points west. Inside the opening of the spur is the heel of

the boot, a huge mountain mass, and in the narrow space between the heel and the spur runs the River Karakash, making a complete curve in its escape through the mountains. We begin by crossing one branch of the spur by a pass of over 17,000 feet, and this brings us into the gorge of the Karakash. We follow this gorge round its curve, by which means we avoid crossing the great heel. Another pass of greater height takes us out of the Karakash Gorge and across the other branch of the spur. The scene which here meets us is extraordinary. The ground we stand on is over 16,000 feet above the sea. In front of us and to our left stretches a wide undulating plain of bare gravel. Looking across it, twenty-five miles off, is a row of apparently isolated snow-mountains divided by ravines. They are the bluff terminations of immense parallel ridges of which we can only see the ends, these ridges being the mountains about the Karakorum Pass. Turning back we see the Kuen-lun like a huge wall. One is an army in line; the other an army in parallel columns, of which we can only see the heads. To the east and the west we have even greater contrasts. Eastward the gravelly plateau stretches till it is terminated by some high rolling downs covered with snow. Westward a few water-courses from in front of us form into a ravine which deepens gradually, plunging down a blue abyss that is lost to view amid the tremendous convulsions of the mountains around. This is the Yarkand River. The clearness of the atmosphere is indescribable. Everywhere the snow descends nearly to the level of the plain, and nowhere is there a blade of grass, or any other sign of vegetable or animal life. Each halting-place is a perfect charnel-house of dead horses, which would be preserved almost unchanged by the dryness of the climate if it were not for the wolves which we hear howling in packs every night.

It would take too long if I were to describe minutely the remainder of the journey back. We were drenched in ice-cold streams, nearly swallowed up by quick-sands in their midst, stopped by glaciers which had dammed them up, obliged to abandon all our baggage for a time and sleep wrapped in a blanket on the least windy side of large stones. We floundered through large plains of snow, in which we periodically sank up to the thigh.

This will give you an idea of the difficulties which merchants undergo on the route now in use. A few of them have lately struck out a new route more to the east, by the Valley of Chang Chenmo, of which it is sufficient to say that it nowhere crosses either perpetual snow or difficult rivers, the great perils of the present road. It is also a much more direct route to British India, to which they

are bound, and they object to going a longer and more difficult way merely in order to pass through the town of Ladák and be taxed by our tributary the Maharaja of Cashmere. But the officials of the latter (unsanctioned, I believe, by their master) see things in a different light, and our Indian teas and Manchester cotton goods may possibly have to pass through water and snow for years to come on their way to Central Asia.

The PRESIDENT, in returning thanks to Mr. Shaw for his paper, said that he was the first Englishman who had visited Yarkand and returned to give an account of the interior of the country and the manners of the inhabitants.

Sir H. RAWLINSON said the great practical value of Mr. Shaw's explorations in Eastern Turkistan was, that they had been the means of opening out an extensive market for British trade and manufactures, a market which was really almost boundless, and which in the future may be of the very utmost importance. The Government of India had regarded the discoveries of Mr. Shaw and Mr. Hayward of such importance, that negotiations had been entered into with the Maharaja of Cashmere, for the purpose of fostering trade, and these negotiations had resulted in an arrangement by which all transit duties through Ladak would be abolished, and officers would be appointed as joint commissioners by the two Governments to facilitate traffic in every possible way. At present, from the vicinity of Rudok to Shadula there was positively not a single inhabited dwelling, and, therefore, the object of the negotiations must be to erect stations for supplies on the road, and to give facilities for the owners of baggage and cattle. It was also to be hoped that security would be attended to. At present, whether travelling by the Karakorum Range, or through the Chang Chenmo, traders are obliged, after leaving the Karakash River, to cross the Sanju Pass, which was extremely bad for cattle. So long as the communication between Thibet and Eastern Turkistan was confined to that route, there never could be any very great and profitable traffic. Mr. Hayward had, however, discovered that the Yangi Pass, a little further to the westward, was quite practicable, and the only thing required to render it available for commerce was the erection of a fort to keep it safe from the attacks of robbers. The erection of that fort must depend on the friendly feelings of the Cashmere Government, and it was a great matter that the Indian Government should have succeeded so far as to render the establishment of such a defence a matter of great probability. He had that day received information from India of the publication of the results of two most remarkable and valuable journeys in these countries by Major Montgomerie's emissaries. One of them, Mirza Sujah, was at Cashmere when Mr. Shaw and Mr. Hayward were there. Mirza Sujah came from Herat in 1840. He had been educated in India, and was now an accomplished surveyor. Having travelled through Afghanistan in perfect safety, he had subsequently made one of the journeys which had always been considered among the great desiderata of Central Asiatic geography. He had passed across from Beluchistan to the Oxus, and from thence had followed Lieutenant's Wood's route to the sources of that river. He had verified Lieutenant Wood's statement of the existence of Lake Karakul, about which there had been considerable doubts. On his arrival at Tashkurgan he was arrested by the officers of YakooB Beg, who took him to Kashgar, following the very route formerly taken by Marco Polo. This was not the exact course which Mr. Hayward proposed to follow. His intention was to go up the Gilgit River across the mountains, and so on to the Pamir. Another of Major Montgomerie's pundits had also explored what had hitherto been a sort of *terra*

incognita to Europeans. He had crossed from the Indian frontier fairly into the central desert, and had proved that from Rudok right away to the Wall of China there were no high mountains. Thus, after leaving the Pangkong Lake, a four-in-hand might be driven to Kashgar. For many years past a road from the plains of India across the Himalaya had been contemplated, and only 50 miles remained to be finished, in order to have a fair open road into Eastern Turkistan. The only difficulty in the way of carrying out such a scheme arose from Chinese exclusiveness, as this plain was in Chinese territory. However, in due course of time, it was to be hoped that this natural route would be opened up.

Mr. T. SAUNDERS thought the author of the paper had erred with respect to the physical geography of the district he had travelled through, in supposing that the Himalayas and the Kuen-lun Mountains were to be regarded as one system. The mass of mountains to the north of India was upwards of 2000 miles in length, by 600 in breadth. It descended by steep slopes on all sides, by the Himalayas to the plains of India on the south, and by the Kuen-lun Mountains to the great desert of Gobi on the north. On the east it descended by equally steep slopes to the Plains of China, and starting from that base the two ranges, the Kuen-lun and the Himalaya, met together as in an apex at the great mountain knot of Pusht-i-Khar, where they join the Hindoo Koosh Range. But eastward they were 600 miles apart, and he thought it was not to the advantage of systematic geography to consider as one range the whole extent of so vast a mass. It was far more convenient that the great range of the north should have its distinct designation, as well as the great range on the south. He had no doubt that the range on the north was as well defined on its interior base as the Himalayas. It was, therefore, correct to say that this vast mass was bounded by a great range on the south, a great range on the east, and a great range on the north.

Mr. SHAW said his reason for regarding the Kuen-lun Mountains and the Himalayas as belonging to one system was, that the elevated belt of country over which he had travelled consisted of no fewer than eleven ridges, more or less parallel, separated by depressions, and he could not see why the last of those parallel ranges should be considered a distinct system any more than any of the other ranges.

2. *Notes on a Journey through Shantung.* By J. MARKHAM,
H.M. Consul at Chefoo.

[EXTRACTS.]

UNTIL very recently the province of Shantung, in the north of China, has been a closed book to the civilised world; but now, owing to the travels and researches of the Rev. Alexander Williamson, this rich and most interesting country is better known. As however, I considered that there was yet a vast amount of information to be gained, I made a tour of the province in the early part of 1869, visiting the principal cities, sea-ports, harbours, and silk-growing districts, and had the honour of reporting thereon to Her Majesty's Government; there were, however, many subjects of interest not embodied in my official Report, and which this Society may deem worthy of notice.