## PROCEEDINGS

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A Journey across Central Asia, from Manchuria and Peking to Kashmir, over the Mustagh Pass.

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(Read at the Evening Meeting, May 14th, 1888.)

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\text { Map, p. } 548 .
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In the summer of 1885, Mr. H. E. M. James, of the Indian Civil Service, rory kindly asked mo to accompany him on a journey he was about to make into China, and having decided to go to the north-east portion of the Empire to Manchuria, a country about which so little appeared to be known, we left Calcutta in March 1886, travelled to Peking first, and then to Newchwang,* where we were joined by a member of the Consular Service, Mr. H. E. Fulford, whose thorough knowledge of the language and ready tact and good humour with the natives carried us through many a difficulty. Mr. James, last year, read to you a paper describing this journey, and he has since, in his able work entitled 'The Long White Mountain,' given a fuller account of it, and has told how, after leaving Mukden, we attempted to ascend the Yalu river to its source, and then crossing the watershed, descend the valley of the Tumen river to Hunchun, and that finding this impracticable, we crossed into the valley of the Sungari and ascended that river to its source in the Chang-pei-shan Mountains, the highest point of which we found to be 8000 feet only instead of 12,000 or 15,000 feet as had formerly been supposod. Then descending the valley of the Sungari through most magnificent forests, we reached Kirin, the most important town in Northern Manchuria. From there we passed through the richly cultivated undulating country bordering the Sungari to Petuna, and after crossing that river, passed over an open prairie country to Tsi-tsi-har, from which place we struck back again to Sansing, and then ascended the Hurka river to Ningata, and crossed the northern end of the Chang-pei-shan Mountains, here only some 2000 feet high, to Hunchun and Possiet Bay. We then headed back to Kirin again, and from thence through Kuan-

- Vide Map of Mancharia, ' Proceedings R.G.S.,' 1887, p. 594.

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cheng-tzu to Mukden and Newchwang, which we reached on December 19th, just seven months after leaving it.

It was on our way to Mukden that we saw one of the pretiest sights it is possible to imagine. As usual, we had started very early in the morning-three or four o'clock-snow was lying on the ground, and the thermometer was several degrees below zero, when, as the sun rose, we saw the whole atmosphere glistening with shining particles. We were in a frozen mist, and every tree and shrab, every branch and twig, was encrusted on all sides with the glittering particles. Earth and air alike were sparkling white, and the delicate tracery of the trees, the glistening atmosphere, and the snowy hills in the background, made up a scene such as one could scarcely hope to meet with except in fairyland.

Our work of exploration was now over, and few countrios could repay the traveller better for his labours than Manchuria. It is a noble country, and well worthy of being the birthplace of the successive dynasties which, issuing from it, have conquered all the countries round, and of that dynasty which to-day holds sway_over the most populous empire in the world.

The fertility of the soil is extraordinary; the plain country is richly oultivated and dotted over with flourishing villages and thriving market towns, and the hills are covered with magnificent forests of oak and elm. The mineral resources are at present undeveloped, but coal and iron, gold and silver are known to be procurable. The climate is healthy and invigorating, but very cold in winter, when the temperature varies from $10^{\circ}$ below zero Fahr. in the sonth to $40^{\circ}$ or more below zero in tho north.

Rivers are numerous and large; the principal is the Sungari, which is navigable for vessels of three or four feet draught as far as Kirin, and is therefore of considerable importance both strategically and commer-cially-for should the Chinese permit the Russians to navigate it, the latter would derive immense advantage from having access to such a thickly populated and fertile country as lies on both banks of the river above Sansing, more especially when the Great Siberian Railway has been completed up to the Amur. As Mr. James has pointed out, the basin of the Sungari is of extraordinary fertility, and every year thousands of colonists from the northern provinces of China are flocking into these districts, opening up now tracts and boilding large thriving villages and towns.

Unfortunately brigandage is very rife in Northern Manchuria; nearly every one carries arms of some sort, and one never sees small hamlets or detached farmhouses, because the people have, for their own protection, to collect together in large villages and towns. And the Chinese must be careful lest a neighbouring Power, actuated of course by the purest of motives, in the interest of the advance of civilisation, does not take upon itself to stop this brigandage.

None of the other rivers of Northern Manchuria approach in importance to the Sungari. The Nonni and the Hurka are navigable for amall junks as far as Tsi-tsi-har and Ninguta respectively when the rivers are full, but they pass through districts for the most part unproductive, or at any rate undeveloped. The Tumen river, although it falls directly into the sea, is of no importance, as it flows through a mountainous, thinly populated country, and is not navigable even to Hunchun for anything but very small junks. When we first saw the river, two days' march above Hunchun, we could scarcely believe it could be the Tumen river, as it was so insignificant in comparison with what we had expected. It seems somewhat remarkable that of the three rivers which rise within a few miles of each other in the Chang-pei-shan, two, viz. the Sungari and the Yalu, should be of such immense size, while the third, the Tumen, should be so comparatively insignificant, and this although it is on the side of the range nearest the sea. I noticed, however, that in the basins of the Sungari and Yalu rivers, in which we were travelling during the rainy season, the rain usually came from the south, and not from the east, that is to say, it came more from the China Seas than from the Sea of Japan.

With regard to the population of Manchuria, perhaps the mcst noticeable point is the paucity of Manchus inhabiting the country. The original inhabitants seem to have gradually drained off to China Proper, and their places are now being taken by emigrants from the provinces of Shan-tung and Chihli.

Like nearly all conquering nations, the Manchus, from enjoying too much ease and comfort, seem to have lost their old warlike spirit, and in their native conntry do not bear a reputation for excessive bravery, but are, on the contrary, the laughing-stock of the Chinese colonists; for the Manchu soldiers have proved themselves quite incapable of dealing with the bands of brigands who infest the country, and Ohinese regiments composed of men from Hunan and Honan are used against any robber bands who are likely to offer a particularly stubborn resistance.

The inhabitants generally, though at times showing a greater amount of curiosity than was pleasant, were on the whole, well enough disposed towards us, more especially in the remoter districts. Near the Russian frontier we were naturally taken for Russians, and at Hunchun we were much amused at Chinese soldiers coming up to us to shake hands like they had seen Russians do, and greet us with [the Russian equivalent for "How do you do?"

Great activity is being shown now in Manchuria in military preparation, and as Mr. James has already told you, an arsenal and powder factory has been constructed at Kirin, and forts, mounting heavy Krupp guns, at Sansing on the Sungari, and Hunchun near Possiet Bay; a telegraph line will now have been completed through 'Kirin
to Blagovestchensk on the Amur and to Hunchon; some 15,000 additional troops are being raised and large quantities of modern breech-loading rifles are being imported into the country. It seems that the Chinese are anxious to improve their position in Manchuria, and these preparations would no doubt make it very secure if the Chinese soldiers could be induced to refrain from substituting cosldust for gunpowder in their cartridges, if the Government would see the advantage of having one instead of a dozen patterns of rifle, and thus prevent inevitable confusion in the supply of ammunition; and if the officers knew what discipline meant and what is required of a leader of troops in a war with a civilised Power. Before constructing the arsenal at Kirin, too, the Government might have considered whether the money thus expended for manufacturing arms, which could be obtained of very much better quality and at a third of the price, might not have been better expended in improving the lines of communication and making them fairly passable during the summer months.

From Newchwang Mr. James went through Port Arthur to Chifu, and from there home by America, while Mr. Fulford and myself returned by Shan-hai-kuan to Tientsin. I intended to winter at that place and Peking, and then return to India by sea, but having obtained an extension of leave I determined to travel back to India through Mongolia and Chinese Turkistan.

Mr. Shaw, the first Englishman to penetrate into this latter country, in finishing a description of it, says:-"We have thus brought our imperfect' survey round by the south of the Desert of Gobi into the regions concerning which our more accurate knowledge is derived from the eastward. Thus the two sources of light are pushing towards each other, giving good promise that the penumbra still remaining between will soon be dispersed by the rays from one side or the other." My ambition, therefore, was to join together these two sources of light by completing my journey from the eastern coast of Asia till I reached the Himalayas at the western extremity of the Chinese Empire. The route I selected by which to reach Chinese Turkistan from Peking was the most direct one, though the least frequented, and as yet unknown to Europeans. It leads across the Gobi Desert in a line lying between that followed by Mr. Ney Elias in 1872, when he travelled from Péking to North-western Mongolia and Siberia, and the route followed by that prince of travellers, Marco Polo, six centuries ago, in coming from Eúrópe to Peking, the account of whose journey has been so admirably edited by Colonel Yule.

So after enjoying, for nearly three months, the hospitality and kindness for which Sir John and Lady Walsham and the British Legation are so well known, I set out again on the 4th April. But this time I was without companions, and had only one Chinese servant, who
acted as interpreter as well as cook and groom. Well and faithfully did he serve me, and when things went hardest he was most cheerful. Once only did he give in, and that was when he was overcome with mountain sickness: he thought the air was poisonous, and said they had no air "same like that Peking side."

In preparing for so long a journey through an almost unknown country, a great many things have to be thought of, chief of which is the money supply. I found it impossible to get bills on any town in Turkistan, so it was necessary to carry money sufficient for the whole journey with me. It is perhaps not generally known that in China there is no silver coinage, and that the value of two or three sovereigns in the copper coinage would be a mule-load. It is necessary therefore to take solid silver, which is weighed out as occasion requires, and I set forth with some 60 lbs . weight of solid silver, stowed away amongst my baggage. To guard this I had to arm my servant as well as myself, and to trust to his fidelity not to betray me. Then with regard to clothing, I had to be prepared both for great heat and intense cold. Of medicines I took a plentiful supply, for they are always useful for giving to the natives. It is well I did so, for Mr. Dalgleish's fame as a medicine man had spread throughout Turkistan, and the Turkis thought that I, being also English, must be able to cure them instantly of any illness they had.

My preparations, however, did not occupy me for very long, as my kind friends in the Legation thought of every possible necessary, comfort, or luxury, so that my only difficulty was to reduce my baggage to reasonable limits.

On April 4th, then, I left Peking, and the next day passed through the inner branch of the Great Wall. Here, under the eyes of the Emperor, it is a magnificent structure, built of immense blocks of granite. It is some 40 or 50 feet in height and wide enough at the top to drive two carriages abreast on, winding up and down the steep hillside, over the summits and across the valley far away into the distance, and the credulous European tourist who comes out here to see it, imagines that it extends thus for hundreds and even thousands of miles; but where I passed through it next, scarcely one hundred miles from Peking, it had dwindled down to a miserable mud wall, not 20 feet in height, of no thickness, and with gaps in it often from a quarter to half a mile in width. The gateway there was very typical of a feature of the Oriental character. There were massive doors, and a lofty gateway, two gans pointing down the road, and a detachment of soldiers to collect customs duties, while twenty yards to the right was a gap in the wall wide enough for a brigade in line to pass through.

Four days after leaving Peking I reached Kalgan, on the Mongolian frontier. It is a town of some importance, as from here start the caravans to Kiakhta on the Russian frontier. Large quantities of tea
are taken by this route to Siberia, and from thence to Russia, and it has been proposed to build a camel tramway or Decauville railway across the Gobi to Urga. Mr. Sprague, of the American Mission, which is established here, gave me most valuable assistance in making preparations and collecting information. We went to all the chief merchants in the place and asked them for information regarding the route to Hami. Not one of them had ever heard of such a place. They had heard there was such a country as Turkistan, but they thought it would take many months to get there.

At Kalgan I met the ex-captain of a Chinese gunboat, which had been engaged in the action at Fuchau during the Franco-Chinese war. His vessel being moored at some distance from the French fleet, had escaped without much damage, while the rest of the Chinese squadron was almost totally destroyed. Hence the Chinese Government considered he had shirked his duty, and sent him into exile at Kalgan. Had he, on the other hand, blown up his vessel and perished in the wreck, he would have received the highest posthumous honours.

Leaving Kalgan on April 10th, I turned off westward, and ascended the valley of the Yangho. The country presented a desolate and deserted appearance, for the villages were half in ruins; numerous watchtuwers, now falling to pieces, were scattered over the country; and the inhabitants, looking ill-fed and badly clothed, were attempting in a halfhearted way to cultivate fields which were constantly being covered with layers of dust by the horrible sand-storms, which used to occur almost daily at this time of the year. The country is of the formation called loess, a light friable soil which crumbles to dust when the slightest pressure is put on it. In consequence of this, the roads are often sunk 30 or 40 feet below the level of the surrounding country; for when a cart passes along a road the soil crumbles into dust, the wind blows the dust away, and a rut is formed. More traffic follows, more dust is blown away, and gradually the roadway sinks lower and lower below the surrounding level; for the Chinese here, as elsewhere, never think of repairing a road.

On the 12th April I passed through the Great Wall, which I have described above, entering what Marco Polo calls the Land of Gog and Magog. For the next two days I passed through a hilly country inhabited by Chinese, though it really belongs to Mongolia; but on the 14th I emerged on to the real steppes, which are the characteristic features of Mongolia Proper. Stretching far away in the distance there was a great rolling grassy plain on which the flocks and herds and the yurtas, or felt-tents, of the Mongols were scattered about, These people offered a striking contrast to the Chinese inhabiting the districts I had just left. They were strong and robust, with round ruddy faces, very simple minded, and full of hearty good humour. They are entirely pastoral and nomadic in their habits, and do not take to agricultural
pursuits. The old warlike spirit which made them so powerful in the days of Chenghis Khan has now disappeared completely. The Chinese Government has purposely encouraged the men to become Lamas, and now it is said that as much as 60 per cent. of the whole male population are Lamas, who by their religion are neither allowed to marry nor to fight. In consequence there is a great decrease in the fighting strength of the Mongols, as well as in the whole population. A recent famine carried away numbers more, and the country, it seems, would almost become depopulated, were it not that Chinese immigrants are now invading it, and these are even outdoing the Mongols in their own callings, for I met Chinese in Mongolia who owned flocks of sheep which they were fattening for the Peking market.

On April 17th, I reached Kuei-hua-cheng or Kuku-khoto, an important place of trade with Mongolia; its importance, however, has diminished since the tea from Hankow has been taken round by steamers to Tientsin, and thence by Kalgan to Kiakhta in preference to the old land route by Kuei-hua-cheng and Urgan

I now had to prepare for my journey across the desert to Hami, and was fortunate enough to get the valuable assistance of Mr. G. W. Clarke, of the China Inland Mission, in making my arrangements. This gentleman had travelled 16,000 miles in China during his long residence in that country, and had assisted Mr. A. R. Colquhoun in his journey through South-west China, so that he well knew the requirements of a traveller.

There was considerable difficulty at first in finding a man who was willing to hire out camels to go across the desert with such a small party. A Chinese native of Guchen, however, finally agreed to do it for double the ordinary price, all of which he required in advance. Next a propitious day on which to start had to be chosen. April 26th was fixed, and in the meanwhile $I$ had plenty to do laying in provisions for the whole sixty or seventy days which would be occupied in crossing the desert. Flour and rice, together with the tinned beef which I had brought from Peking, were to be the great stand-by, while I also, in order to make the journey as little disagreeable as possible, took a supply of potatoes, dried beans and mushrooms, raisins, apricots, and tinned milk and butter. A tent was also purchased, and the last, but not the least, articles of my equipment were two water-casks, which were filled with water daily before starting on the march, so that if, as sometimes happened, we did not find water at the end of it, we should still have a supply in reserve. The auspicious day having arrived, we started from Kuei-hua-cheng, the party consisting of my Chinese servant, who also acted as interpreter, the camel-owner, who acted as guide, a Mongol assistant, and myself. There were eight camels. I rode one myself, four others carried my baggage and stores, and my servant rode on the top of one of these baggage camels; of the remaining three, one carried
the water, one was laden with brick tea, which is used in place of money for busing things from the Mongols, and the third was loaded with the men's things.

After crossing the cultivated plain round Kuei-hua-cheng, we ascended the buttress range on to the great Mongolian platean, which along the route I followed is generally from 4000 to 6000 feet above the sea-level, with a few depressions 2000 or 3000 feet. For some days I passed over an undulating country, with grass meadows and clear streams of pure water. But gradually the aspect of the country became more and more barren, the streams disappeared, and water could only be obtained from the rough wells or water-holes dug by former caravans. No grass could be seen, and instead the country was covered with dry and stunted plants, burnt brown by the sun by day and nipped by the frost by night. Not a sound would be heard, nor scarcely a living thing seen, as we plodded along slowly, yet steadily, over those seemingly interminable plains. Sometimes I would strike off from the road, and ascend some rising ground to take a look round. To the right and left would be ranges of bare hills, very much resembling those seen in the Gulf of Suez, with rugged summits and long even slopes of gravel running down to the plain, which extended apparently without limit in front of me. And there beneath was my small caravan, mere specks on that vast expanse of desolation, and moving so slowly that it seemed impossible that it could ever accomplish the great distance which had to be passed before Hami could be reached.

Our usual plan was to start at about three in the afternoon and travel on till midnight or sometimes later. This was done partly to avoid the heat of the day, which is very trying to the loaded camels, but chiefly to let the camels feed by daylight, as they cannot be let loose to feed at night for fear of their wandering too far and being lost. Any one can imagine the fearful monotony of those long dreary marches seated on the back of a slow and silently-moving camel. While it was light I would read and even write, but soon the sun would set before us, the stars would one by one appear, and through the long dark hours we would go silently on, often finding our way by the aid of the stars alone, and marking each as it sank below the horizon indicating how far the night was advanced. At length the guide would give the signal to halt, and the camels with an unmistakable sigh of relief would sink to the ground and their loads would quickly be taken off, and before long camp would be pitched, and we would turn in to enjoy a well-earned sleep, with the satisfaction of having accomplished one more march on that long desert journey.

But though these marches were very monotonous, yet the nights were often extremely beautiful, for the stars shone out with a magnificence I have never seen equalled even in the heights of the Himalayas. Venus was a resplendent object, and it guided us over many a mile of
that desert. The Milky Way, too, was so bright that it looked like a bright phosphorescent cloud or as a light cloud with the moon behind it. This clearness of the atmosphere was probably due to its being so remarkably dry. Everything became parched up, and so charged with electricity, that in opening out a sheep-skin coat or a blanket a loud cracking noise would be given out accompanied by a sheet of fire. The temperature used to vary very considerably. Frosts continued to the end of May, but the days were often very hot, and were frequently hottest at nine or ten in the morning, for later on a strong wind would usually spring up, blowing sometimes with extreme violence, up till sunset, when it generally subsided again. If this wind was from the north the weather was fine but cold. If it was from the south it would $k$ warmer, but clouds would collect, rain would sometimes fall; generally, however, the rain would pass off into steam before reashing the ground. Ahead of us we would see rain falling heavily, but before it reached the ground it would gradually disappear-vanish away-and when we reached the spot over which the rain had been falling there would not be a sign of moisture on the ground.

The daily winds, of which I have just spoken, were often extremely disagreeable. It was with the greatest difficulty that we could keep our tents from being blown down, and everything used to become impregnated with the sand which found its way everywhere, and occasionally we had to give up our march because the camels could not make any head against the violence of the wind.

But in spite of many disagreeables, the desert has some charms, and I well remember the day on which I made the following entry in my diary. "A really delightful morning. The desert is not so dreary after all : for no artist could wish for a finer display of colouring than the scene presents this morning. Overhead is a spotless clear blue, and beneath it the plain has lost its dull monotonous aspect, fading away in various shades of blue, each getting deeper and deeper till the hills are reached, and these again in their rugged outline present many a pleasing variety of colours all softened down with a hazy bluish tinge; while the deceitful mirage makes up for the absence of water in the scene, and the hills are reflected again on what appear to be lovely laker of clear still water."

After crossing the Galpin Gobi, which Prejevalsky says is the most sterile part of the whole Gobi, and in comparison with which he says the deserts of Tibet might be called fruitful, I pussed along the southern part of the Hurku Hills, crossing Prejevalsky's route at the Bortson well. It was now of interest to find out whether the range extended as far westward as the Tian-shan or whether it formed a continuation of the Altai Mountains. We travelled on, then, in a north-west direction for 190 miles over a plain lying between the Hurku Hills and a similar but somewhat lower range running parallel
to it on the south at an average distance of 30 miles. A low watershed connecting these two ranges was crossed, and we then descended into a low-lying sandy tract very much similar in character to the Galpin Gobi. The Hurku range here comes to an end, its extreme length being about 220 miles. It is highest at its western extremity, where the peaks are probably about 8000 feet high. It presents a bare sterile appearance throughout, though stunted shrubs can be found in the hollows and along the watercourses.

At the western end of the Hurku Hills, between it and the range to the south, is a most remarkable range of sandhills. It is about 40 miles in length, and is composed of bare sand, without a vestige of vegetation of any sort on it, and in places it is as much as 900 feet in height, rising abruptly out of a gravel plain. With the dark outline of the southern hills as a background, this white fantastically shaped sand-range presents a very striking appearance. It must have been formed by the action of the wind, for to the westward of this range is an immense sandy tract, and it is evideut that the wind has driven the sand from this up into the hollow between the Hurku Hills and the range to the south, thus forming these remarkable sandhills. Tradition corroborates this supposition, for the Mongols say that a large force had been collected, and was preparing to march to China, when a mighty wind arose, blowing the sand of the desert against them and burying them all together, with several villages and temples. At the present time a stream runs along the nothern foot of the range; this stream has some patches of meadow land on its banks, on which are pitched several groups of Mongol yurtas.

To the west of the Hurku range is a very barren sandy tract forming a depression between that range and the outlying spurs of the Altai Mountains. This depression is about 80 miles in length, and to the north is bounded by a series of isolated hills which form connecting links between the Hurku range and the Altai Mountains.

Descending into this depression on the 8th June, we, towards dusk, approached a low range of broken hills, and as night fell, the guide came up to me with a terror-stricken face and said that it was a favourite resort of robbers, and told how a short time previously nine men ont of one caravan had been killed, and the remainder left in a pitiable state to continue their journey on foot across this awful desert. The Mongol said, too, he had just seen a horseman riding to the hills. We had accordingly to keep a sharp look-out, and when we reached the foot of the hills, halted, and taking the loads off the camels, wrapped ourselves up in our sheepskins and watched through the long hours of the night. Day broke at last, and then we silently advanced and entered the hills. Very weird and fantastic in their rugged outline were they, and here and there a cairn of stones marked where some caravan had been attacked, and as we passed these each man threw one more stone on the heap.

Arriving at a well in a hollow we encamped for the day, and in the evening set out again, revolvers and carbine loaded and ready. As night fell we emerged on to the plain again, and with a great sigh of relief my men added a goodly number of stones to the last cairn.

We now approached the outlying spurs of the Altai Mountains, and on some of the higher peaks to the north could be seen patches of snow. These mountains are perfectly barren, the upper portion composed of bare rock and the lower of long gravel slopes formed of the debris of the rocks above. In such an extremely dry climate, exposed to the icy cold winds of winter and the fierce rays of the summer sun, and unprotected by one atom of soil, the rocks here, as also in every other part of the Gobi, crumble away to a remarkable extent, and there being no rainfall sufficient to wash away the debris, the lower features of a range gradually get covered with a mass of debris falling from the upper portions, and in the course of time a uniform slope is created, often 30 or 40 miles in length, and it is only for a few handred feet at the top that the original jagged rocky outline is seen.

It was in this region that I first heard of the wild camel. The guide one day pointed out to me a prominent peak in the Altai Mountains, and said that behind it was a grassy hollow, which wild camels usually frequented. Later on I met a Mongol hunter who said the Mongols shoot the wild camel for the sake of its skin, and they also catch the young ones to train up for riding purposes, and I was assured that these would go for 200 miles a day for a week, but they can never be broken in to carry a load. They were described to me as being smaller than the tame species, and were said to have short smooth hair in place of the long hair of the ordinary Mongolian camel. I was once shown the track of a wild camel, and it was certainly very much smaller than that of the tame one. Prejevalsky saw these animals both at Lob-nor and in the desert of Dzungaria.

We also sow here considerable numbers of wild asses, which appeared to be perfectly similar to the Kyang of Ladak and Tibet; and wild horses too-the Equus Prejevalskii-roaming about these great open plains.

Before leaving the Altai Mountains I picked up several heads of the Ovis Poli, called Argali by the Mongols. They were somewhat different from those which I afterwards saw at Yarkand, which had been brought in from the Pamir. Those I found in the Gobi were considerably thicker at the base, there was a less degree of curve and a shorter length of horn. A full description of the Ovis Poli, with a large plate drawing of the horns, may be seen in Colonel Gordon's 'Roof of the World.'

I unfortunately was unable to spare any time to shoot as Hami was still a long way off, and some 2000 miles of country beyond Hami had to be traversed before India could be reached. We accordingly pushed
on, and at last one evening from the top of a hill I saw far away in the distance, and scarcely distinguishable from clouds, the snowy outline of the Tian-Shan or Celestial Mountains. My delight was unbounded, and for a long time I feasted my eyes on those "Heavenly Mountains," for they marked the end of my desert journey. The next march, however, was the most trying of all. The route descends into the desert of Dzungaria which separates the Tian-Shan and Altai mountain systems. We passed out of the low broken ranges of hills which lie at the base of the higher ridges, emerging on to a great open plain of bare gravel without a blade of vegetation. From 11 in the morning through the heat of the day till 11 at night we marched on, then halted for a short time to make some tea, and starting again at 2.30 a.m. marched on through another day till three in the afternoon. The length of that march was 70 miles, and not a sign of water could be found throughout, while the heat was intense, for the wind blew off the heated gravel as from a furnace, and I used to hold up my hand to protect my face from it in the same way as one would in front of a fire. We encamped among some trees at a height of 1700 feet above the sea. This is the lowest point I reached in the Gobi. But after our long march we got no rest, for we were pestered with swarms of sandflies and midges. Starting at 1.30 the next afternoon we now began to ascend the slopes of the TianShan Mountains, and as we were travelling on through the night we were suddenly hailed by a shrill voice. The guide replied, and then led us to a house in which we found some Turki men and women. This was the first sign that we had left Mongolia and had now entered Chinese Turkistan. Ranning by the house was a little stream of the most delicious water, and well do I remember the delight with which I guped down mouthful after mouthful of it, for during the whole desert journey of two months the water had always been bad and brackish, and even when made into tea, in which form I always drank it, was still very unpalatable. During the next day we still ascended the bare gravel lower slopes of the Tian-Shan, and on the following day crossed the range at a height of 8000 feet above the sea. The upper portions were covered with very fine grass, but trees were not often seen. I picked up several specimens of Ovis Poli horns and was told that they are very plentiful about there.

On descending the southern side of the Tian-Shan I expected to enter a fine well-populated country, but instead of that I found the same barren desert as before, with, however, a small oasis every 15 or 20 miles with a village and cultivated lands. On July 4th we at last reached Hami, having accomplished the distance of 1255 miles from Kuei-hua-cheng in 70 days.

In the whole distance very few inhabitants were met with, but every few days we would come across two or three felt tents pitched on some spot where scanty pasturage could be found for the flocks and herds of
the Mongol inhabitants. Sometimes a small stream would be met with, and along its margin would be a narrow strip of grass, but generally the only means of obtaining water was from wells. These wells were from 10 to 20 feet deep, and ofton less. We occasionally had to dig ourselves for water when we had missed our way or had found the usual well choked up with sand. Along the route, then, the water is evidently not far from the surface of the ground, and this is partly accounted for by the fact that the road, almost throughout, keeps along the base of hills or along the depression between two parallel ranges. The soil is generally gravel, and sandy tracts were only orossed in the low-lying districts of the Galpin Gobi and the portion of the Gobi lying between the Hurku range and the outlying spurs of the Altai Mountains. Fodder for camels can nearly always be found, though it is often very scanty, and the animals have to wander over a great extent of country picking up a mouthful here and there. Grass is rarely seen, and it is impossible to take ponies along this route unless you are able to change them every fortnight or so.

It was difficult to get any accurate information about the tribes inhabiting the country passed through, but, as far as I could learn, the country up to the Galpin Gobi is inhabited by the Tumed tribe, the region south of the Hurku Hills is occupied by the Sain Noin tribe, while the Djassaktu tribe occupied the spurs of the Altai Mountains. There is a distinct difference in personal appearance between the Mongols of Eastern and Western Mongolia, the features of the former being rounder and fuller, while the latter had rather more elongated faces with noses slightly more prominent and less squat than the Eastern Mongols. The few inhabitants I met with on the desert journey were miserably poor and wretched-looking. They were dressed in filthy rage, and evidently had to content themselves with very little food. Milkcamel's, cow's, sheep's, or mare's-is the principal article of their diet. Once a day they mix up with it some flour or millet which they bay from Chinese merchants, who come round during the summer months selling them grain, tobacco, opium, and articles of dress, at very exorbitant prices, or bartering these articles for ponies and camels.

At Hami, the great road from Peking through the provinces of Shansi, Shensi, and Kansu to Turkistan, joins that which I had been following. This place had been visited a year previously by Mr. Carey. It is of no great interest, though of importance strategically as the meeting-point of the roads from Kashgar and Kuldja. This was the first town of Turkistan I passed through, and I noticed directly a regular change from the ordinary Chinese towns. In China the houses are as a rule large and well built, with pent-roofs and overhanging eaves; the shops are of a respectable size, with plenty of room inside for the storage of goods for sale, and for several bustling shopkeepers who serve their customers from behind good solid counters. In Turkistan the houses
and shops are more after the Indian style; they are built of mud, low, and flat-roofed, and the shops small and heaped up all round with goods so that there is little room left for the shopkeeper.

At Hami I had to make fresh arrangements for my onward journey to Yarkand, a distance of about 1400 miles. The camels were discharged, and in their stead I hired an araba, or travelling cart, to carry my baggage, and bought a pony to ride myself. These arabas are large carts carried on a pair of enormous wheels, and drawn by three or four mules or ponies, which are driven almost entirely by word of mouth. There is ample room inside to lie down at full length, and on the way to Kashgar I generally preferred sleeping inside the cart on a felt laid over the top of the baggage to lying on the ground in the close, stuffy rooms of a Turki inn.

Now that I had reached Turkistan I thought that I should be able to say good-bye to desert travelling, but was again disappointed, for the whole country is really nothing but a huge desert with villages and towns situated in the oases formed by the succession of streams which flow down from the Tian-Shan Mountains. If you could get a bird's-eye view of Chinese Turkistan you would see a great bare desert surrounded on three sides by barren mountains, and at their bases you would see some vivid green spots, showing out sharp and distinct like blots of green paint dropped on to a sepia picture. In the western end round Kashgar and Yarkand the cultivation is of greater extent and more continuous than in the eastern half, where the oases are small and separated from each other by 15 or 20 miles of desert. These oases are, however, extraordinarily fertile, every sorap of land that can be cultivated is used up, and every drop of water is drained off from the stream and used for irrigation.

The inhabitants are industrious, but not such good cultivators as the Chinese. They seem peaceful and contented, dress simply and well, and live in houses which, though built of mud, are kept remarkably clean inside. The Turkis are, however, very much lacking in spirit, and are tame and submissive to a degree. They stand in the greatest awe of the Chinese, who without in the least oppressing them, and without even an army of any size to cause it, yet produce an impression in the Turki mind of their overwhelming strength and importance. The Turkis accept it all in a comfortable submissive way, and think of nothing else but how to earn a living as easily as possible. The Chinese are in fact perfect masters of the art of impressing Orientals. They live in separate towns, in which no Turkis, except in the Government employ, are allowed to reside. Their officials are scarcely known as human beings : they are presences inhabiting a great walled-in inclosure, entrance to which is barred by huge massive gates, and they never appear in public except in state and accompanied by an escort. Ohina, too, is regarded by the Turkis as an almost fabulous country. Being separated from Turkistan by the great Gobi desert, scarcely a Turki has visited it, and the Turkis
only hear of it from the Chinese, who give the most exaggerated deecriptions of it, telling them that the emperor has an untold number of soldiers at his command, and has a hill of gold and a hill of silver, from which ho obtains inexhaustible wealth.

But it is not only in Turkistan that the Chinese are considered so great a nation-greater, indeed, than either England or Russia-but also to a greater extent than may be generally supposed, in such States as Kashmir and Nepal, and even by Afghan and Hindustani merchants who have travelled all through India and Russian Turkistan. Nobody there believes either that we took Peking. They know that we arrived there, but think we were driven back again by the Chinese; for if we took it, they say, why did not we keep it, or else burn it down?

I left Hami on July 8th, by the road through Pichan to Turfan. For the first three marches the road leads over a level country at the southern base of the Tian-Shan Mountains. The country is for the most part desert, but small oases are met with every ten or fifteen miles. They were covered with the ruins of the houses built by the Chinese army under General Teo-tsung-tang, which ocoupied this part of Turkistan for a year or more during the campaign against Yakub Beg. The soldiers are said to have quietly settled down here, cultivatod the land, and grown a crop, while waiting for reinforcements with which to continue the campaign. There are still standing the remains of forts built at this time, and occasionally a monument to some Chinese officer who had fallen during the war would be seen.

Pichan is situated in an oasis of great fertility, some ten miles in length. The town itself is small, being only 400 yards square; it is surrounded by a mud wall, and has one short street of shops, but the country round is thickly studded with houses.

On July 15th I reached Turfan. The heat there was intense, as the town is situated at a very low elevation, and surrounded by the desert. The people, to avoid the heat, dig underground rooms, and live in them during the day. Here, as at all the chief cities in Turkistan, there are two towns, the Mussulman and the Chinese. The former contained some very good shops, in which the chief articles sold were Russian piece-goods and ironmongery.

Round the town for many miles on either side I noticed immense numbers of what looked like old rifle-pits, but which I found to be wells, which had been dug by the Chinese army when besieging Turfan a dozen years ago. These wells were dug at intervals of 15 or 20 yards, in the middle of the desert, and extended in several lines, each two or three miles in length. There must have been thousands of them, and the one I measured was 110 feet deep.

I stayed at Turfan a day, and then continued my journey to Kashgar, passing through the towns of Karashar, Korla, Kuchar, and Aksu, which are all very similar in character to one another.

From Aksu I sent my Chinese servant with the cart by the usual road through Maralbashi, which was first visited by Captain Biddulph, and engaged an Afghan merchant who spoke Hindustani to accompany me through Ush Turfan and the Syrt country to Kashgar.

This was the pleasantest part of the whole journey, as the Afghan and a Turki servant whom I engaged were both mounted, and we conld get over the ground as fast as we liked, for I only took one baggage pony, which was very lightly laden with a roll of bedding and a few cooking utensils, and could be led along at a trot.

Starting from Aksu on Angust 10th, we passed through a richly cultivated country, extending almost continuously to Ush Turfan. It is watered by the Aksu river, and rice is largely grown.

Ush Turfan is a small town with one principal street. The Chincse fortress is situated at the foot of a rocky precipitous hill, about 150 feet in height, on the top of which is a small guard-post.

After leaving Ush Turfan we continued to ascend the valley of the Aksu river for three days. We were accompanied by a Kirghiz guide, as the country we were now passing through was entirely inhabited by Kirghiz. Our party was certainly a curious mixture of nationalitiesan Englishman, an Afghan, a Turki, and a Kirghiz, travelling together under the protection of the Chinese.

The Kirghiz, like the Mongols, are nomadic and pastoral. They live in the same round felt tents which are here called akoees, which further west are called kibitkas, and which the Mongols call yurtas. They cultivate the land to a small extent, and the chief crop they grow is the poppy. They do not, however, smoke opium themselves, nor even tobacco, but finding that they can make a very handsome profit out of the poppy crops, they grow it in preference to wheat or other grains. The Kirghiz are very much more well-to-do than the Mongols or Kalmacs, who are also nomadic. They dress better, live in better tents, and keep them clean. They are fine strong men, not so industrious as the Turkis, but a great deal more so than the Mongols. In religion they are Mahommedan.

We put up every night in their tents, and they were generally very civil, though naturally rather curious to know who I was and to see all my things. The Afghan had a hard time answering all the questions, so when he found it getting monotonous, he used to spread a rug and solemnly say his prayers. He was a Hajji, and to keep up his religion properly had to pray five times a day; when he had been travelling all day and he had not been able to say his prayers, he used to make up for it in the evening by repeating them once every half-hour or so.

After ascending the valley of the Aksu river for three days over a road good enough for ponies, but impracticable for carts, we turned south-west and crossed the Kara-Kara or Belowti Pass, 11,000 feet in height. Both the ascent and descent were perfectly easy.

I was now in well-known country, for the members of Sir Douglas Forsyth's mission to Yarkand had reached as far as this, and I was able to profit by the store of information which they had so carefully collected. Captain Trotter, who rendered such valuable service to geography by joining together the Trigonometrical Surveys of India and Russia at Kashgar, had explored as faw as this Belowti Pass, with Dr. Stolickza, the eminent geologist who accompanied the mission.

Descending from the Belowti Pass we passed over a stony plain surrounded on all sides by bare hills, through which we found our way to another larger plain called the Syrt. It is also surrounded by hills, but instead of being bare, it has some very considerable patches of forest and some good pasture land. There were large fields of wheat, too, grown by the Kirghiz, who had built houses to store the grain in, but continued to live in their tents themselves. They said they preferred not living in houses, as they were always afraid of their tumbling down on them. I frequently saw the Burkut or hunting eagle which is used by the Kirghiz for hawking deer and other game.

On August 19th we descended by a gorge to the great plain of Turkistan again. The Kirghiz were now left behind, and we were once more amongst the Turkis. From Kalti Ailak, where we left the hills, up to Kashgar we passed through almost continuous cultivation.

We arrived at Artish, 20 miles from Kashgar, on a market day, and the country people were bringing in the most splendid melons, apricots, grapes, and peaches. These latter were being sold at the rate of twelve for a penny. The melons were of a huge size, and very sweet and luscious, whilst the grapes were quite equal to English hothouse grapes, both in size and quality. On Angust 20th I reached Kashgar, and the following day called on the Russian Consul-General, M. Petrovsky, who received me most cordially, and told me all the lat st European news. He has been established in Kashgar for six or sc en years, and is assisted in his duties by a secretary, and has also an escort of about fifty Cossacks. He introduced me to a Belgian Missionary, M. Henriques; who had lived for many years in Mongolia, and had lately come to Kashgar in hope of converting the Turkis, but so far he has not made much progress, for in Turkistan they are very bigoted Mahommedans.

The next day M. Petrovaky returned my call at the serai where I was staying, and which I had, with the assistance of the Beg of Kashgar, made fairly respectable by borrowing tables, chairs, carpets, \&c. The serais in Kashgar are not good, and I was putting up in a small room without a window, without a scrap of furniture of any sort, and with only the bare mud floor to sit on. I used to keep a large tray well piled up with fruit the whole day long, and received any one who liked to come in. The room was generally pretty crowded, and I had visits from all the Hindustani and Afghan merchants in the place. The latter

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were especially friendly, and one of them said he had met "Robert Sahib" in Afghanistan during the war, and said he was the one who knew the way to fight properly. I found out afterwards that he had been engaged in three battles with the English. Curiously enough they all thought General Roberts had risen from the ranks; they said, "You have two castes in your army, the officer and the private, and General Roberts was a private."

In Kashgar and Yarkand you meet travelling merchants from all parts of Asia, and great numbers, too, of pilgrims who have been to Mecca through India. They all declaim loudly in praise of the English rule in India; not to me only, but to the surroanding crowd. They say the English are the only people who know how to really govern a country. The English make roads, railways, and canals, and build sohools and hospitals, and look after the welfare of the people. Every one does what he likes and goes where he likes without restriction, and oppression is unknown. The Arabs were loudest of all in their praises, for they have evidently great reepect for wealth.

I went one day to see the Hazrat Apak, where Yakub Beg was buried. I was shown a slight mound of earth and was told that that was his burial-place. The Chinese, on re-entering Kashgar, had exhumed his body, burnt it, and sent the ashes to Peking, and now they have forbidden any monument or sign of any desoription to be erected over the last resting-place of the man who, by his own genius, raised himself from a very humble position to be the conqueror and ruler of a vast country, and who had done muoh, too, for the good of the country, for on my journey I was frequently shown a road, or a canal, or a school which had been built under his rule.

In the reconquest of this western end of Turkistan there appears to have been little real fighting. On the death of Yakub Beg the opposition collapsed, and as the Chinese advanced, the Andijanis retired into thair own country again, while the Turkis went on ploughing their fields, troubling themselves very little as to who should rule them for the futare. The Chinese then introduced a rule remarkable for its mildness, and differing very much from their old rule before the Tungani insurrection.

My servant and cart arrived from Aksu on August 25th, and the fullowing day I left Kashgar for Yarkand, which I reached on the 29th. Here I met with a hearty reception, for it was the home of poor Mr. Dalgleish the enterprising trader, who for so many years has been established in this place, and who, after accompanying Mr. Carey in his long and hazardous journey through Turkistan and Tibet to India, has just been murdered on the Karakoram Pass when returning again to Yarkand. Englishmen who live at home at ease have perhaps little idea how jealously the honour of their country is looked after by their fellowcountrymen in the remotest parts of the world. Throughout Turkistan

I was told of the straightforward honest character of the "Chota Sahib," of his geniality, and of his ever-readiness to help the sick people, however numerous, who might come to him for medicine-and England owes much to the good name Andrew Dalgleish has established for her in Turkistan.

I had now to prepare for the passage of the Himalayas, and as all the routes to Leh had been explored by Shaw, Hayward, and the Yarkand Mission, I determined to attempt the exploration of the most direct route to India, which leads over the Mustagh Pass to Skardu and Kashmir. This route, although it is considerably shorter than any other, has not latterly been used by traders on account of the great physical difficulties which are encountered on the way, and because of the bands of Kanjuti robbers who used formerly to raid even up to the Karakoram route, and no European has ever explored it.

Baltis from the upper valleys of the Shigar district used, however, to come over to Yarkand by this route till about ten years ago, when the Chinese ordered that all who came should be turned back-since which time the route has been entirely disused. There are considerable numbers, about 2000, of these Baltis settled in the Yarkand district, where they gain a living by cultivating tobacco. I had therefore no difficulty in getting men to gaide me over the mountains.

I took with me five Baltis, of whom three had been over the pass, and the other two were men whom Colonel Lockhart had, two years previously, been obliged to leave behind in Kanjat on account of sickness. The chief of Kanjut had sold these men as slaves to a Sarikoli, who sold them again to a Yarkandi who released one on payment, and the other having escaped a week or two before I arrived, joined me soon after I left Yarkand. He was a capital fellow-always grumbling, but always to the fore when hard work was to be done. Two other of my Baltis had also been captured by Kanjutis on their way to Yarkand by the Mustagh route, and they showed me afterwards the spots where the fights had cocurred. They say the Kanjutis always attack at night; during the day-time they watch the travellers' movements and having marked exactly how they are encamped at night then attack under the cover of darkness. If the unwary traveller pitches a tent they cut the ropes and catch him inside it. So as I wished to end my journey in India and not Kanjut, I gave up using a tent, and for three weeks while crossing the Himalayas bivonacked out, spreading my rugs on the ground on the least windy side of any friendly rock I could find, and always changing my position after dark.

In addition to the five Baltis I had three Ladakhis, one of whom, Muhammad Esa or Drogpa, had been with Mr. Carey in his journey through Turkistan and Tibet. He was an invaluable servant, and to him I entrusted the task of organising and equipping the caravan. We had first to buy some good, sound, hardy ponies, then fit them out with
pack-saddles, blankets, and three spare sets of shoes for each, and get a set of tools for shoeing them with. And as we should find no paths I had to take pickaxes and spades for road-making. While finally I gave to each man a long sheepskin coat and two pairs of shoes, so that there might be no fear of their breaking down on the way.

On September 8th I left Yarkand, and on the 10th branched off from the ordinary route to Kashmir by Leh, at the small town of Kargalik. The following day we reached Kugiar, and halted a day to load up the supplies which I had ordered in advance from Yarkand. I took three weeks' full supply of grain for the ponies, and flour, rice, and ghee for the men, as nothing would be obtainable along the route till the Mustagh Pass should be crossed, and, as we could not be sure that it would be possible to get over it, I had, of course, to be prepared to retrace my steps.

On September 15th I crossed the Tupa Dawán Pass, a very easy one, and only 10,400 feet high. The route then ascends the valley of the Tisnaf river. There are two or three inhabited spots here, and in the winter the few inhabitants of the Pakhpolu district bordering on the Yarkand river, come-into it for the sake of the wood, which is more plentiful here than in most of the valleys of these mountains. These people are extremely interesting, for, as Dr. Bellew says, they are of a purely Aryan stock, with almost as fair a complexion as Europeans, and have remained seoluded in these remote mountain fastnesses for ages. I only saw three, but Captain (now Major-General) Chapman secured two photographs of some whom the Yarkand Mission met, which may be seen in the valuable series of photographs contributed to the Report of the Mission by Captain Chapman. These people are nominally under the Chinese, but they pay blackmail every year to the Kanjutis to free themselves from liability to attack.

The Tisnaf river in September was easily fordable, but during the melting of the snows there is often considerable difficulty in crossing it. It averages from twenty to thirty yards in width, and the water is of a remarkably clear blue colour, which is particularly noticeable after seeing the muddy streams of Tarkistan. As we got further into the mountains, too, I noticed that the heavy haze which perpetually hangs over the Kashgar and Yarkand districts gradually faded away. This haze must, I think, be formed of dust stirred up by the strong winds. which blow almost daily in those districts, for I noticed that there was a thin permanent coating of dust on the rocks in the valley of the Tisnaf river, where there is practically no natural dust, but over which this haze continually hangs, and that as we advanced inland and the haze disappeared, so did also this coating of dust on the rocks.

At the head of the Tisnaf river we left the track which leads over the Yangi Dawan to the Karakoram Pass and Leh, and struck off west-
wards to the Chiragh Saldi Pass. The ascent to this pass was very easy, leading gradually upwards over a wide open gravel plain. This was the first unexplored pass which I crossed, and as I looked out on to the rugged mass of snowy peaks ahead, I felt that the work of exploration had really commenced, and that each one of us would have to work his hardest if we wished to successfully find our way through the labyrinth of pathless mountains ahead.

About 10 miles to the westward we could see the Tashkurgan Pass over which leads a path from the Mazar encamping ground in the valley of the Tisnaf river. I should have saved a day's march by coming by that route, but a landslip was said to have fallen blocking the road. My aneroid had unfortunately broken down, so I was unable to ascertain the height of the pass, but as there were patches of snow lying about, I compute it at between 15,000 and 16,000 feet above the sea. The descent was steep but not difficult, leading down a gravel slope to a narrow stream. We had expected to find a camping-ground on the other side of the pass, but we went on and on and still no signs of a blade of grass. On either side rose great rocky mountains, their summits capped with snow, but their sides perfectly devoid of vegetation. A nasty cold wind sprang up, snow began to fall, and darkness came on, but still we pressed on as now the stream had disappeared beneath the pebbles, and the three requisites of a traveller-water, fuel, and grass-were all wanting. At last we came upon a solitary shrub, then another and another, then some grass, and soon after some water. It did not take long then to get the packs off the ponies, light a fire, cook a meal, and turn in.

The next day we struck the Yarkand river at the camping ground of Chiragh Saldi, which is the furthest point reached by Mr. Hayward in exploring the course of that river from its source downwards.

We now descended the valley of this river for two marches to the Dora camping ground. It varies in width from a quarter to one mile, andjis for the most part covered with pebbles, but there are also some fair-sized stretches of jungle and grass, in which small herds of Kyang arelgenerally to be seen. The river itself is from twenty to thirty yards in width; it has to be crossed over twenty times, and in some places, even in the latter end of September, it is waist deep. While at one place, where it flowed between precipitous cliffs, we had to spend half a day indthrowing pieces of rock and boulders into the stream to form up a narrow pathway round the cliff. The mountains bounding the valley of the Yarkand river are barren and sterile, rising to a height of probably 21,000 or 22,000 feet above sea-level. The river flows on due west for apparently about 20 or 25 miles from the Dora camping ground where we left it; ahead a great snowy range appeared to block the way, and probably from that point the river turns north towards Yarkand. As far as could be seen the valley was open, but my guides said they had
never heard of there being any path down it, and at Yarkand I was told that it was impossible to ascend the valley on account of the cliffs which run down to the water's edge. Probably the addition of the Shaksgam river, which we orossed later on, on our way to the Mustagh Pass, and which is nearly equal in size to the Yarkand river, makes the latter unfordable, and consequently it is then impossible to get round the precipitous spurs running down to the river. On leaving the Yarkand river we ascended the Surnkwat stream to the Aghil Dawan. This stream barsts through a rocky ridge which separates it from the Yarkand river, and flows through a narrow gorge two or three hundred yards in length and only ten or twelve yards broad. The sides of this gorge are of smooth rook and absolutely perpendicular, and between them the river flows with a rapid current. Through this we were obliged to drag our ponies, and a difficult business it was for them, as the rocks were slippery with ioe,'and the current swift and strong. We emerged from the gorge on to a plain which was formerly the bed of a lake, which must have been formed here till the river forced its way through the gorge. Daring the same day's march we passed through two more gorges, and towards evening halted on the edge of a gravel plain, at the foot of the Aghil Dawan range, which rose like a wall straight in front of us, rugged and uncompromising. We had that night our first taste of real cold, and the small stream near which we bivouacked was frozen solid in the morning.

The guides now had a discussion as to which was the right point at which to attack the range. One said we ought to go to the right, and another to the left. Fortunately we took the latter course, and after winding about among the lower spurs of the range for some time, suddenly turned a corner and saw in front a great gap in the range which the guides said was the pass. The ascent was very easy, leading gradually over a gravel alope. The summit of the pass seemed quite close, but we went on and on, and never seemed to get any nearer.

In my eagerness to get a glimpse of the view on the other side I walked on ahead at a brisk pace, and ascended a small outstanding hill, from which I got the first sight of the great Mustagh range, which forms the watershed between the rivers which flow into the Indian Ocean and those which take their way towards Central Asia. At my feet lay the broad valley of the Shaksgam river, bounded on each side by ranges of magnificent snowy mountains rising abruptly from either bank, while up this valley, far away in the distance, could be seen an immense glacier flowing down from the great main range of the Mustagh or Karakoram Mountains.

The appearance of these mountains is extremely bold and rugged as they rise in a succession of needle peaks like hundreds of Matterhorns collected together, but the Matterhorn, Mont Blanc, and all the Swiss mountains would hare been several hundred feet below me, while
these mountains rose up in solemn grandeur thousands of feet above me. Not a living thing was seen and not a sound was heard; all was snow and ice and rocky precipices; while these mountains are far too grand to support anything so insignificant as trees or vegetation of any sort. They stand bold and solitary in their glory, and only permit man to come amongst them for a few months in the year, that he may admire their magnificence and go tell it to his comrades in the world beneath.

As I looked on the scene I falt as if I were intruding on the abode of some great invisible but all-pervading deity, and experienced a keen sense of my own insignificance, such as those only can appreciate who have been alone in these awe-inspiring mountain solitudes of the Himalayas, surrounded by the great snowy heights, which remain there in their grandeur immovable and unchangeable through eternity; and yet man has triumphed over these mountains; he has insinuated his way through the chinks in their seemingly impregnable armour of rock and ice, and mapped, measured, and pictured them till the minatest details of their shape and size are known.

The height of the Aghil Dawan I estimate at from 16,000 to 17,000 feet. Snow was lying near the summit on which there was also a small lake about three-quarters of a mile in circumference. - The descent was rather steep, leading down towards the Shaksgam river. After one hour and a half, the valley opens out, and we passed over a gravel slope which terminated abruptly in a cliff 200 feet high overhanging the Shaksgam river. We looked about in both directions to find a way down, but could see none till I noticed some tracks of Kyang, and knowing that they must get down to the river, somehow, in order to drink, I followed them up, and foand they led down a very steep and narrow watercourse. We brought up the ponies, unloaded them, threw the packs down first, and then brought down the ponies, one man leading each on in front and two more hanging on to his tail behind. All came down', without any accident, and we then followed down the broad pebbly valley of the Shaksgam river. This river, previously unknown to geographers, must be nearly equal in volume to the Yarkand river of which it is a tributary, but instead of being compressed into one stream like the latter, it spreads itself in many channels over a pebbly bed more than a mile in width. It flows down from the main Karakoram range in a direction rather west of north to the point where we struck it, where it turns off in a westerly direction. We followed it down the next day for fourteen miles to the point where it is joined by the Sarpo Laggo stream, it then flows off in a north-west direction to join the Yarkand river. The Sarpo Laggo flows down from the glaciers of the Mustagh Pass through a valley from a half to one mile in width. After ascending it for a few miles, we came in full view of the great peak, K 2, the second highest mountain in the world, 28,250 feet in height. We could see it through a break in the mountains rising up
straight, bold, and solitary, covered from foot to summit with perpetual snow. The upper part, for perhaps 5000 feet, was a perfect cone, and seems to be composed almost entirely of ice and snow, the accumulation of ages. The lower part was more precipitous, but steep enough to throw off the snow altogether, while at the base was a great glacier formed by the masses of snow which fell from its sides. It was a magnificent sight, and I could scarcely tear myself away from it. But we had some way still to go, as we had to push on beyond the Suget Jangal camping ground for fear of meeting Kanjutis, for the path from the Shimshal Pass, which leads to Kanjut, joins in there. Suget Jangal is the last spot where fuel can be got, so we collected a pony-load, and pressed on till we neared the foot of the great Mustagh glacier, where we bivouacked for the night.

Early next morning we started off to tackle the glacier, and here our real difficulties began, for after passing along for half a mile between the glacier and the mountain side, we found the way blocked by the ice, and we could neither get our ponies round the obstacle by climbing the mountain side, nor by taking them on to the glacier. So they were sent back to the end of the glacier, to wait till I had explored ahead with the guides. We plunged into the middle of the glacier, clambering about, often on all fours, amongst a jumbled mass of moraine and ice, passing cliffs of clear transparent ice and caverns composed entirely of ice, with icicles 20 and 30 feet long hanging from the roof. It was a most curious and beautiful sight. We ascended the glacier for a couple of miles and then saw it stretching ahead for many miles more. The guides thought it would be impossible to drag a caravan of ponies up it, and I decided on sending them back by the Karakoram Pass to Leh and going on over the Mustagh Pass with three men, as I had also to take into consideration that our supplies would be running short. But on returning to the caravan, I found that one of the men, who had been exploring the opposite side of the glacier, had found a way, and was gallantly leading the ponies over it though they were knocking and tumbling about in a fearful way. Their legs were getting cut to pieces, and the loads were falling off every five minutes. It was cruel work for them, for they had no chance of keeping their footing on the slippery ice which was usually only covered over with a thin coating of gravel. However, as a start had been made, I determined on making a renewed effort to bring them up the glacier. But they very soon got exhausted, so we halted for the day, and I then went off again with the guides to explore a route for the next day. We kept on up the east edge of the glacier, marking with small cairns the route which was best for the ponics to follow and returned to our bivouac after dark, thoroughly exhausted, for it is terribly hard work walking over those glaciers, and the rarity of the atmosphere at those great elevations adds to one's distress.

At daybreak the following morning we started again, leading the
ponies up the route we had marked out; but a mile from the point where our previous exploration had ended, we were confronted by another great glacier rolling down from the left. The guides set off to explore it while I remained with the ponies, as my boots were worn out, and my feet so bruised I could scarcely bear to put them to the ground. The men returned after a time with a look of despair and said they could find no possible way for the ponies to get over the glacier, but they said : "You have a try, Sahib, perhaps by your ikbal (good fortune) we may find a way." "All right," I said, and we started off back again for some distance, and then struck off right into the centre of the glacier, and ascended a prominent spot in it, from which we could get a good view all round. We were in the middle of a great sea of ice, for the glacier was four or five miles broad, and composed of pure white ice broken up into a mass of needle points, and great glaciers came rolling down the mountain sides like clotted cream pouring out of a cream-jug. From the point on which we were standing I could see a thin line of moraine extending right up the main glacier. We got on to this and followed it up for a long way, and to our great relief, found it would be quite possible to bring the ponies up it, and get them on to the smooth snow in which the head of the glacier is buried. On our return journey we nearly lost our way, and were wandering for some time in the dark before we managed to find it. We held a consultation of war that night as to which pass we should attack, for there are two leading out of the valley we were ascending. The old Mustagh Pass to the east had been out of use for thirty or forty years, on account of the accumulation of ice upon it, in consequence of which a new pass had been sought for, and another one to the west had been found. This latter pass had been in partial use up to ten years ago. No European had, however, crossed either of them, but Colonel Godwin-Austen in 1862 came very near the summit of the new pass from the southern side, when he was obliged to turn back on account of bad weather. One of my guides had at one time taken ponies across it. I decided, therefore, to send on a couple of men to reconnoitre the new pass the next day, while the remainder of us brought on the ponies ap the glacier.

Early in the morning the reconnoitrers set out, while we followed as soon as we had loaded the ponies. Our difficulties were not so great this day, and in the evening we halted on the glacier. Towards dusk the two men returned from the new pass and said it would be quite impossible to get ponies down it, and that it would even be difficult for men, as masses of ioe had formed. They said the best thing to be done now was to leave the ponies where they were, under the charge of three men, and set off with the rest over the old Mustagh Pass to Askoli, the first village on the other side, send back supplies from there for the ponies and men left behind, and collect a number of coolies to try and make a passage for the ponies over the new pass. Things were getting critical
now, for supplies were running short, and where we then were no fuel could be obtained, and the ponies could only feed on some few scraggy weeds which we could see across the glacier on the mountain side. So, if on the morrow the pass should prove impassable, our fate would have been a hard one, as provisions would scarcely last out till we could get back to an inhabited spot again.

It was an anxious night that, and it was also a very cold one, for we were sleeping out in the middle of the glacier with a horribly cold wind blowing down it, and we only had just sufficient fuel for cooking parposes, and could not afford to keep a fire going for a moment after our evening meal was cooked.

Next morning, while it was yet dark, we started for the pass, leaving everything behind, except a roll of bedding for myself, a sheepskin coat for each man, a few dry provisions, and a large tea-kettle. The ascent to the pass was quite gentle, but led over deep snow in which we sank knee-deep at every step. We were now about 19,000 feet above the sealevel, and quickly became exhausted. In fact, as we got near the summit, we could only advance a dozen or twenty steps at a time, and we would then lean over on our alpenstocks, and gasp and pant away as if we had been running up a steep hill at a great pace. It was most tantalising, for the top looked so near, and the slope was so easy, that it seemed as if we could run up in no time. But it was not till midday that we reached the summit, and then on looking about for a way down we could see none. Huge blocks of ice had fallen from the mountains which overhang the pass, and had blocked up the path by which travellers used formerly to descend from it, and the only possible way now of getting to the bottom was by crossing an ioy slope to a oliff, which was too steep for a particle of anow to lodge on it, even in that region of ice and snow. From this we should have to descend on to some more icy slopes which could be seen below.

Nobody spoke as we looked down that pass, and I waited anxiously for the next move,-I could not give an order to go ahead, for I felt incapable of going first myself. I heard them asking each other who should go first, and at last Wali-the finest fellow that ever steppedquietly took an axe, tied a rope round his waist, and giving the end of it to us, told us to follow him.

We had first to cross the icy slope; it was of smooth ice and very steep, and about thirty yards below us it ended abruptly, and we could see nothing over the edge for many hundreds of feet. As Wali hewed the steps we advanced step by step after him, leaning back against the slope, all the time facing the precipice and knowing that if we slipped (and the ice was very slippery, for the sun was just powerful enough to melt the surface of it), we should roll down the icy slope and over the precipice into Eternity. Half-way across, my Tartar servant Drogpa, who had been born and bred in the heart of the Himalayas, gave up,
saying he was trembling all over and could not face the precipice, so I sent him back to the ponies, which he afterwards brought round by the Karakoram Pass.

After a time we reached terra firma in the shape of a projecting piece of rook, and from here began the descent of the cliff. We had to let ourselves down from any little ledge, taking every step with the greatest possible care, as the rock was not always sound; and once a shout came from above, and a huge rock, which had been dislodged, came crashing past me and as nearly as possible hit two of the men who had already got some way down.

At the bottom of the cliff we came to another steep ice-slope. We tied together every scrap of rope we had, and every turban and waistband, and then let Wali down by this on to a small piece of bare rock which showed through the ice. As he went down he out steps in the ice. He then seated himself firmly on the rook while we tied the other end of the rope on to a rock above.

Then each man let himself down hanging on to the rope. One man in doing so slipped, fell over on his back and slid down at a frightful pace, still however clinging to the rope with one hand which was fearfully cat by the friction.

Then came the last man, he was the slave I had released at Yarkand, and how he got down has been a puszle to me then and ever since. He tied the end of the rope round his waist, and then with the aid of an alpenstook, which he used in a most dexterous way, and the steps which had been hewn for him, he came gradually down, and as he advanced, we pulled in the slack of the rope at the bottom end, so that if he fell we could pull him up sharp. In this way we got down two more stages of the ice-slope. Then came a piece where there was no suitable halting-place within the length of the rope. Luckily, however, it was less steep, and we were able to get down it by hewing steps. And at last, just as the sun set we reached the bottom, after having faced the precipice for six consecutive hours. As I looked back at the pass it seemed atterly impossible that any man could have got down suah a place.

Our troubles were not yet over, though, for we were now on a snow-field at the head of a glacier, and all round us were great mountains covered with snow and ice, so we had to trudge on over the snow and glacier till after eleven at night. We frequently met with crevasses, down which one of the men fell, and as he was the last was not missed for some little time, but we went back and extricated him in safety. Ordinarily we should have thought twice before going so recklessly over this glacier, but we were now so utterly tired, and so overjoyed too at having got over the difficulties of the pass, that we pushed along in a sleepy careless way, perfectly unmindful of the dangers of the road, till at last we came upon a dry spot where there
were a few weeds. We collected these, lit a fire with the aid of them and a couple of alpenstocke, cooked some tea, and then rolled ourselves up in our wraps behind a rock and slept as only those can sleep who have done eighteen hours' continuous work of such a description as we had had to do that day. At daybreak next morning we were on our legs again, and after a few hours' travelling emerged on to the great Baltoro glacier, which was explored by Colonel Godwin-Austen in 1862 when making the Kashmir survey and described by him in a paper read before this Society. We travelled all that day, and for two days more till we reached Askoli, a little village, situated on the Braldo river, where it was most refreshing seeing the trees and cultivated lands which surrounded it. I immediately set to work to collect supplies and coolies, and when this was done, sent off one party with supplies for the men and ponies I had left behind on the other side of the pass, and then started myself with another party of coolies to try and force my way back by the new Mustagh Pass.

I ascended the Punmah Glacier, but was brought to a standstill opposite the camping-ground of Skinmang, three days' march from Askoli, by a glacier which had rolled down from the pass. We had managed in some fashion or other to get over a good many glaciers in the passage of these mountains, but this one was the most unnegotiable of them all, for in the last four or five years the mass of ice had greatly accumulated. There were great blocks of ice as big as houses tumbled about, one on the top of the other, in such utter confusion that we could not get a footing on it at all. We were obliged therefore to turn back to Askoli. I had given orders for the party with the ponies that if I did not reach them by a cortain date, after they had received the supplies they should make their way to Leh by the Karakoram, under the charge of the Ladakhi servant, Drogpa, who had gone back to camp from the old Mustagh Pass. So when the coolies who had taken the supplies returned to Askoli, and brought me news of the safety of the party with the ponies, I started off for Skardo and then through Kashmir to Rawalpindi, which I reached on November 4th, just seven months after leaving Peking. Drogpa with the ponies arrived seven weeks later, having come round by the Karakoram Pass route, where they had been attacked by robbers, and where also three ponies died from fatigue and exposure. Poor Liu-san, the Chinaman, too, arrived completely knocked up by the hardships he had had to go through.

Before closing this description of my journey I may say a few words on some points of other than geographical interest which I noticod when carrying it out. To begin with trade-as a commercial nation we are naturally looking for new openings for our trade, but we always seem to want such tremendously big openings, we want to construct great railways everywhere and "open up the country," as it is called. I need not add anything here to what has already been said about railways.

But what I want to bring to your notice is the way we have neglected the amall openings for our trades. We are enterprising enough in a big way, but we are not half enterprising enough in a small way. This is what particularly struck me on my journey. We ought to have simall merchants, or travelling agents of the larger merchants, or best of all, agents of the manufacturers themselves, pushing their way right into the interior, looking after the sale of their goods themselves, seeing that they are not subjected to any unlawful imposts, as European goods are now, in their transit to the interior; examining the wants and tastes of their customers, and finding out also what articles of native produce would be worth exporting. At present our goods are allowed to take their chance after leaving the Treaty Ports, and our manufacturers seemed to have taken little or no trouble to adapt their manufactures to the tastes and requirements of the people for whom they are making the goods. The Russians have acted on better principles and have reaped their reward, for their Consul at Kashgar told me with pride what I had already observed for myself, that all the bazaars in Turkistan were filled with Russian cotton goods, and English goods could scarcely be bought now. The chief reason for this is, I am convinced, that the Russian goods are very much better suited to the people; they are stronger, more durable, and also printed with more tasteful patterns than our own, while they have their small merchants travelling everywhere, and setting up shops themselves in the bazaars.

We may be handicapped in our competition with the Russians for the trade of Turkistan by having to bring our goods across the Himalayas, but I am sure that if our goods were like the Russian, and the Russian like ours, we should be in a very much better position than we are now. And it is a fact worthy of particular notice that Russian piece-goods are being brought over the Himalayas, in gradually increasing quantities, into the bazaars of Ladak, and even, I hear, into Kashmir.

What the Russians have done already in Chinese Turkistan, let us at least try to do in other parts of the Chinese Empire. Let our manufacturers find out exactly, by practical trial, what is required, and let agents be sent into the interior to see to the sale of these goods themselves, and then, I doubt not, our goods will find their way through and through the interior of China, as Russian goods have in Turkistan.

I have already said something regarding the military position of the Chinese in Manchuria, showing what energy was being displayed there in military preparations, but in Tarkistan the case is very different. The country is almost denuded of troops, and those that are there can scarcely be termed anything but police. They are quite sufficient to keep the country in order, for the Turkis are as quiet and submissive people as any in the world ; but would be altogether incapable of resisting an invasion. That they should be so weak in this western end of the empire may be a serious matter for the Chinese, because the great distance which
reinforcements would have to traverse, and the barren nature of a great part of the country through which they would have to pass, makes it impossible to reinforce their army, say at Kashgar and Yarkand, except after a lapse of many months. People are asking now what ohance the Chinese would have in a real struggle with a European Power. One hears constantly of their purchasing large numbers of Krupp guns, breech-loading rifles of all sorts, gunboats, and even large heavily armed ironclads; of their building arsenals and forts ; and of their employing European officers to instruct and drill their troops; and one might be led to suppose, as the Chinese themselves do, that they have become a powerfal military nation.

But this is not the case, as unfortunately for them these inventions of modern warfare do not, as the Chinese half suppose, act as a patent charm or talisman, making the country proof against invasion, and they are rendered almost valueless from the corruption and want of discipline which prevail; while as long as the military profession is held in such contempt as it now is in China, it will be impossible to get good officers into the army. The material to hand for recraiting the rank and file is, however, excellent, and by offering good pay the Government could secure an almost unlimited number of men; and who knows what these might not be capable of doing under such a leader as the late General Gordon?

My journey across the Chinese Empire was now finished, and I had travelled for some 7000 miles over almost every description of country which could be imagined-through the gloomy forests and dismal swamps of the Long White Mountains and over the open steppes of Mongolia, through the richly cultivated plains and valleys of Manchuria and the great desert wastes of the Gobi, and finally over the rugged glaciers and lofty passes of the mighty Himalayas. The climate varied as greatly as the scenery-from the scorching heat of the desert to the ioy cold of the Manchurian winter and the Himalayan heights.

Throughout I was shown more consideration than I had ever expected by the people with whom I was brought into contact, who, besides Chinese, included Manchus and Koreans, Mongols and Kalmaks, Turkis and Kirghiz, Afghans and Hindustanis, Kashmiris and Baltis. That I was enabled to carry out this journey successfully is entirely due, under Providence, to the unfailing fidelity shown towards me by my staunch companions, Liu-san the Cbinaman, Drogpa the Tartar, and Wali the guide; and also to the good fortune by which I was enabled to get a practical experience of travel, in the first and most important part of the journey, under so good a leader and so kind a friend as Mr. James, to whom I owe a debt of the deepest gratitude.

[^0]taken in the subject, it had been to him a great enjoyment. So long ago as 1837 he first imbibed an interest in the Kirghis Steppes, and in the geography of Central Asia. Daring the fifty years that had elapsed since then he had taken every opportunity of maturing the knowledge which he received from his early studies. At the present day (and it would still more apply to the future) the difficulties of the early travellers could hardly be appreciated. There was now a railway to Samarkand, the opening of which a few days ago he was invited to attend. When he began to study geography Samarkand was almost a fabulous place. It was known that there was such a town, but as for any one visiting it, except a solitary traveller like Vambery, such a thing was never heard of; but now a person could book himself for Samarkand just as for Constantinople. But although the journey was so easy now it was not in former times, and he trusted that the present facilities would not detract from the merits of the early explorers, especially those who visited such far-off countries as Mongolia and Eastern Turkistan. In fature times those countries might be included in the Grand Tour, but the names of Carey and Younghusband would always be retained in the first rank of explorers who had found their way across the great plateau of Central Asia, from China to India. Lieutenant Younghusband had given a most admirable account both of his journey through Mongolia and of his wonderful exploit of crossing the range and the glacier pass.

Lieut.-Colonel Godwns-Ausyers said that in the summers of 1860 and 1861 it was his good fortune, when serving under Captain Montgomerie, to be deputed to visit and survey the region of the Mastagh glaciers-in 1860 the mountains north of the Shyok river, in 1861 from the great glacier which descends from $\mathrm{K}_{\mathbf{\xi}}$, and thence along the main range westward close up to Hunza Nagayr. The position of $\mathrm{K}_{\mathrm{a}}$ had been fixed from trigonometrical stations on lofty peaks far to the southward by Captain Montgomerie's assistants. It was hardly possible to describe the grandeur of those glaciers, and he could realise the difficulties Lieut. Younghusband had had to contend with in crossing the pass. Great changes had evidently taken place since he was there. The pass lately crossed by Lieut. Younghusband was completely cloeed, and no one had been over it for many years, but the pass over the Mustagh Pass was then at the head of the Punmah glacier further north and west. He had tried to reach it, bat was driven back by snow coming on when very close to it. Lieut. Younghusband had attempted to go over that way, but could not get beyond Skeenmung. In all probability the greater accumulation of snow on the higher parts had piled the gorge just beyond Skeenmung with ice. When he was there all the glaciers were advancing. The great glacier at Arundo had advanced to within 400 yards of the village since Mr . Vigne was there, when he records that it was $1 \ddagger$ miles distant; and some of the people said that in their young days it was a mile off up the valley. That showed the great rate at which the glaciers were advancing. It would be an interesting thing if an expedition were made to them again in order to note the changes that have taken place in twentyseven years, and clear up many points connected with glacial action and motion. He congratulated Lieut. Younghusband on the magnificent journey he had accomplished.

Mr. C. F. R. Aulser said he had been twenty-five years in China, and had the great pleasure of meeting Mr. Younghusband at the commencement of his journey. He knew nothing of Mongolia, except that he had been the first stage on to the great Central Asian plain. He could bear testimony that what Mr. Younghusband called a disagreeable wind was a very severe, catting wind. He could add his evidence as to the filthy habits of the Mongols, and the rags in which they were constantly clothed.

General J. T. Walerer drew attention to the circumstance that the Mustagh Pass, which Lieutenant Younghusband had crossed with such difficulty, is situated within a few miles of the second highest mountain yet discovered. This mountain, in conformity with their custom of naming the peaks of distant ranges in succeasion by numerals and letters of the alphabet, provisionally, until the local names can be ascertained, is atill only known by the designation $K_{2}$, which was given to it by the officers of the Trigonometrical Survey. Thus the mountain in the Eastern Himalayas, which is the highest yet measured, was primarily designated XV. by the surveyors. Sir Andrew Waugh, who was then Surveyor-General of India, having long tried unsuccessfully to find out its proper name, at last told the Asiatic Society of Bengal that he had always scrupulously adhered to the rule of ascribing to every geographical object its true native appellation, bat here wias the highest mountain in the world without a local name, and hence the duty devolved upon him to assign a name whereby it might be known among geographers, and become a household word among civilised nations. He therofore proposed to call it "Mont Everest," after his respected chief and predecessor, using the French "mont" instead of the English "mount," to indicate that the object named was the peak" only, and not the entire mountain range. Before Sir Andrew Waugh left India the second highest peak was discovered, but he did not confer a name upon it. He tried to discover a name, but did not succeed, and the last Englishman who has seen it, Lieutenant Younghusband, does not appear to have heard of any name for it. It might seem very strange that so lofty a peak should not have a definite name, but the explanation was that it was surrounded by a number of satellite peaks, very nearly as lofty, which stoud between it and the nearest inhabited regions, cutting it off from view. In the same way Mont Everest had four satellite peaks around it, which shat out the pinnacle itself from general view; the consequence was that the satellites were named, while the pinnacle remained unnamed. There could be no question about the advisability of assigning a name to so lofty and eminent a peak as $\mathrm{K}_{2}$, and he would propose that in future it should be known as Peak Godwin-Austen, after the officer who first surveyed the Mustagh range and glaciers. He had drawn the wall maps illustrative of the relative magnitudes of those glaciers and the Chamouni glacier which were exhibited to the meeting. General Walker added that it had been a very great gratification to him to hear the paper by Lieutenant Younghusband, whose father was an old friend of his own. He was very glad to think that the son had done his best in regions outside India to rival his father's exploits inside India.

Sir Henriy Rawlinsons said he should be very glad to act as second sponsor at the baptism of Mount Godwin-Austen.

Colonel Woodthorpe said he wished to offer a few remarks on a statement made by Lieutenant Younghusband, which, though perfectly true and innocent in itself, seemed in these days, when the worst of motives are often imputed to the best of men, to require a little explanation. It was quite true that Colonel Lockbart left two men at Kanjut, but it caused him a great deal of sorrow to do so. It would be doing a great wrong to him to entertain the idea that he did so unnecessarily, for he was one of the most tender-hearted as well as bravest and most generous of men. One of those left behind fell sick shortly after they left Hunza. As they approached the Kilik Pass he became worse and worse with pneumonia, and Dr. Giles, just as they reached the foot of the pass, said to Colonel Lockhart, "To save this man's life it is absolutely necessary that he should remain hehind." Colonel Lockhart replied, "I do not like leaving him among these Kanjuti who are known to be such utter scoundrels: I should be much more pleased to take him on at whatever inconvenience to ourselves." Dr. Giles then said, "He cannot possibly stand the journey over the snow." The fact turned out to be that it was very hard work for the
strongest to get over, and two men succumbed on the pass who were perfectly well previously. Much against his will, Colonel Lockhart decided to leave the man behind with the young Rajah of Kanjut. He could not be left by himself, and another Balti coolie volunteered to remain with him. In order to ensure their safe return, Colonel Lockhart gave the young prince a written order for 200 rupees to be paid to him on their safe delivery at Gilghit. The coolie certainly would have died on the pass, and it was fortunate for him that he fell in with Lieutenant Younghusband, who was able to rescue him from slavery, giving 62 rupees for him. By taking him down a few short marches to Gilghit, the Rajah would have received 100 rupees each fur the two men. General Lockhart was not present, but he (Colonel Woodthorpe) could say that he rejoiced greaily that Lieutenant Younghusband had been able to release these men, so unavoidably left in Hunza. He would add that no one appreciated Lieutenant Younghusband's great achievement more highly than he.

Mr. H. H. Howorth, y.p., said it was most gratifying to hear the very kindly references that had been made to poor Dalgleish. It was pleasant to find an Englishman in those regions emulating the reputation of Connolly and others who had died in those terrible wilds, and left an impression which would make it easier for Englishmen to follow in their steps. It was also gratifying to know that the name of England had reached those regions as that of an empire which was doing a great deal of benevolent work in civilising and improving the condition of the people. There were two features in the paper which were exceedingly interesting. One was the remarkable light this journey was likely to throw on some problems of physical geography immediately to the north of the great range, and also on the ethnography of the district. Until a few years ago it was always understood that the snows which fell to the north were so dry, like those around Chimborazo, that they were never converted into ice, or formed glaciers. In regard to the bistory of this region, one of the most pitiful chapters in all human annals was the Chinese desolation of the great string of Turkistan towns, when they put down the power of Yakub Beg. Up to that time it was a great and important trade route, along which passed almost all the commerce of Central Asia from Medimval and even Roman times. If any one would turn to an interesting book which could be seen in a manuscript translation in the British Museum, containing the account of the campaigns and journeys made by a cousin of the great Baber, the founder of the Mogul Empire, and contrast the extreme prosperity of the towns in that district with regard to trade, and the power of the petty chiefs in the sixteenth century, with the desolation which followed the Chinese occupation, he would learn a very great lesson. He wished to know if Lientenant Younghusband passed the ruins of towns that were outside the small posts which now formed the centres of civilisation, and also whether at Hami he saw the tombs which were described by a Jesuit as forming an interesting feature in the landscape. Hami, planted just at the end of the long range, really formed the great gathering-ground where the Turkis and Mongols had been in close contact ever since the beginning of Eastern history, and it was the one spot where many riddles might be expected to be solved. It would be interesting to know where the coins were obtained that Lieutenant Younghusband had brought home. A very remarkable series of coins with Tibetan inscriptions upon them had been found in the mounds close to Hami, and it was important to try and bring together the débris that travellers brought back. The great feature of modern history was the sweeping away of all the small tribes that occupied such areas, and the substitution of great bomogeneuns races. The only remains left of the former inhabitants were the archæological fragments that travellers now had an opportunity of collecting.

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Instead of being remitted to conntry houses, where within a few years they were placed in the garret, or formed the playthings of children, they should be sent to the British Museum. Had Lientenant Younghusband brought home any archeological remains from the North Desert?

Lieutenant Yodnamosband, in reply, said that the coins he had brought back were mostly collected at Yarkand. He let it be known that he would give two annas, about equal to threepence, for every old coin brought to him. He had not yet shown them to the British Museum, bat he hoped to do so before long. The only relics he brought home were jade bowls. He saw the tombs at Hami. There were three cities there, the Chinesc, the Turk, and the New Chinese. The tombs were immedistely outside the Turki city. They were covered with very fine green tiles, and stood up remarkably prominent amongst the houses of which Hami was built. He saw no ruined towns in his journey through Turkistan. There were a few ruins in the eastern part of Cbinese Turkistan, bat they were ruins of barracks which were formed during the campaign of 1875 and 1876. He saw no ruins older than that. Probably the old towns had now been built over, and if there were formerly any out in the desert, they had been buried beneath the sand which accumulated in immense quantities.

The President expressed his assent to all that had been said as to the great interest and value of Lieutenant Younghusband's account of his adventurous journey, under circumstances of extreme difficulty, from the extreme east of Asia to India. He had condensed in the paper the experiences of seven months, and it was not to be supposed that he had mentioned all the details of everything he had seen. The seven montbs to which he had referred had been extended by Colonel GodwinAusten to twenty-seven years, and by Sir Henry Rawlinson to fifty years. He was not going to attempt a review of what had happened during the past half-century, but he would remind the meeting that the knowledge of these regions which had been acquired during this period had been necessarily at the cost of great endurance, and even the lives of energetic, courageous men. The first Enropean who lost his life in attempting to explore those countries was Adolph Schlagintweit. The names of Stolicska and Basevi should also be added as baving fallen in the same cause; and the last sacrifice was Dalgleish, whose serviccs had lately been prominently brought to notice in connection with the extremely adventurous journey of Mr. Carey. These were the unavoidable conditions under which knowledge was advanced, and fortunately men were still to be found who were ready to undergo the troubles, and fatigues, and dangers of such explorations. The Mustagh Pass appeared to be the centre of the most wonderful accumulation of glaciers on the face of the earth. Some of them, which Colonel Godwin-Austen described, and which Lientenant Younghusband must have passed over, were from 30 to 40 miles in length, and probably by passing from one to another, the traveller would be able to go over a glacier surface of 70 or 80 miles. The dangers and difficulties of such journeys as Lieutenant Younghusband's, could be more readily imagined than described, and he trusted that explorers would still be found to carry on such explorations.


[^0]:    After the paper,
    Sir Herby Rawlinson congratulated himself on being able to attend the meeting that evening, and listen to so interesting a paper. Considering the interest he had

