## EAST INDIA (EASTERN TURKESTAN).

## RETURN to an Address of the Honourablo The House of Commona, dated 23 July $1869 ;-f o r$,

" COPIES of a Note on Seistán by the Officiating Under Secretary at Fort William, dated the 20th day of December 1867:"
"And, of Despatches and Memoranda, or Extracts from Despatches or Memoranda, which bave been sent to the Government of India since 1866, by Mr. Forsyth, or other Officers on the Frontier, as to the Trade of India with Eastern Turkestan, or the Countries between it and the Punjab."
\(\left.\begin{array}{c}India Office, <br>

29 July 1869 .\end{array}\right\} \quad\)| J. W. KAYE, Secretary, |
| ---: |
| Political and Secret |
| Departments. |

[^0]Ordered, by The Ilouse of Commons, to be Printed, 31 July 1869.

## CONTENTS.



# TRADE WITH CENTRAL ASIA. 

# (Politioal, No. 164). <br> The Governor General of India in Council to the Secretary of State for India. 

Simla, 8 October 1866.
Adverting to the correspondence forwarded with our Despatch, No. 12, dated 30 July 1864 (Revenue), we have the honour to transmit, for the information of Her Majesty's Government, copies of the papers marginally noted on the subject of the trade of British India with Central Asia, vid Eastern Turkeatan, and the obstucles occasioned by the exactions of the Cashmere officials at Ladakh.

Note hy Mr. T. D. Forsyth, Commiealoner of Jullandur, datad lat Auguat Ifabo.
Note by Mr. T. D. Forsyth, Comnisuioner of Jallandar, dated 28th August 1808.

ToSecretary, Government, Punjab, dated IOth September 1686, Nn. 830.
(Extract.)-Note by T. D. Forsyth, Esq., Commissioner and Superintendent, Julinder Division, dated Spiti, 1 August 1866.

The subject of trade between India and Central Asia was ably and fully discussed in ${ }^{\text {a }}$ Report drawn up by Mr. R. H. Davies, under the orders of Sir R. Montgomery. - Sae Parliamentary Shortly after reading this, I accompanied Sir R. Montgomery on his tour through Cash- Paper, No. 65, of mere, and had ample opportunitics of learning the state of trade between that country and 1864.
Yarkand. But little real knowledge was had either of Russia's power or her intentions; but there was generally a sort of undefined fear that she could and would stretch forth her hand and swcep the whole commerce of Asia into her grasp. Determined, therefore, to ascertain the truth as far as possible, I paid a visit to Russia in 1864, and was present at the great Nijni Novgorod fair. From the very interesting reports of Mr. Savile Lumley, Secretary to the Embassy at St. Petersburg, and frum conversation with him, and many English, Scotch, and Russian merchants there, I gatheret? much information, which was duly reported to the Punjab Government. The pith of this information was, that Russia, when seen nearer, is not to be so nuch dreaded as a rival in commerce. There are causes at work in the abolition of serfdom and the general movement in favour of liberty, which will give ample employment to all their factories and merchants to supply the newly-stimulated wants of their own countrymen, so that little will be left for export for some time to come. An intelligent. Scotch merchant on the Volga told me that already our merchants were spoiling their trade by entering Asia from the Black Sea; and it is the unanimous opinion of all whom I consulted that in all the countries north of India we ought to have absolute command of the market.

I was told that shortly after our occupation of Cabul in 1838, our goods completely drove the Russian trade out of the market, and had the supply of articles of the same quality continued, we should have held our own. As it is, the quality of goods supplied fell off, and the Russians then regained their footing. The principle then laid down was, that we should send in a continuous supply of goods of superior quality, and then we have nothing to fear.

On assuming charge of the Trans-Sutlej Division on my return to India, I have made it my business to study the question further, and have just completed a tour through the frontier provinces of Lahoul and Spiti, the people of which countries trade with Yarkand and Khotan.

I learn from them that English goods of a superior kind are much in demand in those markets, and Russia can only compete when our supply fails. But they tell me that whatever be sent from India, in three years' time an imitation, but of course an inferior article, is supplied from Russia, which is purchased only for want of the better.

The conclusion, then, that we may arrive at is, that all other considerations being favourable, it is our own fault if we allow this opportunity of securing the extension of our trade to slip out of our hands.

Now let us take up the other considerations.
Yarkand and Khotan are two Mahomedan provinces which have been for a long time under the Chinese yoke, but during the last two yeare have managed to emancipate themselves from foreign rule. Hitherto they have been most hostile to all strangers, but now they bave occasion for our aid to protect themselves from the return of the Chinese on one hand, or from being swallowed up by the Russians on the other.
$3^{84}$.

They are ready, then, to receive us, have already hospitably entertnined one Egglishman who has adventured into their country, and have sent an ambassador to seek our assistance.
There would appear to be every reason, then, why we should reciprocate thase friendly advances, aud improve a trade already existing.
I now come to consider the state of our trade as it is at present with these countrics.
There are two grent routes to Yarkand from the plains of India; one passes through Cashmere and Ladnkh; the other goes through Kulu and Lahoul to Ladakh. There is a third route across Spiti aud through the Chinese frontier, but it is not much used, and there are many practical oljectiona to it.

The route tlurough Lahoul is the more ancient, and is, moreover, decidedly the most direct; but owing to certain obstacles it has not as yet been used as freely as it might be, and trade at present flows languidly amidst many hindrances through the Cashmere channel.

I purpose now to set forth the advantages of the Lahoul route, and to show how the obstacles may all be removed by a stroke of the Viceroy's pen.

The prominent advantage of the Lahoul route is, that our traders can then march through British territory to within 23 days' journey of Khotan, whereas by Cashmere they are upwards of 63 marches from our frontier to the same point. Then, too, there are immense taxes and exactions levied on merchants passing through Cashmere, from which they are exempt in travelling through our country.

The Trans-Sutlej. Division of the Punjab juts out like a promontory into the sea of Himalayan Mountains, and enables us from British soil to stand and survey at a comparatively close distance all that gocs on between Calmmere on one side, and China on the other, with the foreign countries spread out before us.

The road up to the British frontier at Lingti is quite passable for laden animals, and with a little further outlay might be made most easy.

There are two passes; the Rotang, 13,900 feet, and Bara Lacha, 16,060 feet. The Rotang Pass has acquired unenviable notoriety, not merely for the frequent losses of life in its passage, but lately as being the pass over which Lord Elgin made his fatal journey. Formerly this pass was impracticable for ponies, and the Chandra River, with its birch twig bridge, was wholly impassable for cattle. But within the last few years an excellent riding road has been made over the pass, and a substantial wooden bridge spans the Chandra. All through the Lahoul Valley, and up to the top of the Bara Lacha Pass, the road may be ridden oyer with case and safety. Here and there bad places are to be met with, requiring a little engineering skill and the application of some blasting powder.

For a comparatively trifling outlay, then, the road to within 23 days' journey of Khotan might be made a brond highway for traffic.

But there are present obstacles more serious to trade which moncy will not remove.
In order to get from British ground to the Khotan market, traders must needs pass through Ladaklh, and the Maharajah of Cashmere, our tributary and ally, bound by every tie of gratitude and allegiance to further our interests, has practically determined to do everything in his power to put a stop to our trade, and to throw every obstacle in the way of our progress.

For years past the Lahoul traders have complained of the exactions levied on their goods as they pass through Leh, the capital of Ladakh. Remonstrances may have been made to the Maharajah, and I believe he has made professions of a desire to relax his oppression: but the fact, for which I can officially vouch, remains the same, that he has not abated one iota of his heavy transit duties on all traders who pass by the Lahoul route.

It is the avowed intention of the Cashmere Government, openly acknowledged in the Leh market, to prohibit all goods from passing by the Lahoul route. Traders from Bussahir, owing to an old convention between the viziers of the two countries, are allowed to pass their goods through at half the rates imposed on the Kulu and Lahoul traders, who have to sneak through the country, and have to pay heavy douceurs in addition to the regular taxes to escape all kinds of petty annoyances. Nor does the evil end herc. In the days of Native rule, when Kulu and Ladakh each had their independent rajah, a kind of convertion was established between the two countries to puta stop to the frequent reprisals made by each on the other's trade. An annual interchange of presents was made by the sovercigns, in virtue of which merchants passed from one country to the other free of molestation.

On the bouleversenent which followed the Sutlej campaign of 1845-46, when Kulu and Lahoul became British provinces, and Goolab Sing purchased the sovereignty of Cashmere and Ladakh, the Lahoul people, thinking all fear of reprisals at an end, discontinued the payment of their annual offering, and did not expect any return from Ladakh. But Gliolab Singh soon asserted his rights, and plundered the property of the Lahoul traders, one year taking 13,000 rupees, and another year bomewhat less, from the merchants, and threatened to continue his attacks unless be were regularly paid. Ever since then a vakeel from Ladakh has paid an aunual visit to Lahoul, and having presented a pons and a piece of cloth, valued at the outside at about 60 rupees, to the Negu of Lahoul, collects in return from the various villages 32 maunds of iron, and about 125 rupees in cash, as tribute to his master. That this is pure tribute I have not the slightest doubt, for such it is called by the people, and the paltry present of a pony and piece of cloth eannot in any way be considered an interchange of presents.

This state of things was reported by $\mathrm{Mr}_{\mathrm{r}}$. Lyall three years ago, but ammehow or other the Maharajah managed to hold a veil before the truth, and represented the transaction an an interehange of presente, at the discontinuance of which he would feel aggrieved. It was alsoalleged that the Lahoulces obtained equivalent advantages for their payment, and so the tax was upheld.

What the advantages derived from the payment are I have fuiled to ascertain. It surely is no privilege worth paying for to be allowed to trade under double the exactiona levied from others. The simple fact is, that the Laboulees pay because they see no other way of locing allowed to trade at all; and whether it be called tribute, or be disguised uoder the pleasant garls of interchange of presents, it is a tax which they would gladly escape if the Jiritish Government would secure for them the free right to trade.

Such are the exactions levied on our traders, that all small merchanta have been driven from the ficld, and even Tara Chund, Negu of Lahoul, and the representative of our Government on this frontier, has found it necessary to take a journey to the Court of Jamoo and propitiate the Maharajah by open homage and acknowledgment of his power. The consequence is, that the necessities of their position bave driven the Lahoulees to divide their allegiance between Cashmere and England.

But fortunately for our interests English merchants have appeared on the ficld, and are taking up the trade which had well nigh been stifled by the Mabarajah, and they have quickly appreciated the real state of the case, and are now about to solicit the protection of the Government for the interest of British traders.

During my visit to Lahoul and Spiti I have ascertained the foregoing facts, and have proposed to the Punjab Government to be allowed to visit Khotan, in order to secure the intereats of the traders belonging to this division, for which I am in duty bound to care.

But it is necessary first to secure the abolition of transit duties passing through Ladakl. Everywhere else transit dues are being abandoned, and they should not be maintained in Cashmere.

Even granting the right of the Mabarajah to cxact customs duc on goods passed through the Leh market, still there should be no impost on goods passing outside the town, and unopened. The direct road from Lahoul to Khotan does not touch Leh; it passes through an angle of Ladakh territory, and no town or market is found on the way.

Thus there are but three objects to be achicved, and they all appear easy of a ccomplishment, and our trade with Central Asia may be established on a permanent aud profitable footing:

First, the road has to be improved at a comparatively small cost.
Second, we have to call on the Maharajah to follow the example of other countries and abolish his transit dues.

Third, we have to enter into commercial relations with Khotan and Yarkand, the rulers of which are ready to receive us with open arms
I was quite unaware of the result of Mr. Johnson's visit to Khotan when I proposed to the Punjab Government to pay a visit to Khotan, and even now I know nothing beyond the bare fact of his having gone and returned in safety.

Note by Mr. T. D. Forsyth, Commissioner of Julinder; dated 28 August 1866.

## Trade througil Ladakif.

In 1864 an agreement was entered into between the Lieutenant Governor of the Punjab and the Maharajah of Cashmere for the reduction of the tariff on English goods imported into Cashmere.

The intention of the Punjab Government was that the reduced scale should be applied to all goods sent into Cashmere by any route.

But it has not been applied to articles of trade passing ly way of Lahoul, on which the old heavy rates are still levied.
Some of the most important articles are taxed as follows:-
Opium.-The average value is 133 rupees per maund, on which the following dues are levied:-



Churrus.-Value of a bhar varies from 100 rupees to 200 rupees.
On this a tax of 20 rupees is taken without weighing the goods, besides all other customs dues.

The above rates are taken in Ladakh on all goods passed through Ladakik, whether they are opened or not. No distinction is made between groods in trinsit and gouds taken into the Leh market.

From the Secretary to the Government of India, Foreign Department, with the Governor Gencral, to the Secretary to Government, Punjab (No. 930); dated Simla, 10 September 1866.

Referring to the letter of Mr. T. D. Forsyth to your address, dated 18th July 1866, and a note by the eame officer, dated lst August, on the trade with Central Asia and the obstacles occasioned by the exactions of the Ladakh authorities, I am directed by the Right Honourable the Governor General in Council to communicate the following observations for the guidance of the Honourable the Lieutenant Governor:-
2. His Excellency has had the opportunity of discussing the subject with Mr. Forsyth in personal conference with Dewan Nehal Chund of Jamoo with the Vizier Gosain of Mundee, whose mercantile experience gives weight to his statements, and with the Negu of Laboul, Mungul Sing, who accompanied Mr. Foreyth, with the view of representing his grievances.
3. Mr. Forsyth has drawn up a paper, of which a copy is enclosed, showing the nature and incidence of the transit duties levied by the Maharajnh of Cashmere on the frontier of Thibet, i. e., on goods passing through the British districts of Lahoul and Spiti. From this statement it is presumed that the Cashmere import duty on sugar and spices aggregates 18 per cent. on the estimated value, 14 per cent. on opium, 25 per cent. ou iron. On claths or British piece-goods the per centage is not very clear; but it probably does not fall below the average of the above duties.
4. Now referring to your predecessor's letter of the 29th April 1864, it appears that the Maliarajah engaged that the import duty to be in future levied should not exceed 8 per cent. on piece-goods and $12 \frac{1}{2}$ per cent. on other articles. It was also agreed that the transit duty on goods intended for Thrkestan, Yarkand, \&c. should be limited to 5 per cent. ad valorem. Hence it is clear that, if the table of duties now alleged to be levied, as vouched for by Mungul Sing, is correct (and there is no reason to doubt its accuracy), then the Maharajah has not kept to his promise. His Excellency in Council desires that this point lie brought prominently to his Highness the Maharajah's notice, and that his Honour the Lieutenant Governor will insist upon effective measures on the part of the Jamoo Government for limiting the demands of the Ladakh officials strictly in accordance with the schedule of rates agreed upon.
5. I am instructed to bring another subject under the notice of the Punjab Government. It would appear from the statement of the Negu of Lahoul, confirmed by the Vizier Gosain, that the Ladakh authorities levy from Lahoul a money contribution of 120 rupees and 32 maunds of iron (in all 164 rupees) annually. It was alleged by Dewan Nehal Sing that this payment had been made for the last 100 years; but whether this he so or not is nothing to the purpose. The Maharajah holds his territories, not by ancestral tenure, but in virtue of the treaty of Amritsir, made in 1846. By that treaty we transferred to his father, Maharajah Gholab, in consideration of the payment of 75 lakhs of rupees, certain hill territories indicated by name and boundary, and expressly excluding Lahoul, which territories, together with certain other districts, had a week before been ceded by the Lahore Durbar to the British Government. The provisions of the first treaty, and the manner in which it was carried into effect, imply that the rights and interests of the Maharajah are restricted to the territorics thus acquired. Whatever lands he held beyond those boundaries, and whatever other claims he may have possessed,
lapsell to the British Governoent. Similarly, whatever josecomions belonged to the Bikh or Rajoont chicfa, or to the Lahore Durbar, in the hill regione within the asagned limita, became the property of the Maharajah, and subject to lis plensure. Itence any rignts which the Mahurajah may have previously enjoyed in Lahoul fell to the Britiah Government. These remarka proceed on the assumption that the Maharajah may have posecesed personal rights in Lahoul prior to tho alove transactiona; but hiy Excellency in Council believea that any such assumption is unfounded; for, as Nazion of Janioo, the late Maharajah, previoualy to the treatics of 1866, held simply in the capacity of manager for the Sikli Government, and had nothing to do with Ladoul, which. it is uppretiended, was (like Thibet and Ladakh) under the Nazim of Cashmere.
6. However that may be, it is clear that, under the treaties hefore mentioned, the Maharajuh has no vestige of right or authority in Lahoul ; and although the money consideration involved in the payments before alluded to is in itaclf insignificant, yet his Excellency in Council is not disposed to allow of any such encroachment or claim as would he implied under the aseertion of the right to levy it. The inhahitants of Lahoul are British subjects, and to this Government alone should they be reaponsible for any payments of revenue.
7. The Negu of Lahoul stated that, of the 164 rupees levied by the Janoos official at Ladakh, 36 rupees was paid to himeelf as his perquisite; thus making the chicf man in Lahoul a servant of the Maharajah, and subservient to his interests.
8. The Negu, it is believed, regeives only some 300 rupees per annum for his services to the British Government, and his allowances should be increased, at least in proportion to what he will lose by the stoppage of the Jamoo tribute. His Excellency in Council requeats that this may be inquired into. The revenucs of all Lahoul, extensive as it is, are believed to be only 2,000 rupees, and it is understood that it could not well bear any additional demand.
9. His Excellency in Council obeerves that, in 1863, something like a proposal was made to compensate the Maharajah for the loss of duties expected from the arrangements then concluded. It is presumed that nothing further was done in this direction. Ang such proposal was altogether inadmissible.

> (Political.-No. 38.)

The Secretary of State Cor India to the Governor General of India in Council ; dated 7 March 1867.
Sir,

1. The letter of your Excellency's government, No. 164 of 1866 , in the Foreisn Political Department, encloses some very iuteresting correspondence relating to the trade of Central Asia.
2. The subject primarily treated in these papers, and the one respecting which the views of your Excellency's government are expre-sed, is the departure of the Maharajah of Cashmere from the promises made by him, in 1864, for the reduction of certain import and transit duties on articles of Briish-Indian produce entering or passing through some parts of his Highness's dominions. ()n the subject of the agreement then entered into, the views of H:r Majesty's Gorernment were communicated to you iu a separat. revenue de-patch, dated 31 Narch 1865. It cannot be otherwise than a source of extreme regret that an arrangement, from which such good results were anticipated, should now be pronounced, so far as the Maharajah's engagements are concerned, to be "little wore than a sham." I concur in opinion with your Excellency's Goverument, that the Maharajah of Cashmere should be held strictly to his cingagemenrs and I approve, therefore, the instructions contained in your Secretary's letter of the 10 th of September last. I have no doubt that the Lieutenant Governor of the Punjab, in giving effect to your Excellency's views, will have done inis best to persuade the Maharajab that his real interests will eventually be best promoted by the aduption of a liberal niscal system in place of the irregular and arbitrary exactions to which he is now stated to resort.
3. I have read with great interest the reports of Mr. Forsyth, in the correspondence now under review, relating to Russian and British trade with the countries of Central Asia. The zeal and ability which he has displayed, in prosecuting these interesting and important inquiries are highly creditable to him, the more especially as these inquiries appear to have been conducted, to a considerable extent, at his own expense.
4. I observe that Mr. Forsyth has solicited the permission of Government to visit Khotan, with a view to the opening out of our tride with Central Asia. I do not gather from the papers before me what answer has been returned to this request. With reference to the explorations of Mr. Johnson, whose very interesting report on the Khotan country has been highly commended by the Royal Geographical Society, as a very valuable contribution to our knowledge of a hitherto almost unknown territory, your Excellency has remarked " that the "explorations of English officers in Central Asia are not worth the risk to which "their own lives, and the prestige of the Government employing them, are " exposed; " and I concur in opinion with your Excellency that no such hazardous journeys slould be undertaken by one of your own officers without the special consent of your Government. I shall be glad to learn from your Excellency what are the opinions of the Lieutenant Governor of the Punjab and of your Excellency's Government concerning the proposal of Mr. Forsyth to visit that interesting part of the country.

I have, \&c.
(signed) Cranborne.

## (No. 35 of $1868 .-$ Political.)

The Governor General of India in Council to the Secretary of State for India, 4 March 1868.

We have tine honour to forward copy of a letter from the Punjab Government, submitting Dr. Cayley's interesting and valuable report of his proceedings in Ladakh during the past season. We also forward a copy of our remarks thereon.

Political.

* See Parlia-
mentary Paper,
No. 65 of 1864 .

From Offciating Secretary to Government of Punjab to Secretary to Government of India, Foreigi Department (No. 40-116; dated 27 January 1868).
In forwarding, for the information of his Excellency the Viceroy and Governor General in Council, the enclosed copy of a report, dated 131 h January, from Dr. H. Cayley, on special duty in Ladakh, I am directed by the honourable the Lieutenant Governor to communicate the fo!lowing remarks:-
2. Mr. Davies, in his Trade Report,* which was submitted with the letter of this Government, No. 47, dated 23rd January 1863, brought to notice that, in consequence of the entire remission of custons duties on the Peshnwur and Derajat border by Sir John Lawrence, when Acting Tiesident at Lahorc in 1848, the trade with Afolanistan, particularly by the routes leading from Peshauur, lad greatly increased. Mr. Davies also pointed wut that access to the markets of Eastern Turkestan by the natural route, passing through Cashmere, was virtually barred by the excessive duties levied on goods in transit:
3. The question of the reduction of transit duties was afterwards discussed with Diwan Joala Sahai, the Prime Minister of the Maharajah, who agreed on the part of his Highness to reduce the existing duties to rates approved of by the Lieutenant Governor, on receiving compensition amounting to one-half of any loss of revenue which might be caused to the Maharajah. At the same time the Diwan took the opportunity of submitting the ardent desire of the Maharajah to acquire the territory of Bijwat in commutation of a loan which he had made w the British Government of six lakhs of rupees.
4. Lord Elgin, then Viceroy, did not pass any final orders on these proposals at the time. But as Sir Robert Montgomery had visited Caslmere in 1863, and on that occasion had been directed to discuss the matter with the Maharajah in person, the Governor General stated that he would give his decision on his arriving at Sealkote. Lord Elgin, however, died in the meantime, and no definite issue resulted from the proposals which had been made.
5. In the beginning of 1864 the Maharajah intimated to the Lientenant Governor that the subject "as still under consideration, and shortly afterwards Diwan Nihal Chand placed the results of the Maharajah's deliberations before the Lieutenant Governor. The duties formerly taken by weight or mule load were converted to an ad valorem rate chargea ble on the value stated in the invoice, and the following reductions were made on the rates of duty :-

| Piece goods | - | - | - | fionir 30 | - | - | to 8 | per cent. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Raw bugar | - | - | - | $\#$ | 150 | - | - | to $12-8$ | . |  |
| T'ea - | - | - | - | - | $\because$ | 71 | - | - | to $12-8$ | " |

Spices and drugs, various rates to uniform rate of 12-8-0.
Metals - - from 21 - to 104 - - to 12-8 per cent.
Rock salt - - 0-13-6 per maund, - - 8 nnuas per maund.
These rates were applied to moods exported from the Punjab into the Mahurajah's tetritory by any of the following routes:-

Jamon and Banihal, Aknur, Boodliil, and Sunot(sic orig.)

| By Bhimbur | - | - | - | - | - | To Serinagur and |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| By Gulahun (sic orig.) | - | - | - | - | - | Ladakh. |
| By Mozufferabad |  |  |  |  |  |  |
| By Jamoo and Kishtawar |  | - | - | - | - | To Ladakh direct. |

The rates on goods proceeding to Leh by the Kulu routr, whether from Bussahir or the Punjab, were always pretty reasonable, and generally below even the revised raten ahove noted. But the rates on the following articles, which were highly taxed, were reduced : 一


Changes were also made in the rate of goods imported to the Punjab from Yarkard or the Mularajah's dominions, whether by the Cashmere, Jamon, Kulı, or Bussahir routes. But the duty on goods coming from Leli to Serinagur and onwards was not ghown.
8. Another most beneficial reform was introduced liy the Maharajah at the same time. Formerly there was no difference made in the rates whether goods were sold at Srinagar or went on to Leh and Yarkand. This arrangement in practice prevented any goods going beyond Serinagur, and the traffic was restricted to the Kulu route, though a very much more difficult one than that of Cashmere. In 1664 a uniform transit duty of five per cent. was fixed for goods going to Leh; and the trader to Yarkand by Serinagur was chus placed in a position, fiscally, not less advantagcous than that of one trading with Bokliara by Pesliawur.
7. The rates were not levied on the frontier of the Maharajah's territories, but at the towns, and varied with the distance. Those at Jamou were lower than those at Serinagur. A trader buying goods at Jamoo and taking them to Serinagur hat to pay the difference between the rates of these places. In the statements which were shown to the Lieutenant Governor at that time there was no mention of the rates on goors sent from Leh and Yarkand 10 Serinagur, and it did not clearly appear whether therr, was any intention on the Maharajah's part to confine the trade from those places to the Kulu route, nor were the rates to be levied on the fine Turfani shawl-wool anywhere specified.
8. On the whole, bowever, the Lieutenant Governor regarded the measures of the Maharajah with much satisfaction, and trusted that they would result in an expanded trade. both with the town of Serinagur, the populous valley of Cashmere, and ultimately with Eastern Turkestan. All possible publicity was, therefure, given to the new tariff.
9. In July 1866, however, Mr. Forsyt!, who had recently travelled in Lahnul, received many complaints of the heavy cxactious levied on Bitish traders by the Ladakh authorities. Mr. Forsyth brought to the notice of the local Government that the reduction of duties professedly made by the Maharajah was in reality little more than a sham, the reduction being granted only in rare cases to those traders who were supposed to have influence enough to make their complaints known to the head of the Government. He added that from inquiries made by him in Russia and from Indian traders he gathered that British goods would diive out Russian goods from the markets of Central Asia, if ouly the trade was not improperly obstructed.
10. The subject was taken up with interest liy the local govermment, and the Maharajah of Cashmere was addressed with a view to the removal of the obstructions to trade. Mr. Forsyth had also an interview with his Excellency the Viceroy, at which Diwan Nital Chand, the Maharajah's confidential agent, and Wazir Gusain of Mandi were present The Lieutenant-Guvernor solicited authority to depute an assistant-commissioner to Ladakh to look after the interents of traders, but the Supreme Government suggested that a medical officer would be most suitable for the post, the duties of which were laid down as follows:-

The officer selected "must be cautioned against any interference in the internal administration of the country. The primary object he will have to keep in view will be the maintenance of the tariff fixed by the Maharajah in 1864. Any infraction of the tariff which his remonstrances on the spot may be unable to prevent should be promptly reported to the Punjab Government. Another, and very importaut branch of his duties will be to inquire closely into the nature and extent of the traffic, as it at present stands, between India and Cential Asia, and to report the measures which he
would recommend to secure a furiher development of this trade. Lantly, he will pick up and silt all the political information that may come in his way, especially as regards the progress of events in Chinese Turkertan."
11. The Lieutenant Gowernor sclected fur this duty Dr. Cayley, who reported his arival at Leh on the 24th June 1867, havinir met on the road Diwan Hira Numd, who had been spnt to Ladaklı a few days bufore by the Maharajah to assist Dr. Cayley in his endeavours to promote the trade with and through Latakli, and to carry wul reforns in thr mode of levping duty on merchandise pasang between British tervitones and the countries beyond the Blitinh fiontiers.
12. The results which Dr. Cayley hus secured, as exhibited both in his weekly diaries submitted to this Government, and in his present Renort, are, in the Lieutenant Govemor's opiniun, highly satislactory; and his proccedings have qemerally been ch inacterisen! by good judgment, and a kindly and conciliatory spirit both towaris traters and the oflicials of the Maharajah. More than one of the measures which, micer the ord is of Govermment, and in the interest of trade, it has been Dr. Cayley's duty tuinsist on, were of a nature calculated to evoke not a little opposition on the part of the local officials, who, there is tou much reason to believe, were interested in uplolding abuses, in spite of the Maharajah's orders; anci it is very creditable to Dr. Cayley's tact nad good juclgment that hi, measure s and proposals, although not at first always understood or appreciated ly the Kishmir Goverument, have eventually, when fully explained, been acquiesced in and frequently approved.
13. There can be no doubt that the Maharajah his always shown the ereatest readiness to meet the wishes of Government to assist Dr. Calley, ant to adopt measures tor the improvement of trade, and the protection of nerchants in Ladakh. Tuis is fully shown by his removing Hira Nand, who was reported in him as obstructing the inyuriis which Dr. Cayley instituted, and keeping up a system of espionage on the proceedings of that othicer; by his abolition of the exira duties in the shape of muzzer butti, choongi, and zakati, levied by his ofticials, and the tax of five rupe es, and une felt on ench caravan; by his reduction of the duties on the Kulu and Rampoor routes; and by the establishment of a 5 per cent. ad valorem duty on goods in transit through Ladakh to British territory. For these meanures the Miaharajah is entiled to acknowledements; nad if he is not prepared just yet to accept the more liberal policy which the British Guvernment would wish to see adopted, the Lieutenant Governor does not think this is to be wondered at.
14. For the present, the Lieutenant Governor is not prepared to sugsest to the Maharajah Dr. Cayles's proposal that the transit duty be reduced to $2 \frac{1}{2}$ per cent. ad valorem; any such proposal at present would only dishearten lim : and after the experience of a year or two, if the interests of trade be as well represented in Ladakh as they have been this year by Dr. Cayley, the Malarajah will probably requice nu argument to convince him that further cuncessiens in this respect may be made with adrantage to trades and to his own revenues.
15. The cencessions to which the Maliarajah has shown the greatest reluctance is the transport of the fine Tuifani wool to British territory. The value of this wool imported into Lidahh was 23,000 rupees. For the first time, a small quantity worth 650 rupees found its way to British territory. The bulk of it, worth 19,490 rupees, was taken 10 Cashmere. The Lieutenant Governor has already approved of Dr. Cayley's order, directing that wo reatriction should be placed on the transport of this wonl any more than on other goods, on payment of the 5 per cent. duty; and the Supreme Government ( $\mathrm{N}_{1} .1,083$, dated 23 rd October 1867) have approved of the course which the Lieutenant Guvernur has adopted, and desired that the point be pressid on the Maharajah firmly, but courteously. There appears to be nothing in the tariff of 1864 to justify the monopuly of this wool by Cashmere; and its transport to British territory will not interfere with the trade into that country. Dr. Cayley states that the woul can be supplied in immense quantities; and to give British oraders and manulacturers the bencfit of the market will not in any way deprive Cashmere of it; on the contiary, the trade will probably increase immensely, and the Cashmere Goverument will gain not only the 5 per cent. on the wool, but 5 per ceat, on the British goods that are transported to Yarkand in excliange for it.
16. The lieutenant Governur therefore assumes that there will, in future, be no atrempt made on the part of the Maharajah to exercise a monopuly over coods in transit, as being a proceeding opposed to the law of all nations; and he will b: prepared on all suitable occasions to entorce this view, which has already been approved by the Suprene Government.
17. From the returns which Dr. Cayley has subuitted, it appears that the trade from Kashmir to Leh and Yarkand consists chiefly ol goorls, such as saffron, rice, chadde rs, patu, \&c., which can be supplied better, cheaper, and in larger quantities by Cashmere than from British territory, while the British trade is chiefly in piece-goods, croceries, tea, goat skins, \&c., which Cashmere cannot supply. This through traflic is a direct advantage to the Maharijah, whose true desire is to encouage it. He will, therefore, be urget to open up the (lang Chenmo route, and also to improve, if possible, the other hines of traflic throush his tervitory.
18. A part from the unduly high ıate of duties heretofore levied by the Cashmere Govern-
ment, the oppressions 10 which tiaders in Ladakh have been subjected in various ways appear by no means to have been by desire or with the cognizance of the Malarajah, hut, on the contrary, in defiance of his orders, which have virtually been almost inoperative in that region. His officials were thus able pructicilly to prevent the reduction of duties agreed to hetwern the Maharajah and the Bitish Government from being carried int:, effect, and there seems litle cloubt that, if the svatem which has been in force for the last few years had continurd for a few vears longer, it would have enimely restioy d the traire, which has been gradually diminishiny from year to ypar.
1日. The part year, however, his not fairly represented the averace trade heretotore existing, much less that which niaht exist if foirly dealt with; the opium trade from this quarter, and the tea trade from the opposite one, having almost cobsed, ouing to the Chinese cunnection with Eas'ern Tartary having been vislently severed.
20. The stutement which has frequently been heietofore made by Mr. Forsyth, on information obtained by him in Rusisia, that British goods and the products of Hindinstan can reach Eastern Tartary much more easily and cheaply than groods from Russia, has been fully confirmed by Dr. Cayley's inquiries, which also tend to show that the demand fir the forimer is likely to becone very large if all restrictions be removel, the density of the population of these regions and their keenness for trade being attested by the Russian authirities themselves; while, is revards tea, it seems by no means impossible that the produce of Hindurtan may ultimately reach Russia itself by this route.
21. The reduction of duties lately granied by the Miharajah, if the full and permanent realisation of this measure be ensured by the deputation each year of a British officer to Leh, will certainly give an immense impetus in trade. But fitting opportunities will be taken of pressing upon the Maharajah that while this Government, which levies no duty on the tralle, is doing all it ean to promote it, by establishing a lair at the fool of the hills, by i:nproviisg the roads, and establishing new villa:es on the route, nothing is being done in the same direction by his Highnes's Govemumen, which realises larne profits from it, in so much thit the routes via Chang Cheumo and the Karaka-h and Shyok rivers, which are believed to offer great advantages, are now little used, or not at all, alhough the raders state ther woulif gladly use hem if permitted and encouraged, as it is hoped they will be in future.
22. Findeavours will also be made to ,ibtain a modifiration of the armangements b, which parties from Cashmere have spectal advantayes attorded them, a d are placed in positions whirh enable them greatly to harass, and at times (ven endanger, al other traders; a fact of the existence of which there can lie no donbl, as the Maharajath himsell admits that one of these. nam.d Khalukdar, though a resident of Cash.. ere, has areatly damaged by his intrigues in Yarkand the interests even of Cashmere subjects, while the same report is siven by all traders from our own terriory, and corrobrated even by the envoy lately seni by Yakub Khushbegi to the Maharajah's court.
23. In fine, the Lieutenant Governor cannot but concur with Dr. Cayley in the opinion that the presint is a mist fa courable time fir adopting all the measures that may be fe..sible or advisable for fully opening up and extending this tiade. The jealousy whith chatacterised the Chinese sule no lonyrr exists. It appe irs certan that the present ruler, the Khushbegi, who appears to have very reasonable prospects of being able to consolidate his power, is most anxinus to promote lrade and cultivate Iriendly relinions. The traders themselies have afforded every assurance in person that they are eager $t$., extend their operations; and the Mabiarajuh of Kashmir is evidently becoming aware, as evidenced by his late acts and the appointment of a governor of a n ew stamp to Ladakh, that the proceding of hi- officials in that quarter of late years lave not been such as "r reflect credit on his Government or on hinself. The Commissioner of Julinder, Mr. Forsyth, who is in the most fivourable position for ailing and encomaging the movement, has taken the water up with remakable energy and intelligence, which have alieady been protuctive of very grativing resulte, and with the return of the warm season the Lieutenant Guvernor eutertains a confident belicf that diuert advances will be made by Yakub Klusilıbegi himself, w!ich the Lieutenan t Guvernor trusts he may be authorised to meet in a friendly spinit.

## From Dr. Henry Cayley, on Special Duty, Ladakh, to Oticiating Secretary to Govermuent, Punjab; dated 13 January 1868.

I hare the honour to submit the f. llowing report on the subject of my mission to Ladakh during the past season:
2. I leit Lalore on the 1 isth of May, and reached Leh on the 24 th of June, passug through the districts of Kangra, Kulu, and Lahoul, into Rupshu. The road was hardly open so early in the season, and the passage of the Rotang and Bara Lache pa-ses was rendered difficult by the depth and extent of the snow, and could not have been crossed by laden animals. This route is not properly open thll the end of June, but from July to October the road is everywhere sate and easy all the way to Leh in Ladakh. On my way I saw Mr. Forsyth, the Commissioner of Julinder, and am indebted to him for much 384.
useful informution on the subject of the trade through Ladak $h_{a}$ and other mattere connected with my duties. I also saw many merchants of the Punjab and Kulu, and hoard from thene numerous complaints as to their grievances and the exactions they were subjected to in Leh. I may add that during my residence in Ladakh I had ample proof that all the complaints they had brought against the Ladakh ufficials, so many of which had been brouglat to the notice of the Puijab Government, were perfectly true, and without exagereration. I need not describe at lengil the different ways in which the unfortunate traders were Heeced, but merely sity that, in addition to the excessive duties authorised by the Kashmir Government, the trallers were made to pay all forts of extra duties in the form of "nuzzer butti," chomgi, zahati, and others, which often amounted in double, and even tenfold, the regular duties, and they had also to satisfy the demand of the Thanadar and local oflicials in innumerable ways. They could not get their goods weirhed, or obtain permits to depart, or even procure food for themselves and their ponies, without first giving a present; and any man having a good horse or other coveted article was often obliged to sell it lor a mere song, or present it as a gift to avert greater loss. The weights, too, used for weighing their goods, were light. In shont, the merchants were entively at the mercy of the local officers, who were all-powerful, and practically irresponsible and obeying no authorily; and the chief object of the Ladakh Thanadar and other officers was to eurich themselves as speedily as possible at the expense of all those in their power, utterly regurdless of justice and right.

On my arrival I was received by Vakeel Hira Nund, who was deputed to Ladakh by the Maharajah to assist me in carrying out the objects of my mission, and in any other way that I might require his services. I was always treated by him with great show of civility and attention, but I soon discovered that he was secretly throwing every possible obstruction in my way by keeping up a close system of espionage on myself and all who came near me, by intimidating the riaders and people of the country, by preventing their comins near me either for medical treatment or to give me auy infimmation, and in many olher ways, as represemed in my previous reports, and which it is not necessary for me to repeat.
3. The Ladakh trade has, according to the accounts of every one who is in any way connected with it, been rapidly declining during the last few years, and the through-trade with Central Asia has latterly been almost confined to the trading agents of Kashmir and a few influential men who were able to iusure fair treatment for their avents; and there is little doubt that under the old system the hade between Hindustan, Ladakh, and Central Asia, would soon have almost entirely died out. The merchants from the Punjab were rapidly giving it up us being no longer possible or profitable; and most of them who went this year, only ventured because they knew that a British officer was deputed to Leh for their protection.
4. The annexed table; show the extent of the trade through Ladakh during the past season; the amount is considerable considering the uatural difficulties to be encountered. From Amritsir to Lelı is a distance of about 525 miles, or 42 marches; five high passes have to be crossed, only one of which is under 13,000 feet high; the road, however, is generally easy during the summer, and everywhere passable for laden ponies. From Leh to Yart:and is about 350 miles, or 30 marches, and the road goes over five high passes, the lowest nearly 10,000 feet, and three of them are covered with perpetual snow or glacier, and the road is so bad and the difficulties so great, that neariy 20 per cent. of the horses die on the jonrney. On nealy all the passes, too, the merchandize has to be transferred from the horses to yaks. The most intense cold has to be endured, and great obstructions are met with from large unbridged rivers, and the expense of carriage is, consequently, very areat; but these natural dificulties seem to have little or no effect in checking the irade when it receives fair play, and is not overburdened by excessive duties. The extent of the trade between Hindustan and the countries beyond the Himalayas during the past season cannot be taken as any criterion of what it may become in future, for I nced hardly say that, after it has been depressed for years by high duties and unjust treatment, a 1 rade cannot possibly revive in one season. The merchants do not at once gain confidence in the arrangements made for their protection until they have themselves felt their benefit, or learnt from the experience of others. For a long time, too, they felt no certainty that similar arrangements would be carried out in future, and I used to hear on all sides that they would only suffer more next year for present relief. There was also a great diminution in trade last year owing to there being no longer a market in Central Asia for opium, which used to be export-d in large quantities from the Punjab, but for which there has been no demand since the Cbinese were driven out: and now large stores are lying unsold in Yarkand, and some even brought back to Leh and exported ugain to the Punjab. Last season also, on account of the disturbances and changes groing on in Eastern Turkestan, the road was not open, and traders not allowed to pass till Scptember instead of July; and many merchants, who would otherwise have come, took their goods elsewliere, and, owing to the lateness of the season, large stores of merchandize had to be left at Leh for the winter.
5. The wool trade has hitherto existed only as a monopoly of the Cashmere Government, and the export of the Turlani pushm anywhere than to Cashmere was strictly prevented. This year, however, I informed the traders that such a restriction was no longer in force, and that they were at liberty to export the slawl-wool (pushm) by any route they pleased; and a few Yarkandi merchants carried their wool through by Kulu to the Punjab; a few
also of the Hindustani traders did the same; but such was the dread of offending the local officers, who up to the very last tried to intimidate the traders on this point, that very few ventured to purchase and export this aricle; but now that a commencement has been made, there is every prospect of an extensive wool trade in future years. Up, to the prescnt year the real 'lurfani shawl-wool has never been imported to the Punjab, it having all been forcibly diverted to Cashnere. The only wool that ever reached the looms of Nurpur and Amaitsir was the Chantang wool coming from the Chinese territories of Rudok and Churmati and aurrounding comintries, and which is in every respect vistly inferior to the "Turfani" wool prodnced in the monntainous districts of Eastern Tukestan, and deriving its name from the city of Turfun. It is this exquisitely fine worl that is in Cashmere made up into shawls and other fabrics of such surpas-ing beauty as to render Cashmere shawls celebrated nearly all over the world. There is now alinust acertainty of phentifa! suppliag of this shawl-wool being inmported every year into the Purijab; and with this material, there is no reason why the manufacturers of Amritsir and other places should not produce goods equal in every way to those made al Serinagur. The amount of fine pushom imported this year into Leli from Yarkand was only 125 maunds (of nO lbs .) ; of this, only 13 maunde, worth in Lelı about 650 rupees, went down to the Punjab; the rest went to Cashmerr. 'The shawl-wool that was brought down was sold in the l'unjab at a profit of about 75 per cent. over the price at Leh. Churus or bhung, it is generilly called by the latter name by the traders, the extract of hemp, has for many years formed the staple export from Yankand. This year, 1,830 maunds (pukka) nrrived, worth in Leh about 68,590 rupees. Of this, about 817 maunds were taken to the Punjab, eight mannds to Cashmere, and the remainder was, owing to the lateness of the season, detained in Ladikl. Whe article became almost a glut in the market, and the merchants had difliculty in finding a sale for it, and there is every probability that in future the quantity of bhung will be much less, and that it will be replaced by shawl-wool, silk, felts, gold and silver, precious scones, and other articles,
6. As shown in the annexed Table $A$, all ohler articles come only in small quantities; but in addition to what is there put down, almost every trader and pilgrim brines turquoises, guld duat, silver ingets, and uther articles of value, which he disposis of to pay the customs duties and road expenses.

Felts, cotton, silks, raw and manulactured, pushm, and other fabrics of mixed silk and cotton, carpets, coloured and embroidered, leather from Russia and Bokhara, silver ingots, called Yambres or Kurus, gold bars and gold dust, soap, and many other articles, always come in greater or less quantity, and the trade in all hese will undoubtedly increase enormously. "This year a large uumber of silk handkerchiefs of the thinnest texture and of brilliant variegated colours came from Bokhana, and a maund of common sea-weed from China: this article is exported to the Punjab and used as a medicine for goitre. It doubtless derives its virtue from containing iodine.
7. The imports into Leh from Chantang and Lhassa consist chiefly of Chantang wool, sheep wool, brick tea, musk, silk and linen cloth, and salt.

Four hundred and sixty maunds of puslim wool and 75 maunds of sheep's wool, worth about 23,500 rupees, were brought fion Chantang, and nearly the whole of it exported to Cashmere and Bultistan. The Chantang wool, which goes in large quantities to the Punjab, is carried direct from Garo and Rudok without passing through Ladakh. Brick tea comes from China through Lhassa in large quantities, and is chiefly for consumption in Ladakh and Cashnere and surrounding districts. The anount this year was only 175 maunds, not above one-third the usual quantity ; the bricks usually weigh about three seers, and sell for about 12 rupees in Leh, being at the rate of iwo rupees per pound. This kind of tea is not taken to Yarkand and Central Asia.

Musk and various kinds of silk and ocher piece-goods come in small quantities, but since the disturbance on the Chinese frontier and the rebellion of the Mahouedan population, all exports from China have greatly diminished. Salt is very largely imported from Rudok, but the trade in this article is a monopoly of the Casinmere Govemment; it is chiefly taken to Cashmere, and is carried "Bigar" through Ladakh by the people of the country.

The cotal value of the imports into Leh from Chantang and Yarkand during the year was about 1,7l,000 rupees; whereas in Mr. Davies' Trade Keport, the amount is laid down at $3,90,000$, showing a diminution of more thin two lakhs of rupees in the last six years. The falling off is chiefly in the articles churus, shawl-woul, tea, sulks, and horses; of the latter, not one was this year brought for sile, and I believe that none liave conie for three or four years past, as they were all taken for the Cashmere Government at very low prices, and their export to British territory was prohibited.

## 8. The exports from the Punjab into Leh and thence to Yarkand are shown in Table B.

Colton piece-grods here form the staple article; they are chielly of English manufacture The total amount was 482 maunds, worth about 66,000 rupees in Amritsir and 84,000 in Ladakh. All kinds of cotton goods are greatly in demand in the Yarkand market, and the traders say that almost an unlimited amount could be disposed of, and that the English goods are of much better quality und are much cheaper than those coming from Russia. If, however, the merchants send up goods of inferior quality, as they are inclined to do, the trade is sure to suffer, for it is most necessary that English manufacturers should keep uo their charactor for superiority, otherwise they will be driven out of the maiket by Russian gonds. Apparently, this has already been done in the case of broadcloths, for which there is a very great demand, but old and inferior articles only were sent up from Hindustan, and some

384 .
C
found
found no sale, although a very consid rable supply comes from Russia and sells at a very high price. The chief demand is for cloth of bright colnurs, red, blue, green, and yellow, \& c., and only really sound durable materials will sell.

Tea is consumed in large quantities all throngh Eastern Curkestan, and now that the Cbincse have been driven out, and all commmication with China is cat off, the whole supply comes from Hincinstan; a large supply, however, comes from Russia, and sells at enomons prices, 12 and 15 rupees per seer, and the Lhassa brick tea is not in demand. Hitherto litile but China tea, purchasel by the traders in Bumbay and Calcuita, has been tried. The tea thev tike is generally of only second rate quality, anil yet it sells i:I Ladakh at two rupers, and in Yartiand at Rs. 9. 8 and thee rupees per pound; but in 1868 a conviderable quantity of Kangra tea was sent up by the Wazir of Mandi, and fetched Rs. 2. 8 in Leh and three rupees in Yarkand. Only hardly look at black tea; but the taste for toa-drinking is universal amongst all classes of people throughout Eastern I'urkistan, and the country offers a splendid market for Ilimalaya tea, and I believe that almost any quantity of green tea of good quality would lind a sale at Yakind at remunerative prices. It is not, however, necessing to send the tea beyond Ladakh, for the Yarkandi merchants would be quite ready to purchase the t-a at Leh, and in nll probability, in future years, ut Palampore Fuir. 'Tlie merchants who take up the tea must be prepared to receive payncent partly in merchandise and partly in gold and silver, in the projortion of about two-thirds of the tomer, as trade is chiefly carried on by barter, and not by cash payments. There is great hope, too, that in a few years the Indian teas will find their way to Russia by his route, and there find a ready sale, in the same way that the China teas now do, for the distance from Kangra to the nearest Russian perts is only about two and a half months' journey, whereas from China to Russia is a lancl journey of five or six months' duration. 'The best China teas sell at enormous prices in Russia, and I hear now that some of the Indian teas sent by sea to St. Petersiourg have been highly approved of there, so that there is much in favour of the Indian teas competing successfully with the China ones if sent overland hrough Central Asia. 127 maunds of China tea from the Punjab reached Leh last season, and was selling at an average price of two rupees per pound.

Spices, sugar, goat skins, indigo, are all greatly in demand at Leh for the Yarkand market, and are sold at great profic. Nearly all the articles mentioned in Table B fetch a high price, and such articles as needles, scissors, and so on, are in great request.

Opium was formerly the chief export from the Punjab, but duting the last two years, since the Chinese were driven out, the opium trade has entirely ceased, and many merchants have large stores of opium lying unsold in Yarkand, and their losses have been enormous, and there has, consequently, been a great diminution in general trade on this account. According to Davies' report, opium to the value of 50,000 rupees was annually imported into Leh. The total exportation from the Punjab to Leh during the year amounted to 1,800 maunds of goods, worth about $1,73,000$ rupees; two-thirds went by the Kulu and Lahoul route, and the remainder by Rampoor and Cashmere. Nearly the whole of the trade from the Punjab passes through to Yarkand, which is the trading depôt or mart for the whole of Central Asia. Trading caravans from Bokhara, Kokan, and the Russian possessions, Kashgar, Turfan, Aksu, and all the cities to the north-east, Khotan, and until the last two years from China, all meet at Yarkand, and there the merchants barter their soods; and Yarkand is the focus of the trade of all the surrounding countries. UP to 1862 the exports from the Punjab to Ladakh were valued at about $1,80,000$ rupees, or nearly the same as in the past year; but during the last three or four years the tiade has, accoiding to all accounts, been diminishing rapidly, until last year, when it again increased.
9. Iu Tables C and D I have shown the exports Irom Leh to Yarkand and Chantang in one direction, and to the Punjab in the other. These of course correspond in a great measure with the imports into Leh; but this ycar, owing to the lateness of the arrival of the Yarkand kafila, much of the merchandise has been left in Ladakh for the winter, so that the exports from Leh to the Punjab do not amount to more than one-third of the exports from the Punjab.
10. In Table E I have shown the local trade between Cashmere and Leh; this, however, is not a local trade, for nearly the whole of the articles named in the list in reality pass between Cashmere and Yarkand, or Cashmere and Chantang.
11. With regard to the customs duties levied at Leh, the following alterations and remissions have been made during the past year. The extra duties of choongi, nuzzer butti, brokerage which were formerly levied, have been entirely remitied; and at the end of the season, the tax of five rupees and one felt on every caravan, or as it was actually levied on every trader, in addition to the custouns duties, wis also remitted. The duties on spices and piece-goods coming by Kulu to Ladakh have been reduced from Rs. 1. 4 and Rs. 2. 8 respectively per maund of 16 seers, to 10 annas; but the most important change is that on all goods passing only in transit through Ladakh eilher coming from or going to British possessions, a transit duty of 5 per cent. ad valorem, according to the invoice value, is now levied, instead of the former double duties, import and export, which often amounted to more than cent. per cent., and were destructive to trade. This concession, which ought to have been in force since 1804 if the tariff of cluties then agreed upon had been carried out in their full spirit, has only now been acted upon. Whien this was explained to the merclants, their gratification was beyond all bounds, and I cannot better deicribe the
benefita they derive from the change than by giving the following inetance:-A pavily of Yarkandi urerchants came down with about 30 punv-loads of gorets which they wished to carry through to the Punjub, having henrd that the duties were remitted. The duty demanded from them in Leh anounted tu over 800 rupers, and to pay this they would have bean oblige ol to have solil nearly hall their wares, a- cash was very scarce, to pay the duty on the remainder. I, however, only permitted the sper ceit irhisit duty to lie levied on them, and the whole amonnted lin only 55 rupers mstead of over 800 . If in this case the double daty had bren taken, the men wiuld have batered their goode in Leh, returned in ciegrist to Yarkancl, and tiade would have licen thrown back ngain for anoher quarter of a century. As neurly all the merchantline that comes either from Yarkand or Hinduntan merely pasees in transil ihruagh Lidakh, this transil dity of 5 per cent. is the only duty that the regular trater will have to pay; but 1 caunut lu!p expressing my upinion that a duty of s per cent. is excessive to charge on guods merely pasting in trinsit through a corner of the Maharaj: h's dominions, and in a country wherenohing whiteveris done to make or repair a road or facilitatr communicaion. The ruad throngh Ladahhgenerally lics thonghimmense tracts of almost desert country and over dangeroms and dificult monntin pases and acruss unbridged rivers, and if a high (for 5 per cent. is high) transit duty is charged, something should be dove to assist the triders. Besides the present route ehruph Leh, there is anothrand much easier road, which has for a long time been quite cloed by the Ladakh officials, but which was trom all accounts murh frequented in former years. This route leaves the regular rond Irom Kulu to Leh either at lukehen, and thence passes cast and north to Puga and the head (western extremity) of the Pangons Lake, or else leaves the Leh road at Ugshi ou the Indus, and crosses by an easy pass to lantee and Pangong. The road then aecends the Chang Chenmo Valley und crosses the Chang Chenmo Pass, which is very cany and free from snow, after which it lies for several marches over wide undulating plains and crosses an easy pass into the Karakash River, and follows the stream for six marches to Sukeit, a station two marches to the north of the Karakoram Pass, where it joins the present Yarkand road. This route iv only about the same number of marches as the present route, but is from all accounts most easy. The passes are all low and free from snow or glacier, and there are no large dangerous rivers to cross, and over the wide plains north of Chang Chenmo (called Aksai Chiii) quass and fuel are plentiful. The roarl lies entirely in Cashinere territory, and leaves the Chinese Iruitio far to the east. The traders say they are quite ready to go by this route; only they are afraid of the Ladakh officials, who force them all to come to Leh, but next season I hope the new route will be opentd. If the traders pass through Ladakh wilhout stopping at Leh, I think a duty of $2 \frac{1}{2}$ per cent. is all that should be levied. In Yarkand only $2 \frac{1}{2}$ per cent. is levied on goods for the double journey to Ladakh and back, and this shows a liberality on the part of its ruler well wortly of imitation of the Cashmere Government. During my residence at Leh I was able entirely to prevent any unauthorised or irregular exactions on the part of the Leh officials, but I ann quite convinced that nothing less than the presence of a British officer in Leh will hinder a return to all the former abuses, and of this all the merchants are only too well aware.
12. The total amount of customs duty collected at Leh during the year was 16,000 rupees; this dies not include the duty on goods from the Punjab through Cashnere, as this is levied al Jamoo. Of this sum, 12,500 rupees was on goods passing to and from Cashouere, and 3,500 rupees on goods passing between Hindustan and Yarkand. Of course, during the past year the reduction of duties has diminished the customs receipts probably by about one-third or one-hall; but there is every ground for believing that in future years the revenue of the country will not be even a direct loser, as the increase of trade will more than make up for the diminished rate of duties, and the indirect advantages to the country from increase of trade will be enorroous.
18. The trade between Cashmere and the neighbouring states is carried on in great measure by trading agents of the Cashmere Government, and this system acts most unfavourably on the general trade. The usual plan is as follows:-Certain sums of money are advanced to traders out of funds set aside for that purpose, and lor this they pay only a moderate rate of interest to the Government; but besides this, they have always to pay a laige share of the profits to the Diwan at Jamoo and the Ladakla officials; and they are employed as agents and news-writers, besides acting as traders. As a matter of course, they are favoured in every way by the Cashmere officials, and have an unfair advantage over private tradera, and it is with them a great object to injure the latter as much as pussible, aud keep a monopoly of the trade in their own hands. Khalukdar, against whom such general complaints have been made, went to Yarkand in this capacity, and it was by the infuence of two of these men, backed by the Thanadar at Leh, that Purboo Sahai was ruined three years ago. There are many of these arents employed at Yarkand, and the trade with Chantan!: and Lhassa is entirely in their hands, and nu one else is allowed to go. Between the Goverument of Cashmere and Lhassa there is a regular "greement that all the merchandize should be carvied "begar" in their respective territories, and every third year a merchant called "Chabba" comes from Lhassa with a large consignmeut of goods for Ladaki and Cashmere, and one agent from Cashmere goes to Lhassa in the same way every third year and returus the next. In all ildese transactions the Cashmere ofticials have a direct interest, and they, of course, try to lavour their agents at the expense of private merchants, and general trade is thereby injured. The gain to the Government of Cashmere is very trifling, but the system gives rise to abuses in many ways, and is a source of loud complaint on the part of
the seneral traders, and, as I have more fully related in my previous reporte, Cashmere ggents in Yarkand have been by false representations getting he Hindustani merchants into rouble, and using their mfuence to render the later obnoxious to the Yurkand ruler.
14. I merely here offer a few gencral observations on the present suate of the Central Asian trade and its future prospects. North of the great Himalisyan range Yarkind is the chief emporium, and canvans of merchunts neet there from all the surrounding cities and cocorries, as "ell as from the mere distant places-as Badiaksan, Bokhara, the Russian. Provinces, and, until the last two or three yenrs, from China; but since the Mahonedan rebellion in Noithern and Western China, all communication with that empire has been almost entirely cut off. The demand in all these coumries for Indian products and English manuacteres is fnominus, and they can supply in return, to an almost unlimited extent, shanl-wool, silk, lihung, gold and silier, and precious ston's, and many other articles. The morchants of Hindustan either take their goods direcl to Yarkand, or barter them at Leh, and this year many Yarkandis went down to Kulu and the Punjab, though unfortunately all were ioo late for the Palampore Fair. I have conversed freely with nearly all the men who came oser from Yarkand, and all said the same thing, that any number were ready to come it they were sure of fair tieatment and could find a market for the goods, and it was unicersally believed that in future years the trade would incrase enormously. At present Russian produce and manufactures to a considerable amount find their way to Yarkand, but almost all of them could be supfilied more cheaply and of hetter quality from Hindustan, and there is no doubt that English goods can always compete successtully with Russian. Taking all thiugs into consideration, I think the future prospects of our trade with Central Asia are very favourable, and if Khush Begi holds his own, all will ge well, ns he most fully appreciates the advantages of trade, and does all he can to assist it. Bur amongot people who have been fighting between themselses almost from time immemorial, there is no forespeing what a day may hring forth, and the new kingdom of Yarkand may be ulset as quickly as it arose, and be followed by a reign of anarchy. Such, however, is the respect for trade generally throughout $A$ sia, and so fully is it a mational institution, that, whatever may be the political state of the country, the probability is that trading operations will not suffer for a long time or in any gieat degree, and what is now required is, that the merchanto should have the assurance of the British Goverument that they will always have its protection, and that the Cashmere Government will not be permitted again to levy exorbitant duties or commit acts of oppression. The merchints will then of their own iccord soon extend their trading operations, knowing, as they do, the enormous profits that can be made. An anmual fair at Palampore will do much to increase the trade, and the Yarkandis are certain another year to attend it in large numbers, so bighly did they think of its advantages; but unfoitmately; owing to the Jateness in the arrival of the first caravan last season, scancely any of them were able to get down in time to be present.
15. Ifropase here giving a brief résumé of the political listory of Central Asian affairs during the past vear. Three years ago the Chinese, who were iti military possession of Yarkand and ali the States to the east and the north-east, were driven out by ihe Tunganis (military settlers who originally cane from Persia and the West as soldiers of some of the Mahomedan conquerors and settled down in the country) and Kucharis, or Khojas of Kucha. The Chinese garrisons were nearly all slain, and the few who escaped fled eastward. At this time Yakoob Beg Khush Begi, an Andijani, and formerly an ofticer in the Kokan army fighting against Russia, was liviny in Kashgar, wheme he hat taken up his abode, and was nominilly an officer of the Kokan Government. When the Chinese were defeated, he raised a force of Kashgaris and Andijanis and attacked the Khojas in Yarkand, Lut was twice defeated and driven back; but at last he prevailed, and killed nearly all the Tunganis who opposed him, and the Kucharis retired to Kucha, and Khush Begi became ruler of Yarkand. About the same time, Haji Habib-oollah Khan, a very powerful Zemindar of Khotan, an old man who had lately returned from pilgrimare to Mecca, was placed on the throne of Khotan. Yarkand, Khotan, and all the neighbouring states were then only dependencies and tributaries of Kokan, and their rulers acknowledged the authority of its king, Khoda Yar Khan. Habib-oollah Klan, the fakeer, as he is generally called, is said to hive ruled with great cruelty; under him neither life nor property were safe, and he robbed all his sulpjects to fll his treasury, and the Khotanis are said to have asked Khush Begi to help them to depose their king. I heard also that Habib-oollah had refused to acknowledre the Khokan authority, and Khush Begi atıacked him nominally to bring his country again under subjection to their common master; but whatever may have been his pretext, Khush Begi was evidenlly deternined to annex Khotan, and at the end of 1866 he imprisoned the Khotan envoy, then in Yarkand; but the latler, seizing an opportunity, sent off two of his servants with a letter to Khotan; the messengers were, however, detected, and the letter found concealed in a shoe, and the two men shot, and the envoy, under threat of a like fate, was forced to give full information regarding the strength of Khotan, its garrison, and its means of defence.

At the beginning of 1867 Khush Beyi, who had for some time been making preparations, sent a large force against Khotan, but, to avoid suspicion and alarm, he dispatched it in small detachments, and when all were assembled within two or three days' march of the town, he joined the army, and by treachery and under pretext of making a friendly alliance, he heguiled Habib-vollali Khan and his son into his camp, aud afier receiving them with great honour and landsomely entertaining them, he in the night made then and
their followers prisoners, and the next day, uning the captive's signet ring, he summoned all chiefa and military officers of Khotan to his camp, and as they were on their way he sent a body of troops by another route, which took posisesion of the town and fort almost wilmut opposition, as chere were no leaders, and no one was prepared to offer resistance. At the same time he seized all the men who had cone rut to hiscamp. Khush Begi then him. self entered Khotan, and secured a large treasure in gold and silver, and appointed a new governor. Soon afice this, some of the Khotan women, who lad been given over to Khush Begin officers, formed a plot amongst themselves and killed many of their new hasbands, and the people of the country rose against their new manters. Upon this, Khush Begi ordered the execution of old H:abib-oollah, his son, and all lis lillowers who had been sent as prisoners to Yarkand, and a reneral massacre of the men of the cosuntry took place, and many thousands were slaill (iout the womell were spared), and the towns of Ilchi, Karakash, and others were given up to plunder. Mercliants, both native and fureign, were generally protected, but the Kashmir Vakeel, Najaf Shah, was imprisoned and sent to Yarkand, and only released after payment of a lreavy fine. He was accused of having conspired agamst Khush Begi, who seems at this time to have been offended with the Cashmere Government for having formed an alliance with Khotan, and also for establishing a military post at Shadula, which is nearly three marches north ol the Karakoram Pass, and consequently in Yarkand territory, and because the Cashmere Vakeels nisrepresented the relations between Cashmere and the British Government by making out that the former was all-powerfal, and on these grounds Najaf Shah "as impisoued, and the depôt at Shadula was destroyed.

After having completely subdued Khotan, Khush Begi marched on with his forces, said to he about $\mathbf{1 5 , 0 0 0}$ strong, and chicfly composed of Badakshanis, and Kerghiz, and Kipchak, who are Tartar Mahomedans, to Aksu, where he was received by the Tunganis without resistance. He then advamced to Kucha, and, after two or three severe battles, took the place and drove out the K!oja army, which fled to Kona Turfin, far to the eastward. He then took Sairam, Shah-Yar, Ush Turfan, and when last heard of was on his way back to Kashgar. Whilst encraged in these expluits, he closed the road to Ladakin, and refused to allow anyone to pass; but directly he had completed his cinquesis, he gave orders for the opening of the road, and the Yarkand kafila reached Ladakh in September. In Kucha, the Kipchaks, under one of his officers, Muza Ahmed, conspired arainıt Khush Begi, but the plut was discovered, and, acting with his usual vigour, Khush Begi made a wholesale slanghter of the mutineers, to the number of about 2,000 .

The latest news received was, that Khush Begi was organising a large force and powerful artillery, and had sent an envoy to Bokhara with offers of assistance against husia; and this report is confirmed by men from Bokhara of the arrival of this envoy. Kiush Begi seems to have entirely thrown of the Kokan yoke, and to be quite prepared to maintain his independence. Lite reports from Bokhara give out that Khoda Yar Khan has asked the Russians to assist him against Yarkand, but it is unlikely that Russia will give any material aid, is her hands seem to be full, and probably Khush Begi is quite able to maintain his own against Kokan. He has now with him a son of the late king of Kokan, who was killed some 20 years age by the then king of Bokhara, and his throne usurped by Khoda Yar Khan; it is now said that Khush Begi will support the claims of this young prince to the Kokan throne.

Khush Begi is undoubtedly a brave, energetic, skilful soldier, and a vigorous, though perhaps unscrupulous, ruler. He is described as maintaining very strict discipline in his army, and is very severe in punishing any fault, but atherwise he treats bis soldiers well, and is very generous and lavish in his expenditure. He treats merchants well, and the taxation over other classes of the people is not excessive, and he is undoubtedly both feared and respected by his subjects. The effect of his consolidating all the provinces of Eastern Turkistan under one vigorous rule must be advantageous to the countries themselves and their neighbours, and in every way beneficial to trade; and I think this is a good opiortunity for an attempt on the part of the Indian Governuent to enter into friendly relations with the new kingdom of Yarkand, which comprises $n: t$ less than 30,000 square miles, and contaius more than a dozen large and important towns. It would, I leel confident, have a very good effect to send an accredited envoy to Yarkand to conclude a friendly a!liance with Kuush Begi, and to give him a true and just idea of our wishes and intentions. There is no doult that he is most anxious to be on friendly terms with us, but is very suspicious of our motives, and as he now only hears false and garbled accounts of our policy, he will never feel real confidence in us unless some such course be adopted to reassure his mind; of course, this could only be done if the country remains settled. No further direct news can now cume from Yarkand before May or June, and before then importaut changes may of course occur, but it seems highly probable that Khush Bergi will be able to retain his position as absolute ruler of lis new kingrdom of Yarkand.
16. I have not, in this report, in any way described the internal state of Ladakh and its system of government, or the condition of its inhabitants, as the subject did not fall within the scope of my duties, and I was of course able to protect all foreign traders froun oppression or wrong of any kind. Since my depiature, a new governor or Wazir, named Ali Akbar, has been sent up. He is said to bear a very high character for justice and honesty, and I hope this measure shows a desire on the part of the Maharajah to carry out real reforms, and to stop all grounds of complaint for the future.
(A.)

TABLE of Imponts into Leh from Farhand and Chantang during 1867.

(B.)

STATEMENT of Expoits from the Punjab into Leh during the Year 1867.

(C.)

## STATEMENT of Exports from Leh to Yarhand and Chantang <br> during 1867.

| Names of Articles. | Quantity in Maunds (80 lbs.) |  |  | Value in Ladakh. |
| :---: | :---: | :---: | :---: | :---: |
|  | To Yurkand. | To Chentang. | Total. |  |
|  | Mds. Srs. | Mds. Srs. | Mds. Srs. | Rs. a |
| Piece.goods - - | 2710 | 700 | 3410 | 50,075 |
| Spices, Sc. - . - | 2450 | 640 | 3090 | 12,360 |
| Goat skins - . - | 2090 | $30 \quad 0$ | 230 0 | 14,937 |
| Sugar - - - - | 380 | 320 | 700 | 2,800 - |
| , soft - - - | $9 \quad 0$ | 40 | 130 | 390 |
| Tea - - - - | 1124 | - - | 1124 | 17,920 - |
| Preserves, drugs, \&e: - | 70 |  | 70 | $420-$ |
| Haberdnshery, needles, \&c. | 100 | 20 | 120 | 1,800 - |
| Honey - - - | 130 | 40 | 170 | 425 - |
| Sufiron - - . |  | 720 | 720 | 12,000 - |
| Otter skins - - - | 20 | 10 | 30 | 480 - |
| Indigo - - | 140 | 60 | 200 | 3,200 - |
| Shoes - - - | 12 Pairs | - - | 12 Pairs | 12 - |
| Silver - - . | - - | 50 | 50 | 16,000 - |
| Miscellaneous - - |  | 100 | 100 | 800 |
| Dates, dried - - |  | 5 | 50 | 300 |
| Kuchur - | 290 |  | 290 | 1,160 - |
| Majeet (red dye) - - |  | 1 | 10 | 20 |
| Turmeric - - - | 70 | 2 | 90 | 360 |
| Fox skins - - | 116 | - - | 116 | 175 |
| Pushmina, from Bulti - | ${ }_{25} \mathrm{P}$ airs | 85 Pairs | 110 Pairs | 1,760 |
| Kushomir chuddabs | 540 | 350 | 890 | 5,630 - |
| Brocude - - | 75 Thans | 35 Thans | 110 Thans | 7,700 - |
| Musk bags - - - | 300 No. | - - | 300 No. | 3,600 - |
| Kimokht, green leaiher - |  | 15 Pieces | 15 Pieces | 228 |
| Judwar - - | 10 |  | 10 | 1,600 - |
| Numdr - | - - | 650 in No. | 650 in No. | 1,300 - |
| Currants, dry - - | - - | 150 | 150 | 195 |
| Butter | - - | 200 0 | 2000 | 3,200 - |
| Apricots - - - | - - | 2750 | 2750 | 1,100 |
| Guns - - - - | 5 in No. | 3 in No. | 8 in No. | 80 |
| Pistols - - | 6 " | 2 " | 8 " | 40 |
| Tulwars - - | 5 " | 4 " | 9 | 72 |
| Carpets - - - | - - | 15 " | 15 " | 150 |
| Barley - - |  | 9500 | 9500 | 950 - |
| Buckwheat - | - - | 850 0 | 850 0 | 1,062 8 |
| Total - - | 96120 | 2,533 20 | 3,495 0 | 1,63,396 8 |

(D.)

STATEMENT of Exports from Leh to the Punjab during 1867.

(E.)

Trade Betiveen Ladakr and Cashmere.

STATEMENT of Imports into Leh from Cashmere and Bullistan.


Exports from Leh to Cashmere and Bultistan.

(No. 8.)
From Officiating Secretary to Government of India, Foreign Department, to Secretary to Government of Punjab (No. 171 ), dated 14th February 1868.

I am directed to acknowledge your No. 40-116, of the 27th January last, submitting a report by Dr. Cayley, on special duty in Ladakh, and to state that his Excellency in Council has perused these papers with much interest.
2. The remission of duties detailed in your 13th paragraph, so liberally made by his Highness the Maharajah, doubtless deserves the commendation given by his Honour the Lieutenant Governor. The acknowledgnents of the Government of India for the fiscal liberality evinced by his Highness have been conveyed by this office, in letter, No. 1160, of the 29th November last.

3 The Governor General in Council concurs in the Lieutenant Governor's views, as given in your 14th paragraph, to the effect that the proposal for reduction of rates to $2 \frac{1}{2}$ per cent. ad valorem should not be pressed on the Maharajah's attention.
4. The proposal in your 21st paragraph, to the effect that the condition of the Chang Chenmo, Karakash, and Sbyok routes should be urged on the consideration of his Highness's Government, is approved.
5. In regard to your 22nd paragraph respectiug Khalukdar, I am to refer you to this office letter, No. 109, of the 3 lst ultimo, adverting to this person.
6. The generally improved p rospects of trade in these quarters is regarded with satisfaction by the Government of India. The exertions hy Dr. Cayley, made in the cause of improvement, are fully appreciated. That officer will doubtless see the necessity of using great moderation and caution in his dealings with the Native Government. It will be in his recollection that at the outset he did allow certain orders to be so worded as to cause apprehension to the Maharajah's Government. Every care must be taken to avoid a repetition of any such proceedings. Dr. Cayley will do well to represent to the proper official whatever may be noteworthy. Even this, however, must be done in judicious and considerate terms, avoiding anything that can unnecessarily give offence. Frrther, Dr. Cayley must see that his ministerial officers, moonshees, and others, do not insert into vernacular proceedings any phrases that could in the least degree run counter to the principles above laid down. Lastly, while reporting officially to his own Government, Dr. Cayley, while fully stating what he believes to be the truth, must yet do so in guarded and well-weighed expressions, especially in matters reflecting at all on the Native Government. Some thought for these points is necessary, not only out of consideration to our Native ally, but also for the success of the mission.
7. I am to request that the fullest assurance may be given to the Maharajah on the part of the Punjab Government and of the Government of India that no interference whatever, direct or indirect, with his Highness's sovereign rights is contemplated by Dr. Cayley's friendly deputation to Ladakh.

# (Political.-No. 75.) <br> The Secretary of State for India to the Governor Gederal of India in Council. 

India Office, 7 May 1868.

1. I have read, with much interest, the correspondence enclosed in the letter of your Excellency's Government, in the Forvign Department, No. 35, of the 4th of March, and especially the valuable report of Dr. Cayley, relating to his proceedings in Ladakh during the past seavon.
2. Dr. Cayley appears to have conducted the business of the commercial mission with much zeal, energy, and ability. I fully concur in the caution which your Excellency has thought it right to give him is to the importance of moderation in his communications with the Native Government of Cashmere.
3. Your Excellency will have perceived that the instructions contained in your Secretary's Letter, No. 17I, of the 14th of February last to the Government of the Punjab, are entirely in accordance with the sentiments expressed in my Despatches, Nos. 21 and 22 , " of the lath of that month, relating to Dr. Cayley's proceedings. In refusing your sanction to any pressure being put upon the Maharajah to decree any further reduction of rates of duty (i.e. to 21 per cent. ad calorem), your Excellency acted with sound discretion, "the fiscal liberality erinced by his Highness" having already net with an expression of your gratification, and lis conduct throughout these transactions, which must necessarily have been vexatious to him, having evinced as much enlightenment and goorl feeling as it was reasonable to expect.

## (Revenue Department.--No. 528-263.)

From T. H. Thornton, Esq., Secretary to Government, Punjab and its Dependencies, to C. U. Aitchison, Esq., Officiating Secretary to Government of India, Foreign Department; dated Lahore, 13th July 1868.
I have now the honour to reply to your letter No. 47, of the 27 th January 1865, regarding the progress made in tea culture, \&c., in the Kangra Valley.
2. I am desired to state that a reply has been deferred till now, as matters have been in more or less of a transition state in respect to the points therein referred to; but a memorandum on the subject, dated Ist February last, from the Commissioner, Mr. Forsyth, with enclosures, is now forwarded for submission to the Supreme Government; and the Lieutenant Governor trusts they will be found to supply full information in regard to the prosress made during the past two years in the Kangra Valley generally.
3. These papers, I am to explain, would have been forwarded earlier, but that the Deputy Commissioner subsequently intimated that the statement of lands held by tea-planters had been found to be not strictly correct. A revised one had been called for, which has not yet been receised; but the return inclosed is, in His Honour's opinion, sufficiently correct to conrey a practically true impression of the state of matters at present. A register of such lands is now regularly maintained, as enjoined by the Supreme Government.
4. The two points on which information was specially called for in the third paragraph of your letter were,-1. the feasibility of establishing a local treasury for the use of the planters; 2. the establishment of a British agent at Ladakh. The latter measure has, as the Government is aware, been fully carried out, and with every prospect of very great benefits resulting to the tea trade of the ralley. The former, however, His Honour regrets, has not yet become practicable, not only, as assumed by Mr. Forsyth, on account of the expense it would involve, but more especially because of the strong objections now very wisely entertained to increasing the number of small treasuries. But should Palampore hereafter advance in importance, so as to render it worthy of being ren-
dered
dered the head quarters of a Tehsil, it may, His Honour thinks, be found practicable, and even expedient, to transfer the Tehsil to this place from Kangra, as it is tolerably centrical with reference to all the richest and most populous portions of the Kangra Tehsil ; and the Lieutenant Governor considers that this is by no means unlikely, seeing how rapidly Palampore has hitherto progressed, as during his recent visit His Honour was much surprised to find a large and busy bazaar established at a spot which, five years ago, was under forest. It appears, moreover, to be of a permanent character, which he had not expected, the business carried on in it being by no means limited to the season when merchants from Tibetan Tartary are looked for. All this, I am to observe, has been the result of the deep interest taken by Mr. Forsyth in everything affecting the welfare of the Kangra Valley, and the great energy he has brought to bear upon the subject.
5. It will be seen from the papers now transmitted, that besides tea, ciuchona, slates, and China grass, are likely to become important articles of export from the Kangra Valley, and to afford scope, His Honour hopes, for the application of European capital and enterprise.
6. The completion of a cart road throughout the entire bulk of the valley, of which mention is made, cannot. His Honour thinks, but have a most important effect in promoting the interests of all those engaged in developing the resources of the valley, and of the population generally; and much attention has been devoted to the project by this Government. The road has been planned and is being executed by Lieutenant James Browne, Royal Engineers, an officer who is, I am to state, admirably qualified for such a task. Nearly the whole of the earthwork of the road has been completed throughout at gradients such as will offer no obstacle whatever to traffic on laden carts, and numerous small bridges and culverts have been completed, or are in progress. A brick-arch bridge of 140 feet span, the largest masonry span, His Honour believes, in India, has been successfully completed by him over a stream named the Niggal, and another of the same span is in progress over a second stream named the Barao. The completion of these two bridges will afford permanent cart communication between the plantations and Kangra, whence carts, ekkas, and gigs, now reach Hoshiarpur in the plains. A timber-truss bridge of 220 feet span is also in progress over the stream at Kotela, 12 miles from Noorpore; and by making scarps at the other streams not yet bridged, cart communication during the dry season with Pathankot will be opened immediately after the rains shall have closed.

Copy of a Memorandum from T. D. Fursyth, Esq., Additional Financial Commissioner, Punjab, to C. C. Aitchison, Esq., Officiating Secretary to Government, Punjab ; dated lst February 1868.

1. The Secretary to Goverument having called for a report on the progress made in the Kangra Valley in connection with the subjects mentioned in Sir R. Montgomery's minute upon the state and prospects of tea planting, dated 13th December 1864, I submit the following remarks:-
2. The accompanying statement, compiled in the Settlement Department, shows the extent of land occupied by planters, European and Native.
3. The total area has not much increased since 1864, at least so far as regards European plantations; as the landed proprietors have exhibited a very decided aversion to parting with an acre of ground, and all the efforts of the Government officials to induce them to do so bave failed. It is not that the planters have behaved in any way calculated to give offence to the people; for it is a remarkable fact, of which these English settlers may ficel proud, that hitherto they have secured the good will, and in many instances, the hearty attachment, of the zemindars, who frequently flock to some of the planters to seek adrice and belp in domestic trouble, or when involved in litigation.
4. The creation and maintenance of such a good understanding between settlers and the old inhabitants is at the bottom of all future success; with it, planters are alle to ubtain manure for their fields, workmen for their plantations, and supplics for their table; without it, there is enough difficulty in the matter of labour alone to ruin all the plantations in the valley.
5. As regards the difficulty in obtaining more land, it is perhaps as well that for the present more settlers should not come into the valley until the facilitics of communication are such as to enable the proprictors to import labourers from other parts. I propose to dwell on this subject before proceeding to notice the other points alluded to in Sir R. Montgomery's minute.
6. The circumstances of the Kangra Rajpoots are well known to His Honour. They are a proud race, disdaining to touch the plough, and thus they require to $h$ ave a number of labourers on their lands. But they do not object to the easy duty of looking after plantations, and even manipulating the tea, and thus it Las come about that these high caste rajpoots are much cmployed as overseers and superintendents in the factories, and bring a number of labourers to work in the plantations. These men are av erse to going any great distance from their homes, and for the present are content to receive moderate wages, viz., four rupees per mensem for common labourers.
But it requires the constant watchfulness of the authorities to prevent great injury occurring by the sudden disturbances of the labour market.
7. Any great demand for labour, where the supply is limited and inelastic, is productive of great inconvenience and loss to the planters. The systen of forced labour for repairs of roads has only just been put an end to; if, indeed, it has not entirely ceased. This was a crying evil.
8. Scarcely less grievous to the plantere was the aystem of competition which had sprung up between the different departments of works; so that workmen who were cmployed on one job would be enticed, by the offer of higher wages, to another work, and so on to a third, till at last the rate of wages became quadrupled.
9. The case shortly stated stood thus:-The supply of labour being a fixed quantity, it was very evident that, if the demand exceeded that supply, either the requisite labour should be sought for elsewhere, or else some work must suffer. Unfortunately it has been once or twice the case that the Government works, which being constructed for the good of the people, may be considered of the utmost importance, have been pushed forward by meana of raising the rates, and so drawing away the labourers from the plantations. The planters very speedily made known this real grievance, which was at once remedied.
10. Thus this difficulty has been for the time satisfactorily arranged; and it is to be hoped that ere long the completion of the new roads will release a large number of men who are now compelled to act as porters, besides setting free all the workmen on the roads, who will then have to scek their livelihood in the plantations and elsewhere.
11. It is not necessary to dwell upon the question of the manufacture or the quality of the teas, as in all this no aid is sought from Government.
12. The next subject to be considered is, how to get the teas out of the plantations to market, and which are the best markets.
lst. Regarding the construction of a road suitable for carts to the plains:
The Lieutenant Governor has sanctioned the construction of a broad road throughout the length of the valley. The orders originally were for it to commence from Noorpore, but I believe his Honor has now been pleased to render it complete by commencing from Pathankot, and throwing a bridge over the River Chukke, which is essential in order to make the road fit for cart traffic throughout the year.

The entire length of road from Pathankot to Baijnath is about 82 miles, of which the portion between Noorpore and Palampore is now being taken in hand.

In order to give immediate relief to the planters, it was determined to open out the upper part of the road first, and to connect the tea plantations with the Dhurmsala and Hoshiarpur cart road. With this in view, Lieutenant Browne, Executive Engineer in charge, has commenced to throw bridges with brick arches over the Nigol and Baneir streams, and it is reasonably expected that the planters will be able to send their teas to the plains in carts, viâ Kangra and Hoshiarpur, next winter.

A more detailed report on the progress of this road will doubtless be called for through the Engineer Department, if required.
13. The next subject is the public buildings asked for and sanctioned by Sir Robert Montgomery. These were a Rest House, Post Office, Dâk Bungalow, and Dispensary; and it was proposed by the Lieutenant Governor to make the revenue collections of Kulu and the sub-collectorate of Burwarneh available at Holta, if it could be done without additional expense to the State.

These orders were commenced to be acted upon in 1866, when Major Cracroft, then Deputy Commissioner, Kangra, first pointed out the site, which was approved by the planters, and has since become known as Palampore. His Honor, the Lieutenant Governor, has sanctioned the erection of the buildings named in the margin, of which the Dâk Bungalow, Circuit House and Post Office have been built, and the Dispensary and Tehsil are in course of construction. The Police Station has been provisionally sanctioned, and will be commenced so soon as funds are provided.
14. It is scarcely necessary to allude, in passing, to the advantages to the planters arising from having a small market town in their neighbourhood where supplies can be easily procured, and where a general rendevous is obtained.
15. The great inconvenience to which they were formerly subjected by having to go several miles to the nearest market place, and the disadvantage and positive loss caused by the frequent absence of their labourers and followers at the sub-collectorate at Burwarnch, cause the planters to appreciate greatly the transfer of the Tehsil establishment to Palampore.
16. It is said by some that there has been a slight enhancement of prices in consequence of the fair and the influx of visitors to Palampore, but the majority of the planters look upon this as a very small matter compared with the advantages derived from the establishment of a local market, and they have repeatedly expressed their gratitude for the efforts
$3^{8} 4$.

Circuit Howse.
Däk Bungalow.
Dispensary.
Naib Tehsildaree.
Police Station.
Post Olfice.

Which have been made to meet their wishes. It is only right that I should here make known their high appreciation of the aid rendered to them by Major Cracroft whilat he was Deputy Commenioner of the dintrict.
17. With regard to the proposal to make the revenuc collections available at Palampore, and the measurea taken to accommodate plantera in cashing bills and currency noter, it was propared to open a Sub-collectorate Treasury at Palampore, but this was objected to on the score of expense. If, however, funds could be obtained-as perhaps they may now be-by the abolition of any Tehail treasuries throughout the province, I would decidedly advocate the establishment of a nuall treasury at Palampore. At present, the arrangements made by me privately are for the agent of Seth Humeer Mull to open a branch establishment at that place, and he transacta a very fair businese in discounting hoondees and caehing notes for the planters, whose yearly requirements come to about one lakh. At one time it was auggeated to them that they should club together and defray the cost of exia establishment; but this met with no response, chiefly because they felt disinclined tu pay for Government eatabliehments. They desire greatly to have a treasury opened, for it would save them all the discount they now have to pay, and I adrocate compliance with their wishes, for the extra cost to the Imperial revenues would be exceedingly small, and if I am right in my surmise regarding the abolition of some Tehsil treasuries, it need be none at all, whereas the boon to the planters will be very great.
18. The establishment of a British agent at Ladakh, which was the last topic broached by the planters to Sir R. Montgomery, opens out such a wide field for comment, and has been so fully and frequently diecussed, that I need only remark here that the presence of Dr. Cayley at Leh, and the reduction of duties in Ladakh, though tea was always exempt, have given a great impetus to trade generally, and one direct reault of the Palampore fair has been to make traders from Yarkand and Cabool, and all parts acquainted with the Kangra tea plantations, and already purchases bave been made at good prices for foreign marketa, as well as for consumption in the Punjab. Thus it is hoped that a good, if not the best, market for the planters may be found at their own door, and this is what is desired.
19. The following extracts from a report made by Major Paske on the Cinchona and China grass plantations and on the slate quarries are given as relating to the enterprise of British settlers in the Kangra Valley.

Extract (paras. 14, 15, and 16) from a Letter, No. 16, dated 3 January 1868, from Major E. Paske, Deputy Commissioner, Kangra, to Colonel R. Young, Officiating Commissioner and superintendent, Jullundhur Division.

Para. 14. I have again visited the plantation in November last, that is, within eight months of my previous visit. Plants which I saw as young seedlings a few inches high on the occasion of my first visit are now most of them healthy and promising young trees, many of them three feet ligh. Burwarneh. which stands 3,198 feet above the level of the sea, is evidently a very suitable altitude for the growth of the Cinchona: equally suitable positions could be selected in uumerous localities throughout the valley if only the land could be secured. I recently observed a remark in a local newspaper to the effect that the Cinchona plant could only be reared as an exotic in the Kangra district. But my visits to the Cinchona Company Plantation convince me that all the young trees are as fresh, vigorous, and healthy as though they were indigenous to the soil. Mr. M‘Kay informs me that his only difficulty is to secure sufficient land. All he has obtained for the company* has been planted out; he has now a stock of young seedlings ready for transplanting, which would cover 30 or 40 acres if ouly he could obtain the land.
15. In regard to China grass, I have recently submitted a report upon the introduction and culture of this important fibre in the Kangra district. I may here briefly mention that China grass has been introduced and successfully cultivated by Mr. J. Montgomery on his estate at Ram Bagh, Kangra. From my visits to his plantation, I feel satisfied that the plant might be cultivated with great success all over the valley; and, if only in quantities sufficiently large for exportation to Europe, its cultivation and the manufacture of the fibre will be attended with remunerative results.
16. Slate quarrying deserves some mention in this report,-operations in this branch of trade having become very extensive owing to the introduction of European capital and enterprise. An English company, with a large capital, farm the extensive quarries at Kunnyara, six miles from Dhurmsala, The roofing slates produced from these quarries are of excellent quality, and are used not only throughont the district, but are largely exported for buildings at Julinder, Umballa, and other stations. The demand for these slates is increasing, and the company find difficulty in producing supplies rapidly enough to meet requirements. The works are in charge of a professional engineer, and a tramway is being constructed along the main gallery leading to the quarries. The company are desirous that the Goveroment should construct a cart road from Dhurmsala to the quarries, and thereby facilitate the transport of slates required for public buildings.

[^1]STatement of Land heldin the Kangra Dibtrict ly Tea Planters, European and Native.


From W. S. Seton-Karr, Esq., Secretary to the Government of India, Foreign Department, to the Secretary to the Goveroment of Punjab (No. 249.) ; dated IOth August 1868.

I have laid before the Viceroy and Governor General in Council your letter No. 528-623, dated 13th ultimo, and the report which accompanicd it on the progress made in tea culture in the Kangra Valley.
2. With regard to the question of labour, his Excellency in Council desires me to observe that the labourer has the right to expect the best price he can obtain for his work, and that nothing should be done to prevent the rise of wages in the natural way according to the supply and demand of the market.
3. Concerning the proposed treasury at Palampore for the planters, the Governor General in Council is of opinion that the first consideration is the general convenience of the people and the fiscal arrangements of the country. To abolish local or tehsil treasuries, and so to force the people to go to a distance to pay in their instalments of revenue, would, His Excellency in Council thinks, be a very questionable policy.

> No. 67.-Revenue (Foreign).
> The Secretary of State for India to the Governor General of India in Council.

India Office, 31st October 1868.

1. I have considered in Council the Despatch from your Excellency in Council, numbered 35, Foreign Revenue, and dated the 15th of August, with which you forward a copy of the proceedings of the Government of the Punjab on the progress made in tea culture in the Kangra Valley, and of your reply to them.
2. These papers show a satisfactory progress in the establishment of tea culture, and in commercial enterprise in the Kangra Valley. This progress seems to be of a permanent character, and to extend to an important quarrying of slates, with the prospect of a considerable export trade in that article, as well as in Cinchona and China grass, which products promise to succeed in this region.
3. I concur with you in your observations on the demand for labour and local treasuries.
4. These papers are highly creditable to the energetic superintendence of Mr. Forsyth.

I have, \&c.
(signed) Stafford H. Northcote.

# SELections from the Records of the Govrrnmrnt of the Punjab and its Dependencies.-New Series.-No. 2. 

## CONTENTS


memorandum on Routes from the Punjab to Eaftebn Turiebtan. By T. D. Forsyth, Esq., c.b., Commissioner and Superintendent, Julinder Division, Punjab.

Tris President of the Royal Geographical Society in his address at the last anniverary meeting of the society has remarked on the grand and impassable mountain region lying between the Central Asiatic countries occupied by the Russians and our great empire of India, and the complete separation of India from Eastern Turkestan.

Similar opinions regarding the "impassable bulwark of the Himalayas and the mighty barrier of the Kuen Lun, whose mountains rise like a wall 17,000 feet high, with scarcely a crest or depression throughout the entire extent," have been given forth by writers at different times, but now they have received from the mouth of the learned President the fiat of authority, as he refers for a confirmation of his opinion to an article in the "Edinburgh Review," which he tells us was written by an efficient pullic servant in India.

Now, if official information is to be quoted as the basis of opinions delivered ex cuthedra by so important a personage as the President of the Royal Geographical Society, it is necessary that such information should be correct.

Whatever may be the opinion of writers at a distance, it is a fact well known to traders and officials on the spot, who have given their attention to the subject, that the Himalayan range, oo far from being impassable to traders or even armiee, has been already crossed by both, and abounds in easy routes hitherto perhaps but little frequented, owing not to any insurmountable phydical difficulties, but to political or fiscal opposition, and now being opened to general traffic.

The most valuable information on the subject of routes to Central Asia bitherto put forth is that contained in a letter and memorandum submitted by Captain Montgomerie, r.e., on the 20th July 1861, to the Punjab Government, and publighed in Mr. Davies' Report on Trade.

The whole paper is well worth perusal, but the following extracts are given for convenience sake bere:-
" There are several routes from the Punjab to Eastern Turkestan, but three only are ever likely to be available for trafic ; the first is viá Cashmere and Leh; the second viä Mundi, Kulu, and Leh; the third viá Simla, Garo, and Rudok. The Cashmere route is either direct vià Skardo or by Ladak; the Mundi road starting from Noorpore, Amritsir, or Loodianah goes by Kulu, and the Simla route either viá Sooltanpore, Kulu, and the Baralacha Pass, or by the Parang La (Pass), or avoids Ladak altogether, traversing the Chinese territory, but all, except the latter, cross the Karakorum Разs."

The most direct route to Yarkand, taking the sea at Kurrachee as the starting point, is that via Mooltan, Jhelum, Cashmere, and Skardo, but as pointed out by Captain Montgomerie, "it is not generally well adapted for traffic."
" The next route, viâ Jhelum, Cashmere, and Leh to Yarkand is, in Captain Montgomerie's opinion, ' not ouly the shortest but the best and cheapest route for traffic from the sea to Eastern Turkestan.' From Jhelum to Leh (Ladak), the route through the mountains is better than any other that traverses the Himalayas; the road between the plains and Leh crosses the Himalayan range by a very remarkable depression of only 11,300 feet, and none of the passes on it exceed 13,300 feet in height, and they are, moreover, open for at least seven or eight months in the year, and could be crosed at any season in fine weather. There is, moreover, between the plains and Lch but one or at the most two halting places without a village in the vicinity, in iteelf a very great advuatage."

## The next route in use is that viâ Mundi and Kulu.

"The greater part of the traffic between the Punjab, Leh, and Turkestan, is carried on by this road, and after the road viâ Cashmere and Leh, it is decidedly the best route from the Punjab to Eaatern Turkestan, Yarkand, \&c.; though the passee between the Chenab
$3^{8} 4$.
(Chandra
(Chandra Bagha) and the Indus are very high on this route, yet the slopes are so easy that there is but little difficulty in crossing. The route is open for about five or six months, being mearly turo moathe less than the Caehmero route. Those are, moreover, nine or ten narches over very elevated bleak mountain land without any villages. To the East of the Baralacha, there is no roate well adapted for traffic with Fastern Turkestan."

Captain Montgomerie then gives the following comparative distances by the three routes:-


Taking Amritsir as the starting point, Captain Montgomerie gives the distance to Lell by the Cashmere route at 40 marches, or 515 miles, and by the Mundi route at 41 marches, or 525 miles, over a very much more difficult country.

But it was then pointed out that, owing to the heavy customs duties in Cashnere, the Kulu route was most frequented. Captain Montgomerie then remarks that:-
" Every endeavour should be made to improve the roads when a small outlay is likely to he effectual; and if possible camels should be taken as far as Kulu. The Cashmere road offers great facilities for allowing camels to pass, and a very swall expenditure would be sufficient to make the present road passable for camels. The louble-humped camel has been brought to Leh several times, and it is capable of carrying burdens over the highest passes. Ladakh itself offers but few obstacles to the passage of camels."

According to the state of affairs as represented by Captain Montgomeric, Leh, the capital of Ladak, was the point farthest north to which he carried his comparison of routes, that place being the great market for exchange of goods between Central Asia and Hindoostan. And as is clearly shown by him, the choice lay between the route from Aınritsir viâ Cashmere to Leh, and that viâ Mundi-Kulu to Leh, the difference between these two routes being one march or 10 miles in favour of Cashmere in actual distance, besides crossing lower passes, and being open for many more months in the year. Moreover, it was then the case that camels could be taken for 15 marches along the Cashmere route, and only 10 marches along the Kulu route.
But since 1861 great changes have taken place, and it is proposed now to consider the comparative merits of the different routes to Yarkand.
Taking Leh as still the great entrepôt of Central Asian commerce, though it will be ahown hereafter that this is likely to be changed, we may view the improvement made on each line.

When Captain Montgomeric wrote, there was no Mooltan and Lahore Railway, and his calculation of distances by water will have to be set aside.

We may take Amritsir as our starting point, that being the chief cmporimm of trade, and we know that the Maharajah of Cashmere desires all trade to pass by Jamoo, and will give every facility to traders by that line. The road from Jamoo over the Bunuhal Pass to Cashmere is not so easy as that by Jhelum, though the pass to be crossed is lower. In a few years' time the railroad to Rawul Pindee will be opened, and possibly this may cause some altcration in the point at which Cashmere is entered. As the Maharajah has lowered his duties, and perhaps ere long may abolish transit duties, it may be taken for granted that in a few years' time fiscal considerations will have no weight in determining the line taken by traders.

It may safely be predicted that there will be a vast increase of trade along this line,
and perhaps the greater advantages of the Cashmere route with its frequent villages may induce merehents to take that lise in preference to snether ahorter one.

As our object is to extend trade without obtaining any monopoly or preference for any one route, every improvement made ar facility offered l,y the Maharajah will be welcomed ${ }^{2 s}$ proving the identity of his intereate with ours

We may now review the improvenent made or contenpplated on the Kuhu lime.
In the first place, a cart road is uader congtruction throughout the whate length of the Kangra valley. At present it is only to entend to Palampore, but Wuzeer Groghann, the energetic Prime Minister of Mundi, is anxious to continue the road to the salt mines at Gumar, and this work, it is hoped, may be completed in a few years.
Gumar is 16 marches from Armitsir.
As the Rawul Pindee railroad has been mentioned, it is only fair to take inte considerar tien the possibility of a railrond to Pathankot, the project for which is already under the consideration of the Government.

From Gumar a new road over the Bubboo Pass has been made to Sooltanpore-Kullu through Mundi territory, thus saving one march of 16 miles. The road was originally intended ouly for mules, but the gradient is so easy that there will be no difficulty in taking camels over it when it has been properly widened. Once in Kulu camels can travel with perfect case up the Beas valley as far as Pulchan, the foot of the Rotang Pass, a diatance of 23 marches from Arritsir.

From Palchan to Leh, the rood ia pasesble for laden molea, and that portion through Lahoul is being improved with slender fumds placed at the district officer's dieposal. Supplies are collected at every stage, and serais are being built at the most desolate halting places in Britigh tarritory.

Thue instead of the Cashmere route being 10 miles shorter as formerly, it is now five mikes longer, and instead of camele going 15 noarches on the Cashmere ruute, and only 10 on the Kulu road, they will be able to go 23 marches un the latter road, or atill better, carts can be taken for 16 marehes to Gumar.
At present the rates of carriage hire are considerably lower by Caslmere than by Kolu, a difference of 7 rupees or $14 s$. per horse load being in favour of the former road.

This is owing chiefly to the exceptionally bigh rates charged in Lahoul, arising out of the plysical diffieulties which formerly exiated, but are now being removed.
Foymerly no laden animals could crose the Rotang Pass, and merchandize had to be tranaported on men's backs. When the trader reached Laboul, he found himself at the merey of the inhabitants, who fixed their own terms for the bire of cattle, and often aubjected the traders to great annoyance. To such a degree div they carry their annoyance that ever since the road has been made passable for animals, they have tried to assert their right to the monopoly of carriage, and in many ways caused inconvenience to merchants.

Arrangements have now been made for increasing the supply of carriage in Lahoul, and traders have been informed that no monopoly of carriage is allowable. But though improvements have been made on this road, there is still much left to be done, if we would see trale flowing throughout the line without any interruption. When the trade shall have acquired sufficient importance, if it be considered not to have attained that point already, it may be hoped that a proper staff of engineers may be appointed with suitable funds to render the small piece of road from the Rotang to the Lingti, a distance of 10 marches, as feasible for traffic as the Hindoostan and Tibet road has been made. At the outaide, the whole cost could not exceed half a lakh of rupees.

From Lingti, the boundary of Britiah territory, to Leh, the road passes over two easy sloping passes, 17,000 feet high, and crosses a large level plain. The road is perfectly practicable for laden animals, but would be of course improved if labour were applied to it every year.

But we may now consider the effect produced on the different routes by opening out the line between Yarkand and Leh by the Changchungmo valley, by which the Karakorum Passea are avoided.

Regarding the advantages of this route over all others, we have not only the testimony of Mohamed Amin, guide to Adolphe Schlagentwcit, as also of Mr. Dohnson, but this year the road has been thoroughly examined and reported on by Dr. Cayley, who has satisfied himself that as far as the head of the Karakash river, there is no obstacle whatever to the passage of camels and laden animals of all descriptions. From the Karakash to Yarkand, no difficulties exist, and at a meeting of traders held in Leh in September last, the traders expressed an unanimous desire to see this route brought into general use. The Yarkand Vakeel, who was at the time in Leh, on his return to his own country, not only expressed his concurrence, but is now on his way to larkand by that route.

Why a road so free from difficulties should have remained closed so long, and why merchants should have been compelled to take the distressing and difficult route of the Karakorum has not been satisfactorily explained, but we may hope that in future it will be abandoned. And in any case we have eatablished the fact beyond all controversy that the statement regarding the Kuen Lun range rising like a wall to separate Hindoostan from Turkestan without any depression is quite a fiction.

With the prospect then before us, of seeing this route opened to general traffic, I have just travelled over Ladakh to ascertain whether shorter routes to Hindoostan cannot be found than that which passes through Leh.

Starting fromi Leh, the road to the Changchungmo proceeds along the bed of the Indus in a south-casterly direction for two marches to Chimray, and then striking northwards $33_{4}$
across the Changla Pass, 17,040 feet high, takes an easterly direction along the Jankse valley to the Pangong Lake, six marchee from Lel, where it enters soon afterwards to the Changchungmo valley.

Now, a glance at the map will show that traders from Hindoostan coming by the
*Marked red on the map.

## +Marked red on

 the accompanying mup.Pangmit to Meyrick
Shushul -
Chagga
Modh
$-\quad-4$
if this line
were taken it would pass by Puga and join the old line at Rukchen.
§This rate, it is hoped, may be reduced when the Changelangmo route is brought into use.

Mundi-Kulu route* would reach the Changchungmo and Leh route at Marsalung, opposite to Chimray. But unless the object of the traders were to go to Leh for the sake of changing carriage, or for other purposes, I have ascertained, by personal examination, that a much shorter and remarkably easy route can be taken from the Pangong Lake to the Lingti (Lahoul).

Tlis route $\dagger$ starts along the south bank of the Pangong Lake for 12 or 14 iniles, and then passes over broad undulating plains to the Indus, along which it runs for about 15 miles, till the village of Modh is reached, at the end of the fourth march. A still shorter route to Modh from Shushul, over an easy pass, is indicated by Mohammed Amin, as being passable for ponies. $\ddagger$

From Modh the new route would cross the Indus, and rench the south of the Tsho Morari Lake in three marches. Thus far the road from Yarkand is perfectly practicable for camels; grass, fuel, and water are to be found at every stage south of the Changchungmo, and north of that line we have Dr. Cayley's authority that at only one or at the most two stages are grass and fuel difficult to be procured.
From the south of the Tsho Morari Lake the road would proceed westwards to the Pankpo Pasa, not yet visited by me, but reported by the inhabitants of Rupehu and by traders who have crosed it to be very easy, and with a little expenditure of money and labour it might be rendered completely passable for all animals.||

Across the Pankpo, the road would be taken along the banks of the River Tarap or Cherap for one march till it joined the Kulu and Leh road at Lingti. This road from the Tsho Morari is even now used for traffic at certain seasons of the year.

By this route two high passes and five marches are saved between Lahoul, the extremity of British territory, and the Changchungmo, and as merchants desire, as evinced this year at Leh, to trade direct with Yarkand, this route will be found most advantageous and cheap.

At present the cost of hiring a horse to carry goods from Amritsir to Yarkand is 72 to 75 rupees. $\$$. Now, when camels can travel as far as Pulchan, the foot of the Rotang on the south side, and as far as Kiangdong, south of the Tsho Morari on the north side coming from Yarkand, there will be only 14 marches left for goods to be transported on ponies or yaks, even if the intereats of the traders are not sufficiently important to justify the completion of the whole road throughout for camel traffic. The cost of freight may then be calculated as follows:

| Hire of camel to Pulchan, 23 marches | - - | $R s$ 12 |
| :---: | :---: | :---: |
| Hire of pouy and porters to Tsho Morari, 14 marches | - - | 14 |
| Hire of camel to Yarkand from Tsho Morari, 30 marches |  | 12 |
|  | $R$ s. | 38 |

i. e., 38 rupees for four maunds, instead of 72 rupees for three maunds, as at present.

These rates, however, are conjectural ; the hire of a camel in the plains of Hindoostan is not more than eight rupees per mensem for a load of six maunds, whereas here the calculation is at the rate of 12 to 16 rupees per mensem for four maunds.

It may be at once objected that the idea of camels being found for hire at the Tsho Morari or in Kulu is quite absurd, and looking at the present state of thinge, it would be of course out of the question. But all these proposals presuppose the establishment of commercial relations between Hindoostan and Central Asia on a proper footing, when it will be easy to arrange that the caravans from both ends shall meet and exchange their carriage.

[^2]At present there is one oljection to this line, that supplics of grain are not to be had. This, however, is an evil casily capable of remedy. More grain is grown in Ladakh and Sjiti than suffices for the wants of the inhabitants, and this ycar, owing to the aloolition of the oppressive restrictions formerly placed on the export of grain from Ladakh, a large quantity has been taken to Rudul, in Chinese Tartary. Now, Rudok is much farther than the Pangoug or Taho Morari, and there can be no difficulty whatever in inducing the exporters to take their grain to either of these places, when once they are assured of a good market. A very common objection which arises in men's minde, and often finds expression in depreciation of the idea that any trade can flourifh acrose these mountains, is derived from the fact that such high parses have to be crossed, such cold encountered, and such hardships endured in marching for many days without coming in sight of villages.

But we are not writing for English inerchante, whio are accuetomed to eend their goods by rail, and travel themselves in comfortable carriages. We have to deal with a nation accustomed to all the hardships and fatigue of long caravan journeys. And as everything goes by comparison, let us see what is the state of trade in other furts of Asia.

No one doubte the vitality of the trade between Bolhara and Russia, or letween Russia and China. Yet what is the description of the hardslips undergone by merchants on these routes? I quate from Michell's "Travels in Central Asia," page 489:-
"Overcoming in this manner the obstacles which the barbarous Aeiatics place in the way of the development of Rusiian trade, the natural impedimenta by which nature has cut Russia off from that rich oasis watered by the Syr and Amu remain to be considered. The chief obstruction is preeented by a vast extent of barren step 1 es, traversed, however, by five principal routes, vie., first, from Khiva to Mangysblak on the Caspian; second, from Khiva to the western shore of the Sca of Aral, towards Orenburg; third, from Bokhara northwards to Orenburg; fourth, from Taehkend along the eastern border of the Kirghiz Steppe to Troitsk; fifth, to Petropaulovek. Of these the first named is the shortest, not exceeding 1,000 verste, but it pasees through waterless regions infested by pillaging Turkmen, and is for these and other reasons unfrequented. The second route, which is 1,300 verits long, is open to much the same objections, and is therefore erqually neglected. The third road, that in ordinary use, leads from Orenburg to Ores, 225 versts, from thence to Fort No. 1 on the Syr Daria, 721 verets, offering a eafe travereable road for vehicles; further on, again, to the Yani Daria river, about 200 verste, and, lastly, trends southwards through a completely waterless steppe for 300 versts, from whence to Bokhara there remains a distance of about 200 versts, over sandy but less arid localities. The whole distance from Orenburg to Bokhara is reckoned at $1, i 00$ versts. From the fortress of Orik to Bokhara there are 40 etages, and as many from Troitek to Tashkend. Along this last route good pasture for cattle is found. Still better, however, is the road from Tashkend to Petropauloves, which is throughout the whole distance passable for wheel carriages, and though it extends across a barren steppe, wells are to be found along it.
" The length of this road is 1,600 versts. It is only lately that certain kinds of goods are transported from Russia into the steppe as far even as the banks of the Syr by means of oxen and carts. The ordinary mode of carrying goods is on camele, which animals are alone capable of supporting the want of water, or of drinking water of bad quality, while they can also subsist on the prickly sbrubs of the steppes. Goods are despatched by caravans, and only at those seasons of the year when snow hurricanes in winter, and the sultry heat and aridity of summer do not render the steppes impaseable. Owing to these circumstances, only two caravans pass between Bokhara and Orenburg during the year, and the number of cattle and men forming the caravan is in proportion to the difficulties to be encountered on the journey. The number of beasts of burden in the caravan is also governed by the supply of water and pasture along the road. The route from Kliva to the Caspian has been abandoned on account of the scarcity of water and pasture. Caravans are from two to two and a half months performing the journey from Orenburg to Bokhara, and vice versâ. The cost of transporting goods is from five to fifteen roubles, or averaging 10 roubles; $1 l$. $10 s$ s. per camel carrying a load of 16 puds, or 576 pounds avoirdupoia. From Orenburg to Bokhara the price paid is 60 copecks per pud, or 5 s .8 d . per $\mathrm{cwt}$. ."

The following description of the extraordinary route by which tea is conveyed to Russia from China is taken from Mr. Lumley's report:-
" A considerable proportion of the tea destined for the Kiachta overland market is sent direct from Hankow down the Yang-tse-Kiang to Shanghae; some is aleo sent from Foochow and Canton to Shanghae, but most of it is collected in the province of Fukien, to the north-east of Canton, from whence it is despatched by land or water to Chuh-Chau. Thence it is conveyed by coolies, in the manner described by Fortune, over the mountains to Kiu-Chan. Here the tea is loaded in small boats, taking about 200 chests each; it is then conveyed 40 verats down a stream into the Chen-tang, where it is re-loaded into boats carrying j00 chests. Passing the town of Hangchau, the boats emerge into the Liastern Sea, and coasting along reach the River Kisiang, up which they proceed to the town of Shanghae. Here the tea is re-londed into larger vessels, carrying as much as 1,500 chests, besides other goods. These vessels, after leaving Shanghae, proceed along the coast to Tientsin, which place they reach, if the weather is favourable, in about 15 days.
"The tea is once more re-loaded at Tientsin into small boats taking about 200 chests, which follow the windings of the stream Barboe, and reach Tienshai, about 22 versts from Pekin, in the space of 10 days. From this point the tea is trausported by land on camels and in bullock carts to the frontier fortress Changkeakau or Kalgan at the great wall, a
distance of about 252 versts, and thence across the steppe or desert of Gobi, 1,282 , to Kiachta.
"The transport of tea from Fukien to Kiachta occupies two or three months, according to circumstances."
From Kiachta the winter route is by Selenginsk and Verkne Udinak, and acrose Luake Baikal over the ice to Irkutsk, a journey of from eeven to eight days.

This winter route is generally available from the middle of January to the middle of April. Lake Baikal is $\$ 30$ miles long and 40 miles broad; there is occasionally great difficulty in crosaing it, in consequence of its surface being free from snow, as it is seldom completely frozen till the snow-fall has ceased.

At Irkutsk, the capital of Eastern Siberia, part of the tea is retained for sale in that province, and of the January arrivals n portion is forwarded to the fair at Irbit. At this fair purchases are made for Western Siberia, and for the Governments of Perm, Kazan, Archangel, Orenburg, Viatka, and Vologrla. The tea despatched in February to Tomsk gencrally remains there during the epring, at which time the roads are impassable, and in the month of May it is sent from Tomsk to Tiumen, partly by land but chiefly by water, that is to say, by the Aiver Tom into the Ob , from the Ob into the Irkutsk, and thence into the Tara, by which strenm it reaches Tiumen abont the latter end of June. From Tiumen the tea is conveyed by land to Perm, a journey of about 12 days; here it is loaded into craft on the Kama, down which river it is carried into the Volga at Kazan, and thence up the Volga to Nijni Novgorod, which place it reaches about the end of July. Nijni Novgorod is now connected with Moscow by railway, a journey for passengers of 12 hours. The transit from IKiachta to Nijni Novgorod often occupies six monthe, owing to the delaye occasioned by the ice on the rivers, but it is sometimes performed in half the time.

The distances by this route are as follows:

| Fran Kiachta to Irkutsk | - | - | - | - | - | - | Versts. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| " | Irkutak to Toraak | - | - | - | - | - | - |
| 1,554 |  |  |  |  |  |  |  |
| " Tomsk to Tiumen | - | - | - | - | - | - | 1,768 |
| " Tiumen to Kazan | - | - | - | - | - | - | 1,236 |
| " Kazan to Moscow | - | - | - | - | - | - | 821 |

The distance from the tea-growing districts to Kiachta is reckoned at 500 versta, making a total of 10,936 versts $=7,921$ miles, which the caravan tea has to traverse before it reaohes the Moscow market.

We are told by Mr. Lumley, on the authority of General Kryvanowski, that, in consequence of the Tungani insurrection in Chinese (Eastern) Turkestan, and the trade between China and Kashgar being stopped, Central Aeia had to go without tea. Some of the enterprising Tasbkend merchants, however, ordered large supplies from the fair at Irbit, a distance of 3,000 versts.

Now, from the foregoing extracts it will be seen that caravans are from two to two and a half months' journey between Bokhara and Orenburg, and cross three large deserts. Between Yarkand and Palampore, where the fair may be taken to correspond with that at Orenburg, the journey by the route just indicated will take 55 days, and as caravans would only pass during the summer months, when all the snow would lave disappeared from the passes traversed, no inconvenience from cold would be felt, and for the rest, there is more water, fodder, and fuel to be found on this route than is to be had on the Bokhara and Orenburg line. It has been said that the road over the Himalayas is only traversable for a short time each ycar, but so also we find it to be the case on the Russian line, and there is no reason why we should demand impossibilities for our route, or abandon it because we cannot effect what is contrary to custom.

The case as regards tea is still more remarkable. From Kangra to Yarkand is only a journey of two months, just about as long as the ten takes to reach Shanghac from the Chinese plantations; from Yarkand to Taslakend the journey takes 20 days, and yet, owing to our want of proper intercommunication with Russia, the merchanta of Tashkend had to get their teu viâ Irbit, a distance of 5,000 miles, whereas they might have got it direct from Kangra or Hindoostan, a distance of less than 1,000 miles.

A word too may be said on the subject of the great barier which a mountain, 17,000 feet high, is eupposed to offer to trade. Such a remark can only be made by a person wholly unacquainted with the Himalayas. All who have travelled in these regions know that, with the exception of the Rotang, the lowest pass of all, the other passes are approached by long casy inclines over the Rotang; a mule road has been made, and may be still further improved as the increase of traffic eliall demand it.
There is no intention, in putting forward this paper, of endeavouring to create a prepossession in favour of this Himalayan route over the more popular and casy route, via Aftghanistan. But there is this one prescnt arlvantage in favour of this mountain line, that no hostile countries have to be crossed. As soon as Cashmere territory is left, the caravana reach Yarkand, the ruler of which country would gladly enter into close relations of friendslip with us; and oniy a few days ago a letter from a tea planter appeared in one of the Indian newspapers, lamenting that, although such excellent prices were to be had for these teas if they could only reach the Russian frontier, this was
impossible
impossible viá Affghanistan, owing to the present unsettled state of effairs and the utter ahsence of all protection of Britieh interests. Had the Indian tea planter known of this ronte now pointed out, he might have sent off his teas, and realised the high profits which he says await his grasp.

Briefly to summarise the improvements which have taken place since Mr. Davies' Report of 1863 was published. Then the chicf obstacles to trade were the heavy duties levied by the Maharajah of Cashmere at Leh and on the frontier of the Punjab, the difficult route over the Karakorum, and the insecurity of the road between Lch and Yarkand; also the rugged and uninviting character of the road between the Punjab and Leh, viê Mundi and Kulu. Still, with all these difficulties and restrictions, as remarked by Captain Montgomerie, from time immemorial there has alwaya been a trade between Hindoostan and Eastern Turkestan, and the wonder is not that the trade should bave diminished, but that it should still survive.
Since then we have seen the following improvements effected. The customs duties of the Cashmere Government have been reduced to an uniform rate of 5 per cent. ad valorem, and all obnoxious cesses and exactions have been abolished. The Maharajah has opened out the route tbrough his territory, and by establishing fairs at Jamoo and Leh has given great inducements to traders to frequent the Ladakh market.
It has been satisfactorily shown that an easy, safe, and expeditious route free from obstacles exists, and can be used at once, between Yarkand and Ladakh, and if a comparatively trifing expense be incurred, this road can be continued over the Pankpo Pass to British territory, and thus the passage of caravans between Hindoostan and Turkestan will be accomplished with at least as much ease as can be performed by caravans between Bokhara and Orenburg.
Further, we have in our favour the openly announced desirc of the ruler and people of Yarkend to trade with us, and their very urgent demand for tea, of which the neareat point of supply is reached much more quickly by the Mundi-Kulu route than by any other. Secing that the Kangra tea plautations are only 55 days distant from Yarkand, where four rupees (eight shillings) per pound are readily given for inferior kinds of tea, whereas Calcutta is the next nearest point for China teas to be procured for the Turkeatan market, it may be hoped that the Kangra planters will not be slow to avail themselves of the advantages now offered them.
No mention has been made by Mr. Davies or Captain Montgomerie of the route to Yarkand and Kashgar, from Peshawur viâ Chitral, which some writers suppose must supersede all other lines. As this route passes through countries infested with fanatical tribes always hostile to, and at present in antagonism with, the British power, it may be time enough for us to discuss the comparative merits of the different routes when they are all equally open. But, in addition to the testimony of Mohamed Amin, who describes the Chitral route as the easiest of all, except the Cliangchungmo, I may mention a fact within my own cognisance. For several days on my journey to Lch I was accompanied by two merchants, natives of Boneir, who told me that they had formerly traded by the Chitral route, but last year, hearing in Yarkand of the facilities offered to traders by the Ladakh route, they came that way. They are now returning by it, and said the superiority of this line was so great that they should always adopt it henceforth.

21 September $1868 . \quad$ T. Douglas Forsyth.

## Report on the Route to the Karakash River viâ the Cimangciungmo Valley and Pass.

I hava the honour to submit the following report on the route to the Report on route from Ladakh to Easten Karakash river, viâ the Chanchungmo Valley and Pass.

Turkestan, ol $i$ Changchungmo, to th Karakash river.

1. My object in travelling over this road was to ascertain if it is superior or otherwise, Object proposed to for general purposes of traffic and communication, to the route by Nubra and the Karakorum be obtained by exPass. I had often heard the Changchungmo route described as practicable and easy, but ploring the route. at the same time there were conflicting accounts recarding it: sometimes it was said to be unsuitable owing to absence of water and grass, and other objections were made against it. In former years there was undoubtedly a frequented road in that direction, as well as one further enst through Chanthang to Khotan; but for many years the Changchuaguo route has been alnost disused, and Chanthang is entirely closed by the jealous exclusiveness of the L'hassa Government. The former of these roads was taken by A. Schlagentweit in 1857, and again by Mr. Johnson in his journey to Khotan three years ago; but the road which I followed differs somewhat from that taken on either of the above occasions, and is shorter and better supplied with both grass and water.

Wha accompanied by the Cashmere Vakeel, who will be able to report to his own Government on the route.

## Gives the atafes,

 the distances between each. Re= marks on state of the route and features of the country Explains why he did not himself follow precisely this line.2. I was accompanied on the jouruey by Kazi Kutab Din, the vakeel of the Maharajah of Cashmere, and I was very glad that he should see and judge of the character of the route, and be able to describe it to his own Government. I cannot help acknowledging the zeal and energy with which he entered upon the undertaking in spite of the most discouraging reports, and the cheerfulness with whicls he bore the fatigues and discomforts of the juurney. The Wazir of Ladakh, Ali Akbar Shah, gave every assistance in our preparations for the journey.
3. In the following itinerary I have not given the exact marchee we made either on going or returning, as on the outward journey we were, owing to the ignorance of the guide, more than once led astray from the proper route; and on the retura, from a similar cause, we weu forced to take double marclies as far as Changchungmo, as at the Karakash river I discovered that our supplies of food had run short. When we left our heavy baggage in Changchungmo valley, I ordered the servants and coolies to carry on with them provisions for 14 days; but the guide, an old "shikaree" of great repute in these regions, assured them that by the route he knew we should be back much more quickly, and they, without my knowledge, only took on enough for 10 days. On this account we had to hurry back at all speed, and met our fresh supplies only after the last morsel of food in camp had been consumed. I have, however, described the exact line of roall taken on the return march, but divided the stages into convenient distances, where at the same time water, grass, \&c. are procurable at the halting grounds.
4. Stage 1st, Leh to Tiksey, 12 miles.-An easy level road, first down the Leh valley, then up the right bank of the Indus to the large villnge of 'likse.

2nd. 7'iksey to Chimray, 16 miles.-Direction south-east, up the Indus, and then north-east up the Chimray valley. Road good and nearly level. At Chimray is a large village; just opposite the entrance of the Chimray valley there is a good bridge on the Indus at Marsalung, the second stage out of Léh on the main road from Lélı to Lahoul and Kulu.

3rd. Chimray to Zingrál, 10 or 11 miles.-North-east up the Chimray valley through the villages of Sakté and Chigar. The road is good but ascends considerably. There is no permanent village at Zingrál (Zhing-ral means the "field decayed or ruined.") There is here an old artificial lake and traces of former habitation and cultivation, but only huts and tents occupied during summer by shepherds. Grass and fuel are plentiful. From this place there are two passes over the range of mountains bounding the Indus valley on the north (the Kailás or Gangri range); one, the Changlá, goes over to Durgul (Changlá, eastern pass) ; the other, the Kayla (neck pass), leads direct to Tankse, and gives half a day's march. I returned by this pass: it is much higher than the other, being 18,400 feet, and though shorter, the ascent and descent are steep and stony, and it would probably never become much used; it is now, however, often taken by the traders to and from Rudok to save time. I would here observe that in the new Trigonometrical Survey Map of Ladákh these two passes, the Kayla and Changla, are made to lead over from the head of the Ugú valley further to the east, and not from the Chimray valley, as is really the case; this is an error very likely to mislead travellers. The pass at the head of the Ugú valley, the Ugula, is merely an almost unused foot-track, and leads over into another valley far to the east.

4th. Zingral to Durgu.-About 18 miles over the Chang-lâ, direction north-east.
The road, which is much frequented, leads by a very gradual ascent of about four miles to the crest of the pass, which 1 eslimate at about 17,000 feet high. The descent is easy and gradual, down a valley which is at first a little stony, but soon becomes wide, smooth, and grassy. After about 12 miles, the road turns east over a sandy alluvial spur to the village of Durgu. The pass is excessively easy, and the road does not offer a single difficulty.

5th. Durgu, through Tanksé to Muglit, 15 miles.-First south-east to Tantsé, seven miles, where there is a villnge and Government depôt at which stores of all kinds, as flour, barley, gluee, sheep, \&c., can be procured; then north-east for eight miles to Muglib, where there is a small village, and wide grassy camping grounds. The road is good, and nearly level, running along the stream, and generally over smooth lawn-like turf.

6th. Muglib to Lukung, 14 miles. -First 12 miles south-east, along a narrow and almost level sandy ravine, to near the head of the Pangong lake; the road then turns north over a plain of deep sand for two miles to the small hamlet of Lukúng (Luhhúng-the "fountain god's hollow," or "fountain valley"). The ravine above Muglib evidently once drained the Pangong lake. It widens out in several parts of its course, and contains three or four small fresh-water lakes, which are fringed with grass. Along the sandy bed of the ravine, the Myricaria elegans and a yellow honeysuckle grow in great luxuriance, and a beautiful yellow-flowered Clematis is seen hanging in festoons from the rocks on either hand.
From Lukung a direct road runs south-east along the Pangong lake through Shushul to the Indus, and then direct either by Rupshu to Lahoul, or by the Parang-lá to Spiti.
nor traders paseing between our provinces and Yarkand this route would save five or six marches over the one round by Léh, and is everywhere easy."

7th. Lukung, through Chugra to Lûmha, 13 miles.-The road first runs seven miles north-east over some gravelly ridges, and up a grassy vallcy to Chugra, where there is a larger camping and grazing ground of the Pangong shepherds and herdsmen, and which is the last permanent residence in this direction; and then east up a gravelly valley for six miles, to a grassy camping ground called Lungka (Lung-kha, "valley snow") al the foot of the Marsimik pass. The road is goorl, and the ascent very easy; wood, grass, and water are plentiful. The word Chugra or Chaga means "washing place," and there is a slightly warm spring containing soda, which is much resorted to for the purpose of washing new "pattús"-woollen cloth. Sinall trout abound in the stream. About two miles northeast of Lukung, there is a grassy vailey, which is every year occupied by traders from Chanthan! $!$, who come in the summer with hundreds of sheep laden with wool, salt, \&c., which they barter with the Ladakhis and others for grain, flour, cotton goods, and other articles. These men are called Chák-pa (Chagpa-"cut-throats"), and come from Maching, a district about one month's journey to the eu,tward; they were formerly a race of Tartar robbers, but have been forced by the L'hassa govermment into following the more harmless occupation of trade.

8th. Lungka, over the Marsimik Pass to Gunlé, about 18 miles.-First nearly east for about five miles to the top of the pass, which is nearly 19,000 leet high, but its ascent is very easy and gradual. From lie crest of the pass the road descends to the north down a narrow valley for albout 13 miles to Gualé, passing through two camping grounds called Rimdi (Riugdi, the " long valley"), and Pang-long (the "grassy valley"). The descent is very gradual, and quite easy for laden horses, and a very little labour employed in clearing away stones, \&c., over two or thiee miles of the roughest part would make the road quite good. Fuel and grass are found almost everywhere. Gunlé ("winter inclosure") is, as its name implies, a winter residence resorted to by the Pangong shepherds.

9th. Gunlé to Gogra, about 20 miles.-The road first runs north down the Gunlé stream for seven miles to near Pamchalan on the Changchungmo tiver, then turns over a low sandy spur, and runs east up the left bank of the Changchungmo river for about seven miles; it then crosses the stream by a ford, and continues north-east over a low mountain ridge, lying in the bend of the river, to Gogra (the "garlic ground"), where there is a wide level grassy camping ground covered with bushes of Myricaria. Gogra is situated in the upper valley of the Changchungmo, a few miles above the acute bend that the river takes in the middle part of its course. At Pamchalan, or Pamlan, as it is also called, there is quite a jungle of Myricaria elegans, and abundance of pasture, and both this place and Gogra are winter pasture grounds of the shepherds. The road is everywhere easy and nearly level, but is rather heavy in places from deep sand and pebbly gravel.

The river at the crossing is about 100 yards wide, and is divided into three or four channels; it has a rapid stream, and when at its highest is about four fect deep. It runs over a level, shingly, and not rocky bottom, which very much lessens the difficulty of crossing. The water varies greatly in depth, not only at different seasons, but also at different times of the day. It is always lowest in the morning, legins to rise about noon, reaches its height shortly after nightfall, and sinks again by morning. The daily rise in clear weather is from 12 to 18 inches, and is owing to thie meling of the snow of the previous day on the mountain near the head of the river. The river is fullest at the end of May, and again from the middle of July to the middle of August. I crossed it twice on foot, the second time on July 25th ; there was then about three feet of water in the deepest part. It presented no difliculty of any kind, and would never be any obstacle to 1 raffic like the Sliyok river on the oller route, as it is, I believe, always easily fordable in the forenoon. Two English travellers who crossed it about a fortnight later than I did, described it as being a little deeper, but their baggage was carried over on yaks without damage.

There is another route, which continues eastward up the left bank of the Changchungmo river to its bend at Kyam, and which was taken by Mr. Johnson in his journey to Khotan. It is considerably longer than the one I followed, and as the river has to be crossed twice within two miles, it is no saving in that respect.

10th. From Gogra the road crosses the northern bend of the Changchungmo river, and runs north-east up the Changlung valley for about 16 miles to near the foot of the pass over the range of mountains bounding the Changchungmo valley to the north.

The

[^3]The Changehungmo river from its source first runs east by south to a point a few miles below Gogra and opposite Kyads; it then turns due west, which course it. retains to its junction with the Shyok, so that the road crosses it twice. I found this ford less deep than the first, and easier to cross. The water begins to rise about two hours earlier than at the first, and attains its height about sunset. The path up the Changlung ("Eastern Valley") was generully very easy over gravelly alluvial slopes, and the ascent very gradual. lin a few places the inad requires a litlle making to avoid frequently crossing the stream, which, however, is uct deep. Seven miles above Gosra the Changlung valley widens out into a flat basin, lull of hot springe and fountains, and six miles above this it divides into two ravities; one, with the lagger strean coming down from the right or north-east, leado over a high (over i9,000 feet) and rather rough but perlectly easy pass to Nischu, north of the rauge: we followed this roal un the outward journey. The other rasine from the left or north-ly-west leads over a much easier pass, at laist 1,000 feet lower than the other, and with the most gradual easy ascent and descent. This second pass we di-covered on going, and on our return came over it and found the road much the shorter of the two as well as better. At the junction of the two ravines is a lofty pyramidal mountain, scarped at the base, where it displnys regular strata of sandstone and slate rocks, dipping from each side towards the centie, and meeting at nearly a right angle. This makes a most unmistakable land-mak. I had cairns of stunes erected here and at many other places to mark theroad, and in this rainless climate they will last for yorrs.

At the camping ground, and almost everywhere up the valley to within five of six miles of the pass, fuel and grass were plentiful.

11th. From the head of the Changlung valley over the pass to Nischu, about 15 miles.The road at first ascends gradualiy for about nine miles in a northerly direction to the top of the pase, then turns nearly east and descends gently along the banks of a small scream for about six miles to its junction with another stream from the south-east. The latter leads down from the high pass crossed by Mr. Johnson, and the valley at the junction of the two streams is called in his route maps Nischn ("Ihe two Waters"). This, as well as nearly all the nimes of places beyond Changchungmo, are arbitrary, and quite unknown to the people, even to those who have travelled through the country. The Tibetans have the most fertile imaginations for inventing names, and with the exception of a few well known places they give new names on every fresh occasion that offers.

The route I have just described seems to be by far the shortest and casiest of those over this range of mountains, and the pass much lower than any of the others. 'There is a pass still furiher west, which was crossed by A. Schlagintweit, of whose journey I saw frequent traces, but it is much higher and more difficult. It is called Bao-la ("Cave Pass"), from some caves in the ravine on the south side. This range of mountains is the eastern contimuation of the Karakorum range. In the Nischu valler, for many miles down, there is neither griss nor luel, and, though water is plentiful, there is scarcely a trace of vegetation of any kind.

From this poin! the baggage yaks, and other animals, were sent back to the other side of the pass, as there was known to be a scarcity of pasture on a-head; one pony only was taken on liy the Vakil, and the baggage was carried by coolies.

I have thus far given the route in short atages, which can be changed at pleasure, as camping-grounds exist almost everywhere, well supplied with grass and fucl, and the marches can be lengthened or shortened to suit the convenience of the traveller.

12th. Nischu to a camping ground on the plain north of the Changchungmo range of mountains, about 22 miles. The road first runs north down the valley lor nine miles, then turns north-by-west across a series of broad, flat, gravelly ridges for five more to the edge of a wide level plain, in which the outermost ridge ends abruptly in a descent of 200 or 300 fect. This plain (called Zhang-ri-thang-"Mountain Plain") stretches far away to the north, in which direction it is bounded, at a distance of about 20 miles, by a range of rocky mountains almost bare of snow. Just before reaching the plain, the dry clay bed of an old lake is crossed. Descending on to the plain, the road runs nearly due north, making for a castle-like rocky eminence in the centre of the opposite rangre, and after about cight miles meets with a chain of small fresh water poois and rills lying in a long shallow hollow or ravine, which forms an excellent camping ground. The ravine has a direction from west to east, and comes from the snowy ranges to the south and west. In some seasons there is here a stream of water, which flows north-east into Tso-thang lake, 15 miles distant. If there is no water to be found here on the surface, it can, I believe, always be got by digging down a few inches, as the ground here never dries up. Fuel is abundant on the surface of the plain, but there is no grass; horses, however, eal the tufts of Eurotia, which grow almost everywhere, and constitute the only food of the antelope in these regions.
131h. From last encampment, nearly due north, across the plain to its northern edge, and then down a ravine to a camping ground uear the centre of the opposite range of mountains; total distance about 23 miles.- The road first lies nearly due north across the plain, over sand and gravel, for about 12 miles, then crosses a wide flat-topped gravelly ridge some 300 or 400 feet high, and five miles across. This is the actual watershed of the range, and all the valleys to the north run down by more or less tortuous course through a belt of rocky mountains to a second large plain lying 15 miles to the north-east. From the top of the ridge just mentioned, any one of these ravines may be followed, and all contain water and
grass in some part of their course. This range of rocky inountains runs in a general direction horth-west to south-east, and about its centre rise two remarkable lofty craggy eminences, visible from a great distunce as they tower ubove all the others near then, and between the two, over a low pass, lies the shortest route, as far as I could judge, though by following the ravine, either to the right or left of them, no pans las to be crissed. These two eminences are from on: to two miles apart, the more easterly has somewhat the form of a vast dome with a rugged broken surface, the other to the left looks like a square tower with a snall central peak or spire ising cut of a sloping conical basp, conspicunuc for the red and purple rucks on its surface. Inmediately after leaving the Nischu valley, these two peaks firm most conspicuous features in the landscape.
Afier crossing the ridge between the two, and turning over a low sandy spur to the rinht, the ruad turns norli down a gorge through lofy cliffs of white quariz, rising in broken peaks to a height of 1,000 leet and upwards, and enters a verdant valleg with the moumain slopes green with grass, and a stream of clear water running down the ctnire, hrough turfy banks carpeted will flowers. Thie march may br divided by crossing the larse phain in a directioun north-by-east 10 a large lake, called "Tso-thang ("Lake of the Plan"), and encamping on its margin, the water of the lake is soniewhat brackish, liut quite potable; fuel is found near it, but no grass. On our way out we encumped on the north side of this lake, but returning, we left it six or seven miles to the east, and thus saved a march.

14th. From the last camp among the mountains, 12 miles north-west, to a place called Thaldat.-The direction is first north-west over a low pass, then north down a wide sandy valley, and lastly west, over a wide, low, gravelly spur, to the foot of a lofty pinnacle-like crag, which terminates one of the spurs of the central range of mountains and overkangs a second wide plain. This plain, like the first, extends far away to the north and east, and contains several salt lakes, and the surface is over a large extent covered with white saline efflortscence, in some places a foot and more in depth; on the east side of this rock is a verdant grassy hollow, through which a small strean of clean sweet water runs north towards the nearest salt lake, thoug̣, like all other streams in this region, it sinks into the sandy soil before it reaches the open plain. Fuel is plentiful all round. Two miles beyond this, and on the west side of the sane crag, there is a second path of verdure, surrounding a number of springs and small ponds of intensely salt bitter water; one of them is, however, only brackish, and quite fit for drioking. Both these places were called Thaldat by the guide, and the name seemed well known to many of the coolics; it means, "Ice, or Snow Ground," and is so called fiom a lake of snow about a mile to the north, out in the open plain. It is called Mapothang in the new survey map, but as this word has an objectionable meaning in the Tibetan language, the name Thaldat, given by the coolies, and which seemed well known, is far preterable.
From this place two roads may be taken; one leads north-east, across the salt plain, to the foot of the mountain on its nothl side, and then over the Katai Diwan (pass), aud througlo a valley among the nountains to the Karakash. This route, which is described ho Mr. Jolnson in his published report, gives a distance of nearly 50 miles without fresh wa.er, and almost wilhout grass; and the other route, which I followed, leads north-west along the foot of the mountains to a pass at the west corner of the salt plain, and then traverses a third level plain to the valley at the head of the Karakash. It is shorter than the other, and grass, fuel, and water are plentiful about midway.
15. From 7haldat, 12 miles north-west along the side of the salt plain, then six miles over a low pass to a valley called by the coolies Patsalung.-The road at fir -t skirts the base, of the range of mountains on the south west side of the salt plain for 10 miles, the, crosses a wide sandy valley iunning down from the westward to a suall patch of swampy ground at the fool of a rocky spur, "here fuel and water are procurable, and which forms a good camping ground. The water cannot always be obtained without digging below the surface. Frow this the road ascends gently up a ravise to the north-west, and crosses a low easy "pass 600 or 700 feet higll, aud descends by an equally gentle slope to Patsalung (the "Soda Valley"), a valley opening out into the south end of a third large plain, which is in great part covered with salt, and coutains thiee or four salt lakes. At the lower part of the valley we found abundant fatel and water, and on the sides of the hills, leading up to the pass, grass was plentiful.
16. From the last halting place 20 miles nearly due north to a camping ground in a wide grassy valley called Lon-ding, about nine or 10 miles from the Karakash river.-The road at first turned nordh by west across a wide sandy valley, and along the base of a range of mountains bounding the third salt plain* on its west sicie, then crosed the plain to its morthern corner, and akirting the east side of a salt lake, entered the Lon-ding (" Valley Plain"), a broad, grassy valley, containing springs of fresh water, fuel, \&c. in abundance. There is unlimited pasturage for animals in and around this valley. This march was rather heary, owing to having 10 cross, for 10 or 12 miles. a surface of rough salt, iutn which the feet sank al every step; much of this may, however, be avuided by skirting the siles of the plain, and crossing at the narrowest part, about lialf way, where it is little over four miles across; by this a few miles ate added to the length of the marcll. This stage of 20 miles

[^4]20 miles is the longest in the whole journey, without finding water, grass, or fuel on the road.

17th. From the camp in Lon-ding to the Karakash river, nine or 10 miles.-First north for five miles along the valley, then north-west by the dry bed of an old lake, and down a rather steep sandy ravine, between banks of boulder alluvium, to the Karakash, some 20 miles from its source.

This river here runs in a gorge, 200 or 300 yards across, and divides into numerous channels, running between beds of grass and flowers, with granite boulders strewn all about; there are a few roofless huts on each side of the river, built by previous travellers.

From this point there is a well-known route down the Karakash river to Shadula, one o. the halting places on the road to Yarkand by the Karakorum pass, and four or five marches north of that pass, and eight or nine from Yarkund. I had with me three men who had been down the Karakash to Shadula. The distance is about five marches, and they all described the road as level and easy, and after the first march abounding in grass, fuel, \&c. Lower down, the valley contains thick jungle.

It is a much frequented pasture ground of the nomad shepherds of Yarkand and Khotan. Mohamed Amin, who accompanied A. Schlagintweit in 1857, gives the same description of it.
5. In the above route I have given the distance to the valley near the head of the Karakash as 16 marches, but it can easily be reached in 12 or 13 , and merchants with their Iaden horses would seldom take longer, as they frequently go 25 and 30 miles a day. On my return journey I reached $L+h$ in 13 marches, walking the whole way, and crossed the pass into the Clangehungmo valley in five marches from the Karakash, the baggage being carried all the time by coolies. This route, in fact, is not longer than that by the Karakorum pass.
6. In discussing the comparative merits of these two routes between Ladakh and

Comparison of the Karakorum route, now generally used, and the Changchungino route.
Difficulties of the Karakorum route.

The route detailed gives 16 stages, bu merchants could do it in 32 or 39 deys
invariably complained of by the traders and others who have traversed it, and compare them with the worst obstacles to be encountered on the other.

1st. The pass over the Kailus range from Leh to Nulra.-There are two roads from Lelı one leading over the Kardong pass, which is 17,500 feet ligh, excessively steep and stony, and has nearly 1,000 feet of steep glacier on the north side, and cannot be crossed by laden horses. All merchandise coming from Yarkand has consequently to be carried over on yaks, at considerable expense (two rupees is charged for each horse load), and involving serious delay, from the merchandise being oiten detained from one to five weeks in Nubra before carriage can be procured. Unlaclen horses even cross at great risk. The other pass above Leh, the Sabu or Diger pass, though less steep and stony than the Kardong, and free from glacier, is 100 feet higher, is rough and difficult, and laden horses are seldom taken across, whereas the Changlía over the same Kailás range on the road to Changchungmo is lower than the Kardong pass, has no snow in summer, the ascent aurl descent are very gentle and easy, and laden horses cross it without the least risk or dificulty, and a very little labour would render it perlectly gooll for camels. It is by far the easiest pass across this range of mountains north of the Indus. I have now crossed five of the passes over this range, and the Changlá was the only one fit for laden horses.
2nd. The Shyok river, which has to be crossed in Nubra district, is at some seasons most formidable. The easiest ford is at Deskit, and when I rrossed it, in August last year, the water was nearly a mile broad: and as, owing to the force of the current, this had to be crossed obliquely downwards, it doubled the actual extent of water. The river was divided into three or four channels, and was, in some places, nearly four feet deep, with a very rapid stream, so that the baggaye could cnly be taken over on men's shoulders, and the passage of the river was difficulr, and nuch more formidable than the Changchungmo could ever be. The latter is little above 100 yards broad, seldom over three feet deep, and never unfordable.

3rd. The range of mountains between the Nubra valley and Upper Shyok takes three days to cross, and opposes two high passes, both very stecp and stony, and on one there is a considerable extent of glacier, which is often both dangerous and difficult: whereas the Marsimik pass, between Pangong and Changchungmo, though nearly 19,000 feet high, is quite free from snow in summer, and the ascent and descent are very gradual and easy, and its height is quite lost from being so little raised above the valley on each side; the next pass leading out of Changchungmo to the north is still simpler, and one might ride over both with perfect confort without once having to dismount. Beyond this there is nothing worthy the name of a pass.

4th. The Shyok river has again to be crossed at Sarsíl (Sasar), and though smaller than in Nubra is deep and rapid, and often difficult. This year already the horse of one of the Hajis with all his property has been carried away in the torrent.

5th. Between Sarsil and Shadula, five or six marches, there are two high passes, the Karakorum and the Sukit Diwan, both very rough and stony, and no grass or fuel are found over nearly the whole distance; on the other route, after the Changchungmo, the only pass is a mere hill of 700 or 800 feet, and nearly the whole way from the Changchungmo to the Karakash, six easy marches, is over smooth level sand and gravel; water is
found at the end of every stage ; fuel grows almost everywhere; and there are only three stages without grass, and only two of these are successive ; so that in every way this route contrasts most favourably with the Karakorum. None of these roads are very suitable for cattle or sheep, as there animals require so much grass; but for horses, which eat gram, the Ciangehungmo offers no difficulties, as the merchants always carry with them a little barley for fodder.
7. The custom now is to take two spare horses for every laden animal, to carry grain and fuel and allow for casualties; and each year not less than 20 per cent. of the horses die on the road from exhaustion and falling amonr the huge stones that strew the path, from avalanches, and from being lost in the torrents. It is pitiable to see the state in which most of the animals reach the journey's end, and they are seldom able to march again with leas than six weeks' or two monlhs' rest. On account of these risks and difficulties the hire of a horse to carry a horse load (about 200 lbs.) of goods between Leh and Yarkand is nearly 50 rupees for liftle over 30 marches, or at the enormous rate of nearly 4 annas per pound. The above-mentioned losses are never likely to occur on the Changchengmo route, as there are no dificult mountain passes, no dangerous torrents, no risks of avalanches, and no such rougli rocky paths. With very litule tronble and labour expended on the first pass and in tlie Changethungmo valley (and I am in hopes that the Cashmere Government will co the litile (hint is required for improving the road), camels might traverse the whole road with the greate,t eave. These animals in Ceniral Asia go over much more difficult ground, and the short-legged variety, which is accustonied to the rugged barren mountain slopes of the Pamir, is in common use in Yarkand, and a few years ago a caravan of thees animals actually came over the Karakorum to Ladak; and I hope therefore that in future years caravans of caniels from Central Asia' will be seen wending their way along the sandy plaius of the Tibetan Indus.
8. The Vakeel Kutub Din who went with me is fully alive to the merits of the route, and his reports will, I hope, favourably influence his Highness the Mabaraja and gain his assistance in opening it out to trade. A little labour employed in a few of the roughest places, a few simple stone huts erected in the most exposed spots, and a plentiful supply of grain (such as is now kept at Sarsíl) at the present Government depôt at Tankse, or still better in Changclungmo, would remove the few difficulties the route offers. For many years past this route has been so entirely disused, and merchants and others have got such wild stories of its difficulties and dangers, mostly of a higlly absurd nature, that they may not readily take to it. The Yarkand Vakeel, Mahomed Nazar, has just returned by it, and has written back from the Karakash to say that he found it very easy and reached the Karakash with great comfort, and others will in all probability follow. I have heard too that there was a more plentiful supply of water when the Vakil went than when I traversed the road in July. My sole object in opening the road is to afford a means of communication between Ladakh and the countries to the north by a way less difficult and dangerous than the Karakurum, so that the immense expense of carriage may be diminished, and thus one of the great obstacles to trade through these regions removed.
9. In my hurried journey, which only occupied a month, for I was anxious not to be absent a day longer than necessary, in order that I might meet the Yarkandi merchants on their first arrival at Leh, it was inipossible to do more than make very superficial observations on the physical features of the country passed through; but the following slight sketch of certain points may be of interest.
The Kailas range, which is crossed immediately after leaving the Indus valley, is almost entirely composed of brittle granite, everywhere breaking up into a coarse sandy and shinglv débris under the influence of the atmosphere, moisture, \&c. In the beginning of July there was no snow on the south side, even up to a height of 19,000 feet, except in patches and in sheltered situations; on the north side the snow fields were lower, but the continuous snow line was hardly below 19,000 feet.

After passing Tankse the road lies in a narrow valley, between two masses of lofty mountains, that on the south-east being chiefly composed of dark gray granite, and that on the north of schistose rocks, veined in all directions with a tracing of white quartz, and nearer the Pangong lake chanuing to limestone and gneiss, and conspicuous for the alternate strata of black and white rocks which crop out almust everywhere on the lofty precipitous sides. This valley, a ravine, is hemmed in by lofy clifis, which are often composed of very white gneiss, and must formerly have been the bed of a river draining the great Pangong lake, the water of which is now about 150 feet below the pass over which it once flowel. Just above Tankse and perched on a narrow ledge of rock is a small gunpa or monastery, the last met with in Ladakh in this direction.

The shores of the Pangong lake everywhere show traces of the water having once reached high up the mountain sides, and in many places old beaches are very distinct. The water is now extremely salt and bitter, but it was once probably fresh, as there are in many places along its shores regular strata of shells 15 or 20 feet above the present surface. I found three kinds of siell, a Lynmau, a Planorbis, and a small Bivalve, the Cyclas. These shells exist in myriads, and the two first are similar to the fresh water shells now found in warmer parts of Ladakh. I observed also regular beds of vegetable matter in strata several feet thick, and consisting entirely of long leaves of a water plant similar to

Remarka on number of apare baggage horaca needed on the Karakorum route, and the casualties among them, owiug to the dificulticy of the journey.

The Clangchangmo route might easily be made practicable for camels.

Hopes the Cashmere Government will do the little that is required to render the Changchungmo route easy for travellers.

The Yarkand Vakeel who traversed this route reports favourably of it.

The hurried nature of his journey permitted very superficial observations only on the physical features of the country.
Geological formation of the Kailas range.

Geological formation of the country immediately after passing the Tankse atage.

Description of the Pangong lake
one now growing in fresh water streams in the arighbourhool. The only existing animal 1 could find on the lake was a small shrimp-like crustacean of a reddish cohour. The people of the neighbourhood say that the water of the lake is sinking year by year, and have legends of the district having once been very fertile and thickly populated; now it is little more than a sandy desert, and three or four miserable huts at Lukung contain all the permanent inhabitants.

Physical aspect of
the chain of moun tains between Pangong and Cheng-
chungmo.

Description of the Changchungmo valley.

Hot aprings of the Changlung valley.

The chain of mountains between Pangong and Changchungmo is lofty, ranging from 19,000 to 21,000 feet, but the sides are everywhere sloping, and the ridges wide und roundtopped. They consist almost entirely of granite and other igneous rocks. The snow line even on the north side is not much below 20,000 feet, excepr in sheltered aspects. There was no snow on the pass ( 19,000 feet) even early in July, though in sheltered places large fields of snow extended much lower down. Vegelation is scanty, but the valleys.generally have grass in abunclance; and a Eurotia, with diy woody roots, which serve ailmirably for fuel, is found alnost everywhere. I was rather early in the seison for flowers, but many Primula, Artemisia, Saxifrages and other plants common in Ladakh were just appeading; and near Gunlé I saw a large patch of a dwarf species of Eliagnus at a heiglit of oves 17,000 f.el.

The Changehungmo valley is in its upper course wide and verdant, and is a regular winter residence of $\operatorname{Pang}$ ong shepherds and herdsmen. The valley, though 17,000 feet high, is sheliered, and contains milimited wood for fuel. Gunlé, Panchalan, and Gogra are all winter camps. At Pamchalan and Gogra are regular jungte, of Myricaria elegans, the bushes growing eight and ten feet high, with branches spreading wide enougt: it afford shelter from the sun's rays.
The hot springs up the Changlung valley deserve a few words of notice. Seven miles above its junction with the Changchungmo this valley widens out into a small basiu about one quarter of a mile broad, and one mile long, full of hot sprinus and fountains, and the surface of the ground covered with white saline matter, chiefly I believe borax, and other soda salts, including common salt, but 1 have not yet l een able to make a proper analysis. The fonntains of lint water are inost singular. In one place a boss of stalactite resembling an animal's head, projects out from the side of an overhanging rock, and from its mouth or centre a stream of hot water the size of one's arm shoots out into the river below, with such force that I was unable to huld a thermometer close to the mouth of this natural pipe. In another place a mass of stalactite seven or eight feet ligh, stood in the middle of the river, and from its sumnit two jets of hot water shot upwards like artificial fountains. The temperature of the first spring was $120^{\circ}$ when the stream below was $45^{\circ} \mathrm{F}$. All about the flat valley were small pools of warm water, fringed with luxuriant grass of a deep green colcur, and along the sides of the suream and among these pools innumerable minute jets of hot water vose up the height of a few iuches. Rocks of quartz, stalactite, and variegated coloured clays and clay slates, assuming most fantastic forms, were scattered about among the springs, and occasional patches of snow cccurred within a few feet of the hot water. I noticed Brahminee ducks ("Casarca Rutilu"), a diver and a species of snipe amonget the hot sprinys. There are also bot springs at Kyam, where the Changehungmo river bends round to the west.

The mountains north of Clangehungmo are the eastern continuation of the Karakorum range. The main ridge is lofiy, and nearly all the passes are over 19,000 feet high, and the peaks 1,000 to 1,500 feet bigher, but the mountains are generally rounded with sloping sides, so that the passes are very easy to cross. In July the snow on the northern face was lying pretty generally as low as 19,000 fect, and in the sheltered aspects much lower.

The lowest pass, by which we returned, was quite free from snow. The spurs running south from this range are at the lower parts chiefly composed of unstratified clays of various colours, red, purple, and ytlluw, mixed with stratified slate rocks; higher up the rocks are chiefly slales and sandsone, and the top of the ridge is granite. On the north side of the range the mountains presented a very different appearance, being everywhere broad and ruunded, and rocks in situ scarcely anywhere visible, having, as it were, melted away under atmospheric influences, and crumbled into heaps of sand slaty shingle. Even the tops of the lighest peaks and ridges are covered with this débris of the rocks beneatl, there being no water lorce to wash it away. Here and there cliffs and pinnacles of sandstone or limestone project through this gravelly covering. The valleys are broad and shallow, fillerl up apparently by the same débris, which is brought down liy the slowly melting snow, and are nowhere cut into deep channels and ravines, as is generally the case in Ladakh.

North of this range is the first of the vast lake plains traverserl in the route to the

Descriptions of the first lake plains lying north of the eastern continuation of the Karakorum range of mountains. Karákáslı. It is aboul 20 miles across, north and south, and much wider in the direction east and west. It is bounded to the west by a lofty range of rugged mountains with snow-clad peaks at a distance of 20 miles. The region to the west of this range is tota!ly unexplored, and no native setms ever to have visited it; but I have little doubt that by a careful examination a much easier way could be discovered to Yarkand than that by the Karakash. The mountains present deep gaps between the ligh peaks, so that there must be low easy passes, and once across the range one comes into the watershed of the Yarkand river, along the course of which there is in all probability an ensy route
to Yarkand, or at least to the point where that river crosses the Karakorum route, north of the pasa of that nume. Shonld stich a route be fisund it would save the discromfort and trouble of crossing the salt plains, and anost lik. ly prove the shortrst and easiest way.
To the enstwird the mountiins are mure ditant, and generally appear lower, though they present some very high nowy peaks. The surface of the whin is ewnerally a coarse sundy clay, and gravel often covered wish salsolaceous plants, chinfy a ufty Eurotia with thick woolly roots, which, even when quite liesh, burn very briskly, and are the only fuel procurable. This plant quite replace the Tibetan furze called "Dama," a species al Caragann, which is found under similar comditions in Rupshú, Spití, \&e., but seldom occurs north of the Indus. Were it not fur this plant these resions whuld be almost inpassable for wart of fuel. It is called in Tibetan, "Gapshen," and there are two varieties of the plant, which is found in alnenst all sithations, on the dry sindy plains and on the barren mountain slopes, between the Indus and the Karakásh rivers.
Another plant of the umbelliferous order, an Aster, called by the natives "Palu," and which is used by the Lamas for incense, is also lisund in many places in herse regions. It too grows in spreading tufts, and has diy woody roots, which burn well, but the roots are too thin to be of much use for fuel.

A considerable extent of the surface of this plain is composed of a bed of fine lacustrine clay, sometimes rising in low cliffs and ridges, containing regular strata of dry water-weeds, resembling those at Pangong lake. I could find, however, no traces of shells or fossils. In this plain I saw two large lakes, one close to the northern edge, called Tso-thangbefore mentioned; the other a few miles further south. There are also said to be some larger lakes to the eastward. The level of the plain is about 17,000 feet above the sea. Antelopes are seen in great abundance on the plain, and a lew kyang (wild horse); they feed on the young shools of the Eurotia.

The ranges of mountain north of this plain are in great part composed of slate rocks, but the lofty crargy ridges in the centre are chiefly of limestone, sandstone, and quartz. The spurs running down to the northwards a e generally of clity slate of varipgated colours, arranged in thin britule tlakes, and the straia much contorted. The saline springe and efflorescence seems to be almost always connected with this particular formation. In this range are numerons antelope, kyang, and wild yák. I alsn observed traces of wolves. The only birds I saw weie a few ravens and mountain finches, but I found the remains of a degerted eagle's nest, which contained many hundred antelopers' horns, several horse.' shoes, and other strange aricles.

The second plain, north-east of this range, is about 16,000 feet above the sea. It stretches far away to the north-east and east, but is broken up by low ranges of hills. It contains numerous salt lakes, and the surface is over a considerable extent deeply covered with saline matter.

About a mile from the halting place called Thaldat is one of these lakes, the northern part of which is all salt water; but the southern half forms a lake of frozen snow lying out in the open plain, and nearly two miles from the nearest hills, which thernselves were quite bare of snow on the 15th July.
The snow lake was about two miles long, one and a half broad, and eight or 10 teet deep, with a lew inches of clear water running below the snow. On crossing it, I could see in the fissures and crevices that, a foot or two below the surface, the snow was frozen into semi-transparent green ice, exactly resembling stiacier ice. It is, in fact, a glacier out in an open plain, and not fed by snow mountains. I imagine that in winter an immense drift of snow is heaped up against the hills to the south by driving north winds, and that this lake or hollow is filled with such an accumulation that it does not melt in the short summer of these regions. North-west of this plain, and separated from it by a range of mountains which we crossed by a low pass, is a third plain of a similar character, also contnining several salt lakes. The northern half is covered to a depth of several feet with saline matter, soft, white, and powdery on the surface, but hard and crystalline below. The surface is often rough like the waves of the sea, rising up in ridges of solid salt six and eight leet high, and sinking into hollows of the same depth. With the afternoon winds this salt was blown up in driving clouds, like dust-storms in the plains of India, which, combined with the hot sun and cold dry air, were most irritating to the skin and eyes. The glare from the surface also was very trying, and produced effects like snow-blindness. I observed the Tartar coolies makie what to me was a novel use of their pigtails. They unplaited them, and tied them across their eyes, to protect them from the glare. This plain continues uninterruptedly to the valley at the bead of the Karakash, without any intervening mountain range, though in the latest survey map* a ridge is made to cross it nearly in the wiiddle.

[^5]384.

Fourth lake plain deacribed.

The Karakash river and its source and altitude.

Appearance of mountains north of the Karakash river.

## Salt plains have

little or do regeta-
tion. Flora of
mountains between these plains.
hemarks on climate of the route traversed.

Temperature of first salt plain.

Temperature and elevation of the third plain.
middle. West of this plain, but separated from it by a rugged mountain ridge, is a fourth plain of like nature, and containing a large salt lakc. Into this we were conducted by the mistuke of the guide, who promised a short cut across the mountain. On reaching the fourth plain we discovered our error, and had to return over the intervening range, and at nightfall found ourselves on the side of the rough field of salt already mentioned, and had to encamp without fuel or water, and consequently without food; the next morning had a march of 10 miles over the sall before we reached water. The thermometer in the morning. stood at $4^{\circ} \mathrm{F}$. or 28 o below freezing point. At its northern extremity the third plain ends in the Lunding valley, which, after four or five miles, suddenly dips down by a narrow, sandy ravine, to the Karakash river, which is bere about 15,500 feet high. Its source is in some glaciers and snow fields among high granite peaks to the north-east. These plains have all evidently once been vast lakes, probably of fresh water, and draining into the Karakash river, On the sides of the surrounding hills, up to a height of 150 feet, are seen old beaclies rising in regular terraces. The mountains round are chiefly slaty, with peaks of granite and other igneous rocks.

The mountains north of the Karakash are granite, exactly resembling the brittle granite of Ladakh. South of the river slate rocks prevail. Over all these regions antelopes are common, and near the Karakash I saw kyang, and traces of wild yak (Droug), also a few hares, brahmini ducks, and a species of snipe.

Over the salt plains there is little or no vegetation, except the Eurotia, and even this does not grow where there is much salt ; but amongst the mountains, between the two first plains, some Artemisia and the Eurotia were plentiful; here, too, the slopes were clothed with grass (Carex), and many flowers, chiefly Primular, a Ranunculus and Saxifraye, and a very handsome yellow Ligularia grew along the sides of the springs. At the head of the Karakiash the $\mu$ round was carpeted with brigit flowers. A yellow Primula, the Androsace, grew in wide patches. Two or three species of Saussurea, some small Cruciferce, a blue Nepeta, a liguminous plant not in flower, Saxifrages, and several other plants besides the Eurotia, were common, but there were no shrubs or vegetation of larger growth.
10. With regard to climate, the most striking points are the extreme dryness and the extremes of heat and cold. In Changchungmo valley, on July 9 th, at a height of 17,000 feet above the sea, the thermometer was 31 , at sunrise, $75^{\circ}$ at noon in a tent, and $212^{\circ}$ (a black bulb sun thermometer) in the sun's rays. On the 25 th July, in the same place, it only sunk to $40^{\circ}$ at sumrise.

On the first plain, on July 13 th and 141 h , the thermometer at sumrise was $10^{\circ}$ and $13^{\circ}$. July $22 n d$, on the same plain, it was $1!0^{\circ}$ at sunrise.

On the third salt plain (elevation 16,000 feet), the thermometer on July 18th, stood at $4^{\circ}$ at sunrise.

At Londing, near the Karakasl, on July 19th and 20th, the minimuri temperature was $22^{\circ}$ and $24^{\circ}$. It was evident that extrene nocturnal cold lasts the greater part of the year on these elevated plateaus, and it probably freezes every night. The cold was, however, decidedly less towards the end than at the beginning of July. On the evening of July 161h it began to snow, and continued nearly all night, and in the morning the whole plain was covered to the depth of an inch or two ; this all disappeared in a few hours. Rain is probably unknown in these regions.

In the valley of the Karakasin we seemed suddenly to enter a warmer climate, so great was the contrast after the open plains, and the more advanced state of the vegetation showed the same. In the daytime the heat of the sun was intense. I was forced to leave my sun thermometer in Changchungmo, but I am sure that the sun was as hot on the northern plains as in that valley, where the thermometer rose to $212^{\circ}$ (more than $30^{\circ}$ above the boiling point of water). There can hardly be another country in the world where the thermometer rises from $4^{\circ}$ to $212^{\circ}$ in a lew hours. The cold at night evidently accounts for vegetation being so scanty, even in places well supplied with water. All the lakes, fresh and salt, and generally the running streams, were partially frozen in the mornings.
Prevailing winds.
Anotber point to be noticed in the climate was the constancy and the regularity of the winds.

Duing the forenoon the wind was always light and uncertain, blowing more or less from the south. In the afternoon it veered round to the west and north-west, and blew steadily, and by evening rose to almost a hurricane from the same quarter; three or four hours after sunset it fell again, and went round to the north, and in the morning blew a gentle but cold air from the east. This occurred every day, but the further north we went the earlier in the alternoon the westerly wind rose and the greater was its violeuce.

I did not observe the almost cloudless skies of Ladakh proper, but noticed that clouds blew up almost every afternoon and disappeared again during the night. This may have been accidental, as there has been more than the average of cloud this season in Ladalrh itself.
H. Cayley, on Special Duty.

Ladakh, 18 August 1868.

# (Foreign Department.—Political.—No. 197.) <br> The Governor General of India in Council to the Secretary of State for India. <br> Simla, 2 November 1868. 

1. We have the honour to transmit, for the information of Her Majesty's Government, a copy of two memoranda drawn up by Mr. J. D. Forsyth, the Commissioner of the Julinder Division, of which one relates to the present condition and future prospects of trade with Central Asia.
2. We also forward a copy of the letter from the Punjab Government, under cover of which the first-mentioned memorandum was received, together with a transcript of our reply.
3. You will observe that we have confined our reply, at present, to the commercial aspect of the question.

## Trade wite Central Asia.

## (No. 1.)

From T. H. Thornton, Esq., Secretary to Govemment, Punjab and its Dependencies, to W. S. Seton-Karr, Esq., Secretary to Govemment of India, Foreign Department, with Governor General (No. 334-366); dated 23 September 1868.
I am desired by the Honourable the Lieutenant-Governor to transmit herewith, for the consideration of his Excellency the Viceroy in Council, two printed copies of a memorandum by Mr. Forsyth, Commissioner of the Julinder Division, on the subject of trade with Central Asia.
2. Mr. Forsyth, while absent from his post on privilege leave, has availed himself of the opportunity to visit Ladakh, where he has met large numbers of traders, as well as the envoy deputed last year by the Kooshbegee to the Mabaraja of Jamoo, who was then on his way back to his master in Yarkand. From the former he has obtained much information regarding the present state and future prospects of trade with Tibetan Tartary, a good deal of which has been embodied in this paper; while he has succeeded in inducing the envoy to return to Yarkund by the Changchungmo route, which is now known to be lar easier than the ordinary route over the Karakoram range, and with which the envoy, in the last letter received from him by Mr. Forsyth, expresses himself highly pleased so far as he had gonc. A very full and valuable account of this route, so far as it lies within the Maharaja's territory, has been submitted by Dr. Cayley, who has recently traversed it; and so soon as the letter-press shall have been corrected and revised by that gentleman, a copy wili be forwarded for the informatiou of Goverument.
3. Without entering here into the political and military questions discussed by Mr. Forsyth in the latter part of his pansphlet, regaiding which opinions will necessarily differ, the Lieutenant-Governor trusts that it will be found to contain much that is of great value at the present time in connection with Central Asian trade, and the modes in which it may be best promoted; and he considers this officer entitled to great credit for the energy and persistence with which he has followed up tinis subject and thus lar completed inis inquiries, by visiting in person the only locality at which inlormation on the subject is at present largely ubtainable. His pamphlet fully bears out the account given by Dr. Cayley in the documents already submitted to Government; and all appear, in His Honour's judgment, very clearly to show how important this trade is likely to become, if due attention be paid and encouragement given to it by Go:ernment, at the present juncture.
4. The appointment of a representative or consul (designated in the Tartar countries an Akshâl) from amongst the morc intelligent of the subjects of the Kooshbegee, is a weasure which the Lieutenant-Governor considers especially deserving of consideration. This measure has been, on several occasions, proposed heretufore, and was suggested to the authorities at the India Huse by the untersigned on his late visit to Eugland, with, the concurrence, it is believed, of Sir Robert Montgomery, the late Lieutenant-Governor. It is one which can be readily carried out, if lakub Kooshbegee assent to it, without runung the risk of compromising our Government in any way; while it will show that the importance of the trade is appreciated, and will be productive, if judiciously carried out, of much advantage and support to our subjects trading with Yarkard or other parts ol the Kooshbegee's dominions. It is a measure which is universally adopted by the Tartar races, and those who have commercial dealings with them, for the regulation of all matters connected with trade; and His Honour trusts that, in the event of friendly advances being made by the Kooshbegee, of which there is now little doubt, he may be authorised to carry it out with that ruler's assent.

[^6](Eitraot.)-Memonandim by Me. Forsyth, on Tmade with Central Agia. (No. 2.)

In my report of the 4th Juiy last, a detailed account was given of an interview with Dewan Nehal Chund, Minister of His Highness the Maharaja of Canhmere, which resulted in the sulnission of proposals to establish a large tair at Leh, in Ladakh. His Honor the Lientenant-Governor wis pleased to approve of these proposals; and his Highness the Maharaja also according a hearty asvent, issued the necessary notices, and dispatched one of his confidential servants to meet me at Leh, and make all the necessary arrangements for the fiir.

Mohamad Nazr, Vakeel of Yakub Bey, Kooshbegee, on his return from Cashmere, delayed his departure from Leh, on purpose $t$, a acertain the nature of these arrangements.
 in this part of the country, hearing what was ging on, anked permission to accompany me on the journey, and rendered most valuable and by his counsel.

Tara Chund, Hon rary Magistrate of Lahoul, also accompanied me.
Two years ago, when the question of opening out trade with Ladakh and Central Asia was first broached, the state of affairs looked very unpromising.

The road from Kulu through the outlying Briush province of Lahoul was scarcely passable for laden animals. As I travelled along Lahoul towards the froutier, in 1806, my ears were assailed by continuous complaints of the oppression, exactions, and positive plunder of our traders by the Ladakli oftictals. The recugnised duties were so heavy as to become prohibitive, and yet they were mild compared with the iilegal cesses extorted by the officials. Whilst I was passing through Lahoul, the Mah.raja's agents were going from vilage to village levying tribute from British subjects for the benefit of their master.

Beyond the Cashnere border we knew little of whis events were taking place, beyond the fact that the Nahonedans had cast off the Chinese yoke, and with it all commercial connection with the East, and their necessity was evidenily our opportunity; but beyond this one enco:raging fact there was little to oppose to th- opinion expressed by many that the idéa of 'penieg out commerce with Central Asia by sucu a line was purely chimerical.

Within the short space of two years, however, everything has changed.
At a comparatively insignificant cost, not more than $\mathbf{3 0 0} \mathrm{l}$. having been expended up to the present time, the road lrom Kulu to the Ladakh horder has been rendered passable for laden anmals. Rivirs have been bridgeci, steep ascents have heen reduced to easy gradients, and for another sum of 500 l. the whole road will be rendered complete.

The tribute paid to Cashmere has been abolished; duties have been reduced; uppressions and exactions by Ladalt, officials have beeen abandoned; instead of the fnrmer system of impressing porters without payment, now, thanks to the Malaraja's liberal orders and to Doctor Cayley's watchfulness, full hire is paid to every man for his services. Now joy and gladness reign throughout Ladakh, and the utmost content and gratitude are expressed by the numerous traders $t$ : be met with on the rond.

Moreover, instead of being met with opposition by the Maharaja's agents, and with gloomy forebodings as to the destruction of Cashmere monopolies, we now have the Maharaja and all his agents fully alive to the advantage of frec trade, and rach vieiog with the other in endeavourime to loster and extend the tiade, which they so lately tried to stifle.

From Yarkand and Kasigar the traders and travellers bring encouraging accounts of tranquillity and a vigorous government under Yakub Beg, Kooshbegee. And all unite in expressing the earnest desire of the ruler and bis people to see trade with Hindostan fully de veloped.

Arrived at Leh, it was surprising to bserpe the criwded state of the bazaar, and the piles of gouds brought from Yalkand, Cashusre, and the Punjab, iseaped up in the houses or in the court-yards belind.

Leh is in itself ait insignificant place; the chief town of a sparsely-populated poor country, which can maintain litule or no trade. But it is important as being the entrepôt of commerce beturen distant countries, of the vigor us vitality of which ample prool is afforded by the evidence of one's sellses.

The return of imports and exports about to be furnished by Dr. Cayley will show the state of the m:rket at the present time. It is adnitied that the bulk of the season's merchandise is yet on the road: and as yel the news of the measures taken to facilitate commerce hare not been made fully known. Still it may be noted as a satisfactory commencement that the amount of transactions this year will be about double that of last year.

This trade is now to i, e stimulated by the establishment of a lair at Leh in the autumn of every year. And to make this a suce ess it was necessary to arrive al some computation of the demand and supply of the different articles. Time alone can adjust the market properly, Lut experience of what occurit in establishing the Palampur fair taught that, in order to guard against disappointment and loss, it was necessary to make and publish some kind of estimate of the articles most likely to be in demand.

A meeting of traders, therefore, was held to discuss commercial matters. The conversation was first directed to the road by which Yarkand and Turkestan are generally supplied with yoods.

It appears, from the statements of traders, that of lale ytars English goods have been sent in large quantities by Dera Iswael Kban and Peshawur to Bokhara, and thence by

Kukan to Kashgar and Yarkand, au . have comp-ted successfully with goods brouzht from Russia. It will be observed by a glance at the map ilit commerce thus takex a very circuitous route, double the time being consumed on the journey which would be taken by the direct route.
The reason for this which would naturally suggesi itself to one's mind the unfavourable character of the roarl over the Himalayas, and this was assumed when inquiry was made of the traders. But it is a fact worthy of notice that they all at once replied, in an empratic manner, that the cause of the stoppage of trade by the direct route was solely the excessive levy of duties by the Cashmere Government. As proof of this they pointed to the presence in the meeting of many traders who never came to Leh before, but wion had now been induced to venture by the announcement of a reduction of dutics.
There was no inclination to make iight of the difficulties of the road, but they declared that this would not hinder trade if the fiscaı burden were lighiened. This fact is inportant, and gives encouragement; for, as will be shown presently, there is every prosect of our being alle to improve the rond greatly.
They next pointed out, as a hindrance, the difficulty of getting carriage. Owing to the smalluess of the traffic alung this line, no attempt had been made to provide anmals for burden bevourd what could be obtaned from the neighbouring shepherds or landowers. A few men at different plares kept ponies and yalis for hire; aud, as the supply was limited, not only could the prices be unduly raised, but often great and veratious beliays would be caused by enforced halts till animals which had rarried onvards a previous batch of merchandise could return.

Between Leh and Amriteir merchants have to change their carriage five times.
Now, ou the Bukhara and Kokan line it was represented that, owing to the wealth of the traders and the great:r traffic, no such difficulty existe.
But this is an evil easily remediable. It is quite evident that, it having been once determined to give a stimulus to trade, it will be worth while for carriage owners to increase their supply. All that is requisite is some kind of guarantee that if n:ore cattle be put on the line, the trade will be sufficient to employ them all.

Wuzeer Goshaon and Tara Chund at once agreed to take up the subject as regards the road through British territory, and have already commenced arrangements by which carriage will be more plentiful and cheaper.

The discussion then was turned to the state of the road between Ladakir and Turkestan. Hitherto only one line has been used, which crosses the Karakoram ranse, and is so exceedingly dangerous and difficult that the traders aréobliged to take three spare lorse- for every une laden, and the calculation is that 25 per cent. of the animals die un the roud. The hire of a horse-load for the journey varies from 42 rupees to 50 rupees. This, oi course, increases the cost of lreight enormously. Yet all this difficulty and expense has not prevented the trade from doubling itself ibis year, the real obstacle, escessive duties, having been removed.

Similarly, though in less degrev, the road between Leh and Hindostan has hither:" been somewhat dangerous and difficult, yet there is a large class of the population of Bussahir, Lahoul, Chamba, and the lower hills, whose living entirely depends on this trade.

For these persons the improvement; now being undertaken by the British Goverament will render the road so easy that it is hoped that a reduction of 25 per cent. in the cost of carriage may be made.

As regards the Central Asian trade, it is a matter of the gieatest importauce that the route which two years ago was pointed to, when the subject wes first broached as most likely to prove perfectly easy for laden animals, has now been prunounced by Dr. Cayley, who has travelled over it, to be thoroughly practicable even for lade: camels. By the Changchungmo route all the difficult passes of the Karakoram are avoided. Insiead of havine to march fer six days consecatively without finding a blade of grass for their cattle, as over the Karakoran, the traders will find grass, wood, and water in abundance along the Changchungmo line. Three places only are without grass, and these are not at consecutive halts, so that folder can be carried withnut difficulty for one stage when necessary. Thus the towns of Yarkind and Khotan can be reached without any risk of life or injury, by an tasy undulating road, as quickly as by the dificult, inhospitable Karakoran route.

It is often said by persons not accustomed to travel in these high regions, that it is impossible for trade to pass with any ease over such high elevations as 18,000 or 19,000 feet; but the best answer is experience and fact. Trade not odly does pass by these routes, but shows a tendency to increase.

The fact is that mere elevation, within certain limits, is no obstacle tu progress. When the traveller has reached the plains of Rupshu or Ladalsh he is already at a great elevation, perhaps $\mathbf{3 5 , 0 0 0}$ feet. The passes above him do not rise more than 2,000 or $\mathbf{3 , 0 0 0}$ feet, and the ascent is generally over an easy slope.
It is well known that, though four passes have to be crussed between Kuluand Leh, the only one of which traders speak with any fear is the lowest, the Rotang. This pass i, only 13,000 feet high, but owing to its vicinity to the rainy tracks of Hindostan, its sides are washed by frequent rains inio deep ravines, or are carried away by constant avalanches of snow. As we travel further north, and escape the inflaence of the rains, we find but little snow lying on the passes, and there being less action on the soil, the mountain slopes are scarcely ever cut into ravines.

The consequence is that from the Bara Lacha Pass to the Changchungmo the passage over the mountain. rising as high as 10,000 leet, is only the surmounting of a succession of vast undulations which offer no obstacle to enterprising tradere.

I may perhaps be asked how, when such an ensy road exists, it has never been used. No satisfaciory answer has as yet been given, beyond the ussertion that for many years the route was forbidden by some former ruler of Ladak. Anyhow, whatever be the reason, we have now only to deal with the fact tinat the route, though practicable, was closed till now. Whilst I am writing this, a trader who has ventured over the road points out a still shorter route for a portion of the way, by which two days' march may be saved; and doubiless, if proper persons be enployed to survey the whole line, most satisfuctory rerults will be obtained; meanwhile, the Yarkand Vakeel, accompanied by a party of Punjab traders and horse-loads of Kungra tea, is about to take the Changchungmo route to Yarkand, and thus open the line for future caravans.

If negotiations were opened with Yakub Beg, Kooshbegee, he has the power, and we are assured has also the will, to secure the dircte route by Kokiar to Yarkand from the depredations of the Kunjotee robbers, thus rendering a still shorter line available for trade.

There is another route between Yarkand, Khoten, and Hindostan, which, passing through a corner of Chinese Tartary, impinges on the Hindostan and Thibet road. This, if opened out, would be still more favourable than the Changclungmo route. But this road can only be opened by a negotiation with the Pekin authorities.

It will now be interesting to notice the profits on transactions between Yarkand and Hindostan by this route in its present state, and I am indebted to the frank declarations of the traders for the following statements:-

As all traffic is carried on horses or mules, for which the standard load is three maunds, or 240 lbs. English weight, almost all calculations are made on this basis.

A horse-load of piece goods then is thus computed :-


Now the goods will realise in Yarkand, according to the price current at present ruling in that bazaar, as follows:-


Broadcloth :-This is purchased in Calcutta at 5 rupees, or 10 shillings, per yard. To this has to be added 2 annas per rupee for cost of carriage to Yarkand, and 1 anna 9 pie per rupee for duty. Thus the total cost of a yard of broadcloth landed at Yarkand is Rs. 6. 1. 6., for which the price obtainable at present in that bazaar is from 8 to 9 rupees per yard.

Spices:-

Spices :-These are taken by the mule load:-


One trader informed me that last year he purchased the commonest green tea in Calcutta at six annas per pound, and sold it in Yarkand for lour rupees per pound.

Goar Skins:-There is a large trade in these:-


These sell in Yarkand for 30 and 35 rupees per score; and whereas for all other articles 4 certain amount of barter is necessary these skins are sold only for cash.
We may now take the profit on these chief anticles of import.
Pushm, or finest Turtani shawl wool.
The cost price of this article in Yarkand is 20 rupees per maund.
A horse load may be thus computed:-


This wool was sold last year at Amritsir at 120 rupees per maund.


| Churrus :--Hemp juice, finest quality,  <br> Carriage 3 mands, at 40 rupees <br> Duty ar Leh - <br> - - | $R s$. 120 72 6 |
| :---: | :---: |
|  | 198 390 |
| Net Profil - - Ils. | 192 |

Silk :-Of the finest quality comes from Khoten, in which every house is said to contain silkworms. The profit on this article, when sold in the Punjab, is not less than 50, and has been as trigh as 200 per cent.

From the foregoing statement, which has been carefully prepared, it will be seen that, after paying all duties, and a heavy rate for carriage, at least 50 per cent. profit is to be obtained from trade by this direct route. By the adoption of the Changchungmo route, the cost of carriage from Leh to Yarkand will be reduced one-half, and by the improvement of the road between Leh and Kangra and the increase of supply a reduction of 25 per cent. will be made in the cost.

There is, therefore, a very large margin lor reduction of prices in Yarkand, and still Enghish goods, imported by this; direct route, will be able tof compete successfully with Russian goods.

The next point brought before the meeting was the quantity of each article of comaerce in demand, and the quantity that could be supplicd.

Shawl wool may be taken first as being the mosi important, innsmuch as the idea of free trade in this article caused the greatesı alarm to the Maharajah, and induced his English supporters to cry out against the supposed destruction of the Cashmere monopoly.
The demand for this article in Cashmere is fixed at 1,200 loads. Beyond this quancity the urtich cannot be utilized by the prisent number of hands in the factories. Any quantity beyond this amount then that is imported from Yarkand may be sent to Hindostan. Now the supply of this shawl wool is practically linited only by the demand, any quantity being procurable; and this at once dispels the fears of tite Cashmere shawl merchants, and refutes the arguments of the monopoli-t party.
Tea:-We know, from Mr. Lumley's Report and from the statements of the Yarkand mercliants, that this article can be taken in any quantities to Turkestan, and, as has heen already shown, at most remunerative prices.
The same remark applies to almosi all articies of trade.
Regarding tea and English piece goods, the merchants complained that the liberal orders of the Maharajah of Cashmere had in reality proved to be a burden on trade; for whereas formerly teu passed free, and piece goods were only subjected to a duty of Rs. 4. 11. per horse load, according to last year's rates, now they are all taxed equally, at 5 per cent. on the cost price, and a horse load of piece goods has to pay 25 rupees. What action ought to be taken on these representations I do not venture to suggest; but I may point out, as a fact, that the result of our efforts to facilitate the introduction of English goods into the Turkestan market has been to increase heavily the duty on the most important articles.

Thus far, with the exception above mentioned, the work of opening out trade has proceeded satisfactorily, and the present Wuzeer, Akbar Ali Shah, is showing bimself most energetic in carrying out the orders of his sovereign.

But it was forcibly pointed out by the assemblel traders that all these efforts to open out conmerce with Central Asia were likely to prove unavailing, unless some guarantee could be obtained for the stahility of the goverumient in Yarkand. Many of the merchants present related how a few years ago they had embarked in this trade, and had lost all in the turmoil which followed the expulsion of the Chinese.

A simular petition for protection was presented by traders, when the subject was first broached, and it was because of the necessity for securing our traders from loss, when the idea of a mission across the lorder was abandoned, that the idea of a fair in our territory was started. At such a fair our traders could transact business in perfect safety, and the foreigners who came into our telritory could return with their goorls without fear of molestation.

Now, however, the case is different, the request is not for protection from oppression in Yarkand, but for the continuance of a government which affords protection and facilities to commerce.

This request was put forward by the Yarkand portion ol the traders, whilst the Hindoo mierchants, disinclined to discuss political questions so tar beyond their reach, preferred a more modest request, that the consular or Akshali system might be put on a wore satislactory footing. This system has been described so frequently that it will be unnecessary to say more ihan that, whilst Kokan and Badakhshan are efficiently represented, the interests of the Hindostan traders are but indifferently cared for by an Akshal, who calls himself the Cashmere representative. Yet this man really owes no allegiance to Cashmere, and is under no kind of control. Hitherto, by some extraordinary misapprehension, owing most probably to the entire absence of an! manifestation on our part, the people of Turkestan have inhibed the impression that the English in India are subordinate to the Malarajalı of Cashmere; and when the Kooshbegee dispatched an envoy to seek the friendship and aid of the Maharajah, he sent him to the ruler of Junmoo and Delhi. The Hindoo British suljects then, who desire to trade with Yarkund, pointed out the necessity for some chauge in the consular system, and prayed that they might be placed under a consul of their own, and not be compelled to :ppear in the Yarkund markets as the subjects of England's tributary.

This leads me to detail an interesting conversation held the following day with Umr Bai, Kafila Bashee, or trader of the caravans, the trusted agent and adviser of Yakub Beg, Kooshbegee. This man has for many years past held a high place amongst the trading community of Kashgar and Yarkand, and was employed in the councils of the Chinese Ambans. His frank manner and high character for probity and generosity have rendered him an object of respect to all the Yarkand merchants, and doubtless induced Yakub Beg to place reliance on him as an agent. He described Yakub Ber's position in Turkestan as firmly established. The only Chief of note who could give him any trouble, Buzurg Khan 'Tora, is now an exile in Leh. This individual was the nominal ruler sent forth to recover Turkestan Irom the Chinese with Yakub Beg as the real conqueror. He is the son of Jehangeer Khan, the descendant of the former rulers of Yarkand, prior to Chinese annexation, who was betrayed to, and beheaded by, the Chinese in 1828.
The present then seems to be a nost favourable "pportunity for us to endeavour in friendly concert with Russia to establish in Turkestan a kind of neutral ground on which our traders may meet and interchange goods. Yakub Beg, assured of freedom from interference, would be loth to incur the displeasure of the two European powers by injuring these merchants ; and Russia, having obtained a footing in Kashgar by our aid, could not pretend to any
right to exclude our goods. We may rather argue froun the picture which Mr. Lumley hus drawn of her necessities, that Russia will be only 100 glad to have an easy and expeditious road for the transport of tea opened out to the province of Semipalatinsk.

| APPENDIX sho | wing the P <br> The calcula | OFIT per <br> to $Y$ <br> is made | nt. on ind. the hors | Ds Expor <br> ol goo | from | dostan |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Article. | Cunt Price at Market mbere purchaned. | Cost of Carriage to Yarkand and Duly. | Tolal Cobt <br> Price in <br> Yarkand. | ['rice curieat in Yarkald. | Set Proft, | Profs per Cear: |
|  | Rs. | Rs. | Rs. | R. | Rs. | R. |
| Piece goode - | 490 | 140 | 630 | 1,000 | 370 | 583 |
| Spices - | 42 | 76 | 118 | 180 | 62 | 524 |
| Tea - - . | 240 | 89 | 329 | 960 | 631 | 1913 |
| Gost-blini - - - | 100 | 70 | 170 | 890 | 130 | 764 |
| Fine broad cloth - - | 1,200 | 112 | 1.312 | 1,920 | 608 | 47 |

APPENDIX showing the Phofit per Ceat. on Goods Exported from Farkand to Hindostan.
[The calculation is made on the horse-load of goods.]

(Extracts.)-From W. S. Seton-Kart, Esq., Secretary to Government of India, Foreige Department, with Governor General, to T. H. Thornton, Esq., d.c.l., Secretary to Gopernment of Punjab (No. 1254); dated 28 October 1868.

I am directed by his Excellency the Viceroy and Governor Geueral in Council to acknowledge the receipt of your letter dated the 23 rd of September last, No. 834-366, forwarding copies of a memorandum drawn up by Mr. T. D. Forsyth, Commissioner of the Julinder Division, on the subject of trade with Central Asia, and conveying the opinion of His Honour the Lieutenant Governor of the importance of the trade in question, and of the edcouragement which may be lawfully given to the same by the Government of India.
3. The thanks of the Government are due to Mr. Forsyth for the interest which he bas taken in this question, and for the amount of valuable information which he has collected as to the character of the trade, the cost and mode of conveyance, the details of the merchandise, the opinions entertained by the traders, the administration, and probable sentiments of Yakoob Koosh Begi, and the possibility of increasing our commerce with, and extending our influence in, Central Asia.
4. I am now directed to convey to you the upinion of his Excellency in Council on Mr. Forsyth's proposals, and to state the precise measures which, in consequence, and in the present condition of our information, his Excellency in Council deens it prudent and politic to adopt.
5. His Excellency in Council will be willing to sanction the disbursement of a sum of 5,000 rupees to attain some of the objects aimed at in Mr. Forsyth's communication, viz.: the improvement of the means of crmmunication in the direction of Yarkand by the Changchungmo Pass.
6. His Excellency in Council is, however, inclined to doubt if any extensive or highly important trade can spring up between India and Eastern Turkestan, however much it may be fostered by the British Government or its representatives. The route appears too long and the obstacles too many for such a result to come to pass. No doubt the measures which have lately been adopted will give the trade a considerable stimulus; still, in the very nature of things, and looking to the modes of conveyance by which merchandize is to be transported over such a country, even though some of the highest passes can be avoided, the trade will remain comparatively limited in character.
7. His Excellency in Council, however, consents that negotiations for the encouragement of trade shall be at once opened with Yakoob Beg, the ruler of Yarkand, by such mode of communication as the Lieutenant Governor may find to be expedient and feasible, and that an Akshal, being a native of Yarkand or its neighbourhood, shall be selected and liberally paid by the Indian Government as its representative in that country. Al the same time his Excellency in Council thinks it most desirable that the person on whom the chuice of Governmont may fall should be one in whom full confidence can be reposed as regards credit, respectability, and tact, inasmuch as it is not easy to perceive how, at such a distance, any effective control or supervision over such a person can be exercised.
11. It would be difficult, his Excellency in Council thinks, at present to form, from Mr. Forsyth's information, a reliable estinate of the pecuniary value of the trade likely to spring up. His Excellency in Council thinks that, in comparison with the large figures with which officials in India are in the habit of dealing, the statistics of trade with Central Asia must be, fou a long time, comparatively insignificant. On the other hand, if measured in its moral and political aspects, bis Excellency in Council admits that such a traffic may be of no inconsiderable interest and importance.
12. What is required to give confidence to the traders, and an impulse to commerce, is some clear and langible proof that the Government of India is in earnest in its desire to foster commercial relations between India and Turkestan. Not only therefore will the money which it is proposed to devote to the object of opening up the road be well laid out, but the Government may also very legitimately use its influence to induce the rulers or inhabitants of the territory through which the road chiefly passes to do their uimost to improve it, and thus to facilitate the traffic and the intercourse between the two countries, and so to make the traders really acquainted with the resources of India, the character of its rulers, and the objects of its administration.
13. This trade, though statistically small, does possess certain elements of importance. It is carried on, in part, by enterprising British subjects, natives of India, who are entitled to British protection according to our usual policy ; and, in part, by Asiatic foreigners from remote regions, whom we wish to impress, so far as may be politic and practicable, with a sense of our resources, power, and prestige.
14. Fortunately, too, its amount and importance, though, as already intimated, small when compared with our own internal trade and with our exports and imports by sea, is quite sufficient to afford us a fair reason for manifesting an interest in Central Asia: for expending reasonable sums of money, for lending countenance to some of Mr. Forsyth's proposals, and for the establishment of an agent to watch over our commercial interests.
15. There is a good deal in these papers relative to the hope of the production of large quantities of tea in the British Himalayan regions for the consumption of millions of Russian subjects. To keep this in view is both commendable and prudent. But the consequences are too remote, not to say improbable, to have any material influence on present considerations. Thar good tea, suited to foreign markets, can be profitably grown in moderate quantities in the Himalayas has been placed beyond doubt. But when the probability of a large increase in production and in the consumption of that article is considered, the aspect of the case alters entirely. The Himalayan districts, suited by climate, elevation, and other facilities, to the growth of tea, are mostly (though not all) chinly peopled; and when attempts are made to extend the cultivation largely, then there will arise all the well-knowndifficulties about transport and labour; which difficulties, if overcome eventually, require executive interference, time and attention, and, possibly, legislative ennactaments. This is one of several reasons why too sanguine expectations must not be called forth by the cultivation of tea gardens, and why it may be long before Himalayan tea can compete with the old-established cultivation in the well-peopled and highly civilised districts of China.
16. For the general interests of whatever real trade there may now be, or may be called into existence, the establishment of fairs is most important. The fair at Palampore, in the Kangra district, the fair contemplated at Leh, in Ladakh, are each of sterling value. Moreover, such institutions afford to our officials the means of seeing traders and travellers from the very countries under consideration, and of thus acquiring information which might not be otherwise obtainable.
17. The Goverument of India has thought it necessary to state clearly, and at scme length, its own views in regard to the commercial aspect of this question, in order to prevent the growth of over-sanguine expectations, and to lay down the points to which action should be at present confined. These are, as stated, the expenditure of money on the roads
and bridges, and the appointment of a paid akshal or agent; and it is only necessary to add that the frontier authorities may at all times use every endeavour to acquire more accurate and detailed information regarding the country and people beyond the Limalayas, as well as to promote trade, and to generate respect, eateem, and confidence, by advice, by persoual intercourse, and by all legitimate means in their power.

## (Political, No. 44.)

## The Secretary of State for India to the Governor General of India in Council.

India Office, 25 February 1869.

1. The letter of your Excellency's Government, No. 197, of the 2nd November 1868, in the Foreign Department, Political, which encloses much interesting correspondence relating to the present condition and future prospects of trade with Central Asia, has been fully considered by me in Council.
2. The zeal and ability which Mr. Forsyth, the Commissioner of the Julinder Division of the Punjab, has manifested in his investigation of this important subject, have elicited the warm approbation of the Lieutenant Governor of the Pudjab and of your Excellency's Government, and I have much satisfaction in expressing my full appreciation of the excellent service rendered by this meritorious and enterprising officer.
3. The information which has been furnished by Mr. Forsyth relating to the prospect of so improving the communications between India and Central Asia, by the way of Ladakh, as greatly to facilitate the trausit of goods between the two countries, is very satisfactory as far as it goes. Already he states, "At a comparatively insignificant cost, not more than 500 l . having been expended up to the present time, the road from Kulu to the Ladakh border has been rendered passable for laden animals. Rivers have been bridged, steep ascents have been reduced to easy gradients, and for another sum of 500 l . the whole road will be rendered complete." Your Excellency's Government, however, takes a less sanguine view of the commercial advantages which are likely to result from these measures. It is doubted whether "any extensive or highly important trade can spring up between India and Eastern Turkestan, however much it may be fostered by the British Government or its representatives." Still, with reference to the moral and political aspects of the question, your Government admits that such a traffic as may reasonably be expected " may be of no inconsiderable interest and importance," and you, therefore, observe that "not only will the money which it is proposed to devote to the object of opening out the road be well laid out, but the Government may also very legitimately use its influence to induce the rulers or inhabitants of the territory, through which the road chiefly passes, to do their utmost to improve it, and thus to facilitate the traffic and the intercourse between the two countries, and so to make the traders rcally acquainted with the resources of India, the character of its rulers, and the objects of its administration."
4. In these sentiments Her Majesty's Government concur. They observe with pleasure that already some satisfactory results have been developed in the territories suhject to the Maharajah of Cashmere. Mr. Forsyth states that "duties have been reduced ; oppressions and exactions by Ladakh officials have been abandoned; instead of the former system of impressing porters without payment. now, thanks to the Maharajali's liberal orders and to Dr. Cayley's watchfulness, full hire is paid to every man for his services. Now joy and gladness reign throughout Ladakh, and the utmost content and gratitude are expressed by the numerous traders to be met with on the road. Moreover, instead of being met with opposition by the Maharajah's agents, and with glomy forebodings as to the destruction of monoplies, we now have the Maharajah and all his agents fully alive to the adrantage of free trade, and each vieing with each other in endeavouring to foster and extend the trade which they so lately tried to stifle."
5. Even if this picture be somewhat highly coloured, there is still much cause for congratulation in the improvement which has taken place during the past year. It was not to be expected that, whatever might be the good feelings and the good intentions of the Maharajah of Cashmere, his agents would all at once desist from their old habits of corruption and practices of extortion, and I am not, therefore, surprised to learn from Dr. Cayley that there is still much to be contended with in this direction. We must trust to the action of time to produce a more complete change in the character of public functionaries, who have ever been accustomed to enrich themselves by illicit gains at the expense of the traders passing through their country.
6. On the subject of the former unwillingness of the Maharajah of Cashmere to allow the fine shawl wool from Yarkand to pass out of his territory, Mr. Forsyth observes that his Highness has ceased to desire to maintain the monopoly, and is convinced of the benefit of free trade. "The idea of free trade in this article," he adds, "caused the greatest alarm to the Maharajah, and induced his English supporters to cry out against the supposed destruction of the Cashmere monopoly. The demand for this article in Cashmere is fixed at 1,200 loads. Beyond this quantity the article cannot be utilized by the present number of hands in the factories. Any quantity beyond this amount than there is imported from Yarkand may be seut to Hindostan. Now, the supply of this shawl wool is practically limited to the demand, any quantity being procurable, and this at once dispels the fears of the Cashmere shawl merchants, and refutes the arguments of the monopolist party." But it appears to me that the desire to uphold the monopoly resulted, not from any apprehension of a short supply of wool for the Cashmere manufacturers, but from the belief that the value of the shawls made in Cashmere would be greatly depreciated by a more extensive manufacture of the article in the Punjab, or in other parts of the British dominions, and its sale, perhaps, at a lower price. It was obviously the desire of the Cashmere government to avoid all such competition. Our true cominercial policy, therefore, in such a case, is not to endeavour to persuade the authorities that the actual loss of the monopoly will not in itself be inconveniently felt in Cashmere, but that the practical recognition of general principles of free trade throughout the Maharajah's dominions, will tend so to increase the general revenues of the country, and to promote the prosperity of the people, as to render any depreciation of the value of the shawl trade a matter of comparatively minor importance.
7. I am desirous of learning what is the state of the Hindostan and Thibet road, commenced by Lord Dalhousie, and subsequently carried on towards Changoo and Shipki, but the completion of which was arrested by want of funds. If money is available for the purpose, it would appear to be desirable to open out the 70 miles which still remain to be completed, and which would effectually tap the commerce of the Thibet country.
8. In conclusion, I have only to assure your Excellency's Government of the interest with which I shall receive from you further reports upon the subject, and the willingness with which I shall be prepared to sanction any moderate grants of public money for the promotion of so laudable an object.

> I have, \&cc.
> (signed)





Fant Injula (I AbTEAS









1/1/r. C.ensuich.!

$$
\begin{aligned}
& \text { :1) July } 18 \text { ! }
\end{aligned}
$$

Tine 1s. 1 !
384.

Inder


[^0]:    (Mr. Eastwich.)

[^1]:    * Note by Mr. Forsyth.-There appeara to he some error here, for the Return shows he bas 252 acres, of which only three are planted.

[^2]:    || Since writing the above, I have perused Captaid, now Major General, Cunningham's report on the boundariea between Ladak and British territory, and find that 21 years ago he advocated opening out this same route. I give the following extract from his report:-"As there was a weil-trodden foot-path up the left bank of the Cherpe (or T'srap), and as the Lahoulees who were with us stoutly denied all knowledge of it, it seemed certain that this must be one of the principal routes used by the smugglers of shawl wool between Rudok and Lahoul. As we could obtain noinformation regarding this route, we determined to despatch a trustworthy party up the Cherpa, who should rejoin us at the Chomourire Lake, as we had little doubt that the route would end on the southern end of the Lake. On their return, the party reported that they had found a bridge five miles above the junction, and that the pathway was perfectly practicable even for laden animals, with the execption of an extensive landslip near the head of the Cherpa river. Several traders' or shepherds' encampments were noticed on this route, where both grass and fuel were procurable in the neighbourhood of the river. They described the pass at the hend of the river as being so easy that with a little labour it might be readily made into a very good one. From thence, after a short descent, the route ran over stony alluvial flats along one of the feeders of the Para river, and over a low pass to the southern end of the Chomourire Lake, as we had unticipated. A glance at the map will show that this route leuds directly from the shawl countries of Rudok and Gardok, via Hanle and the Para and the Cherpa rivers to the Lahoul boundary at Phalang danda. Were this route to be opened by the British Government, and a few Dhurmbulas or travellers' houses luilt at convenient distances, our traders in shawl wool from Noorpoor and Rampoor would be saved the henvy duties which are now levied by the Mabsrajah Golab Singh."

[^3]:    * Note.- The stages on these routes are as follows :1. From Luking to Man. 2. Man to Shushal

    3 and 4. Shushal over a low pass to the Indus at Chumathang. There are also forls and ferries over the Indus at Mya and Nima, a few miles higher up.

    ## 5. Chumathang to Puga.

    From Puga there are two routes, one leading by the Tsho Morari lake and Paranglá (pass) reaches Spiti in six marches. The pass is steep and high, but this route is now often followed by the traders of Spití and Bisahar coming to Leth. The other reaches Rapshu in two marches from Puga, and there joins the main road from Kulu and Lahoul to Ladakh at a point seven marches distant from Kenlung in Lahoul.

[^4]:    * The route taken by A. Schalgintweit, in 1057, skirted the N.E. side of this plain, and that followed by Mr. Johnson lept amongst the mountains to the N.E. without ernerging on this plain at all.

[^5]:    *The arrangement of these mountains in this map is incorrect. The dark ridge marked as running nearly east and west in latitude $85^{\prime} 39^{\prime}$ and $34^{\prime}$, and east longitude $79^{\circ} 20^{\prime}$ to $30^{\prime}$, does not exist in this direction. This ridge in reality runs nearly due north, and separates the "salt lake" south of the "encampment Karakash" (of map) from the larger "salt lake" to the south-west; and in the situstion that this range is inade to occupy in the map there is what I have degcribed as the third salt plain, an immense level expanse, 20 miles long, north and south, and from fue to 15 or 16 miles across in the opposite direction, and containing four or five salt lakes. It is separated by the range I have just noticed as lying nearly north and south from the fourth salt plain.

[^6]:    (signed) T. H. Thornton, Secretary to Government, Puijab.

