

THE  
GEOGRAPHICAL  
JOURNAL

VOLUME LXXXIX

JANUARY TO JUNE

1937

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL  
EDITED BY THE SECRETARY

THE ROYAL GEOGRAPHICAL SOCIETY  
KENSINGTON GORE LONDON S.W.7

EDWARD STANFORD LTD. 12 LONG ACRE W.C.2

AND 43 WHITEHALL S.W.1

# The GEOGRAPHICAL JOURNAL

Vol LXXXIX No 4



April 1937

THE MOTOR ROUTE FROM PEKING TO KASHGAR: *A paper read at the Evening Meeting of the Society on 16 November 1936, by*

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IN the autumn of 1935, when Sinkiang was settling down after the convulsions of the Mohammedan rebellion, I was sent on a special mission to establish contact, on behalf of the British Embassy in China, with the new Provincial Government in Chinese Turkestan. On investigating ways and means of making the journey, I decided, following the example of Dr. Sven Hedin and other pioneers of mechanical transport in Chinese Central Asia, to try out the possibilities of crossing the Gobi and traversing Sinkiang by motor truck. When I started to organize my expedition I found it difficult to obtain reliable information about the route and the feasibility or otherwise of motoring through to Kashgar; and the following description of the motor route, such as it was in 1935, from Peking to Kashgar may, it is hoped, prove of assistance to future travellers contemplating the same journey.

Motor transport has revolutionized travel in Mongolia and Chinese Turkestan, and one can nowadays accomplish in a few weeks the long journeys which formerly occupied many weary months of travel by camel caravan or cart. Motor cars and trucks first made their appearance in Chinese Central Asia after the war on the grassy steppes of Mongolia, which are specially suited to motor traffic, and as long ago as 1920 I travelled in one of Mr. Larson's Dodge cars from Kalgan to Urga. It was not however until many years later that motor traffic was developed in the more sandy wastes of the Western Gobi and Chinese Turkestan.

The overland traveller from China to Central Asia has the choice of two routes, the old Imperial cart road through Shensi and Kansu, and the camel trails through Inner Mongolia. While it is possible to get trucks through by the old cart road, the Mongolian route, by which I travelled, is the one better suited for motor traffic. There used formerly to be a third route, which was in fact the road generally followed by the Central Asian caravan trade, the camel trail from Kwei-hwa-ch'eng (Sui-yuan) through Outer Mongolia to Ku-ch'eng and Urumchi. This route, which was the one followed by early European travellers (including Captain Younghusband in the 'eighties), has

had to be abandoned owing to the closure of the Outer Mongolian frontier, and Chinese caravans taking the Gobi route have since followed the camel trails through Inner Mongolia *via* Shan-tan Miao and the Etsin Gol to Ming Shui and thence *via* Hami or Ku-ch'eng to Urumchi. This is the route, "The Winding Road," described by Mr. Lattimore in his book 'The Desert Road to Turkestan.' As it traverses the Gobi longitudinally for 1000 miles or so, it is a more barren and arduous road than that through Outer Mongolia, which, running most of the way across grassy steppe lands to the north of the Gobi Desert would, if available, afford better going for motor traffic between China and Turkestan.

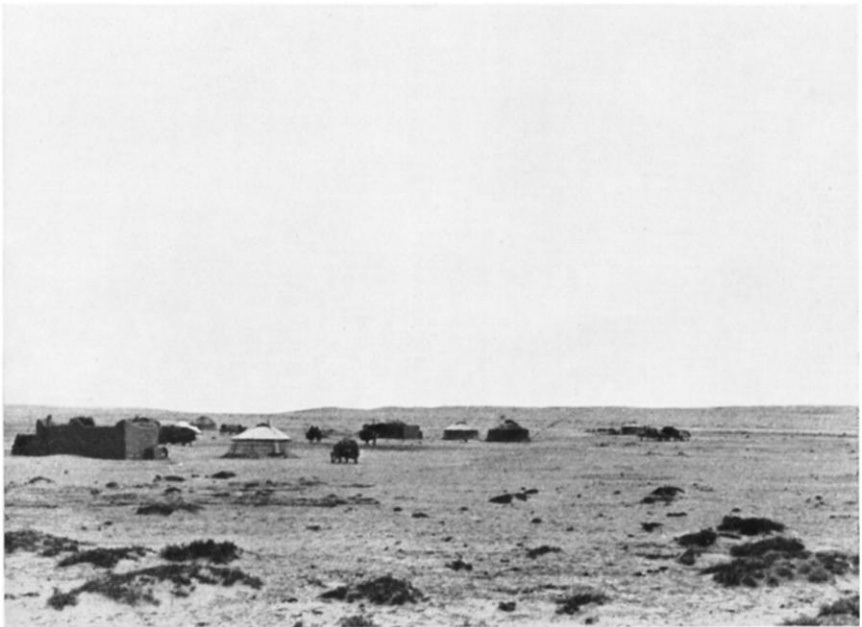
Various attempts were made, after the closure of Outer Mongolia, to find a feasible motor trail from China to Sinkiang by the Inner Mongolian route. The difficulty lay in how to cross the wastes of sand, stretching across Inner Mongolia from Kansu and the Alashan desert to the Outer Mongolian border, which render the main camel trail *via* Shan-tan Miao impassable for motor traffic. A practical motor route across the Inner Mongolian Gobi was eventually discovered about five years ago by the Söderbom brothers (the sons of a Swedish missionary from Kalgan on the Mongolian border) and their Mongol guide Serat, who solved the problem of getting round the sands by working out a new route between Uni-Ussu and the Etsin Gol, an adaptation of minor camel trails and detours across the desert, along and close to the Outer Mongolian border.

The new motor route across the Inner Mongolian Gobi, first traversed by the Söderboms and Serat in 1930-31, has since been followed by the Hardt-Citroën Expedition, by a party of China Inland missionaries proceeding to Urumchi, by Dr. Sven Hedin on his last expedition in 1934, and by the trucks of an American firm in Tientsin bringing down cargoes of produce from Sinkiang; and it is now used by the Sinkiang-Sui-yuan (*Sin-Sui*) motor transportation company, a Chinese concern which runs trucks between Sui-yuan and Hami at irregular intervals. Owing to political difficulties the trucks of this enterprising company are not allowed at present to go beyond Hami. While the credit for the original exploration of the route lies with Serat and the Söderboms, present-day travellers along it have reason to be grateful to the *Sin-Sui* company, who have discovered new detours and done a certain amount of work on the road and improved some of the worst places.

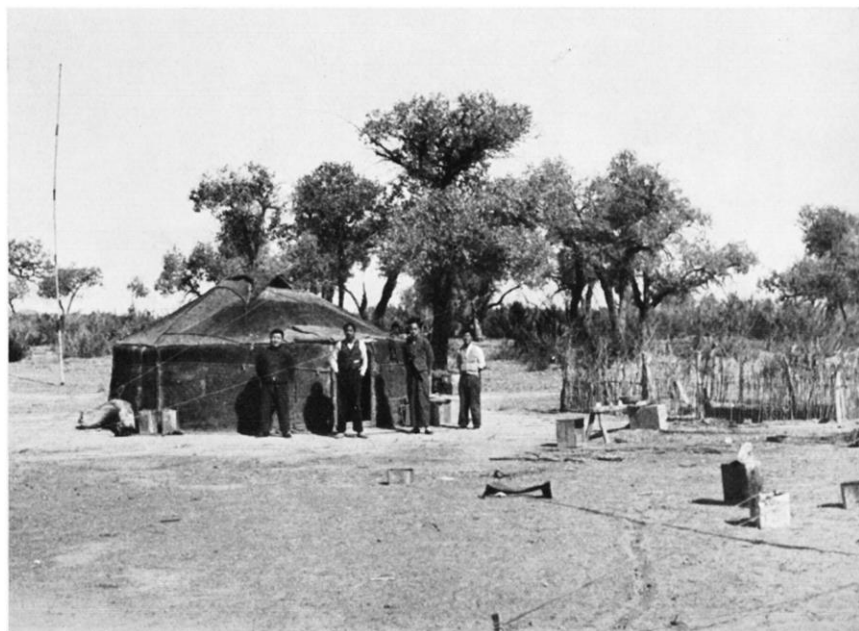
Although the new motor trail through Inner Mongolia is now frequently used by these Chinese trucks, every journey is an adventure and for much of the way a long struggle against the sand. Ten miles per hour is a satisfactory average in the Gobi, say 80 to 100 miles per day, if nothing untoward occurs. On the other hand, if things go wrong and one sticks badly in heavy ground, the whole day may be spent in covering a few miles. Nothing is obtainable on the 1200-mile journey across the desert from Sui-yuan to Hami, and it is necessary to carry a liberal supply of spare parts, as well as all kinds of implements and apparatus for extricating the trucks from sand and mud, including spades, picks, wooden planks, rope mats, towing hawsers and special jacks. (When a truck is completely stuck in sand or mud the rear wheels have to be dug out and jacked up and planks and rope mats inserted underneath.) Sufficient petrol must be carried or sent on ahead to depots in the desert to



*Loading up at Pai-ling Miao. Monastery in the background*



*The eastern Gobi. Bandin Tolgoi*



*Wayen Torrai. Chinese Government wireless station*



*The Dzungarian steppe, approaching Urumchi*

enable one to cover the 1200 miles to Hami, where the first supplies of Russian petrol are obtainable, but at present only through official sources. Estimates of the amount of petrol required should be based on a minimum average of 4 to 5 miles per gallon for a loaded truck in the desert, allowing for the necessary low-gear work in sand and bad ground.

The motor vehicles at present in use on the Sui-yuan to Hami run across the Gobi are mostly Ford V8 3-ton trucks, which have proved themselves to be strong, fast, powerful, and reliable, and have the advantage of being familiar to the Chinese and Mongols who drive the route. Only the strongest machines will stand the strain of Gobi travel—and the nature of some of the ground that has to be crossed must be seen to be believed. The Citroën tractors of the Hardt expedition were, according to Mongol reports of their work which I heard, good in sand but bad on rocky ground and too slow for the purposes required. In Chinese Turkestan, *i.e.* from Hami to Urumchi and from Urumchi to Kashgar and the Soviet frontier, only Russian *Amo* trucks are in use, motor transportation being monopolized by the local Government, who have acquired a large fleet of these *Amo* trucks from the U.S.S.R. They are strong and carry heavy loads, but seem underpowered as compared with the Ford V8 trucks for the nature of the work they have to perform.

The necessary native equipment and supplies for crossing the Gobi can best be obtained in Kwei-hwa-ch'eng (Sui-yuan), including Mongol tents, which, felt-lined for the winter, are more suitable for this kind of travel than any other type of foreign or native tent. The Sui-yuan sheep-skins are amongst the best in Asia, and we were grateful when crossing the Pamir in the depths of the winter for our Mongolian sheepskin sleeping-bags and robes, which were superior to anything of the kind obtainable at Kashgar or on the Indian frontier. All food supplies, except meat, must be carried sufficient to reach Hami. Sheep can be purchased *en route*, and antelope, sand-grouse, duck, and an occasional bustard, can be shot in the desert.

Wells are met with every 20 to 30 miles along the camel trails, but it is not easy to find them without a competent guide who knows the road.

Fuel is obtainable in most parts of the desert, in the form of dead tamarisk and poplar wood, which burns very well, better than the *argols* (dried cattle dung) of the steppe country. Apart from fuel and water there is nothing at most of the halts but the bare well, unless one happens on the *yurts* of a depot of the *Sin-Sui* Company or of a Chinese trading post.

Where possible it is best to follow the old camel trails, which are firmer and better going than the rest of the desert. Over long stretches of the Gobi the surface is gravel over sand, and once off the camel trails the heavy trucks break through the top surface and have to plough for hour after hour through the sand on low gear. The worst part of the road from Sui-yuan to Hami, for sand and heavy going, is the first half, to the Etsin Gol. Thereafter the going, though rocky and stony in places, is better. Some of the worst going is across the sandy beds of dry rivers, and some of the best on the smooth firm surface of dry lake bottoms. The latter sometimes furnish a virgin motor road as smooth as tarmac along which one can travel at high speed for miles on end.

The different seasons of the year all have their disadvantages for crossing the Gobi by motor: in winter the extreme cold, in the spring the wind and

sand storms, in summer the heat of the sun, and in the autumn, in Inner Mongolia, the rain, which may make the softer parts of the desert impassable for a time. Probably the early winter months, November and December, are the best in spite of the cold; or the early summer, May and June.

In Sinkiang, from Hami to Urumchi and Urumchi to Kashgar, the motor route follows for most of the way the old cart road, which affords on the whole easier going than the camel trails of the Gobi. The carts of Turkestan have a specially broad gauge, which facilitates motor traffic, since motor trucks can generally pass wherever the carts go; whereas in North China a cart track will always sooner or later become too narrow for a motor vehicle. The Sinkiang roads are however often very bad in the oasis country, owing to the many streams and irrigation channels that have to be crossed.

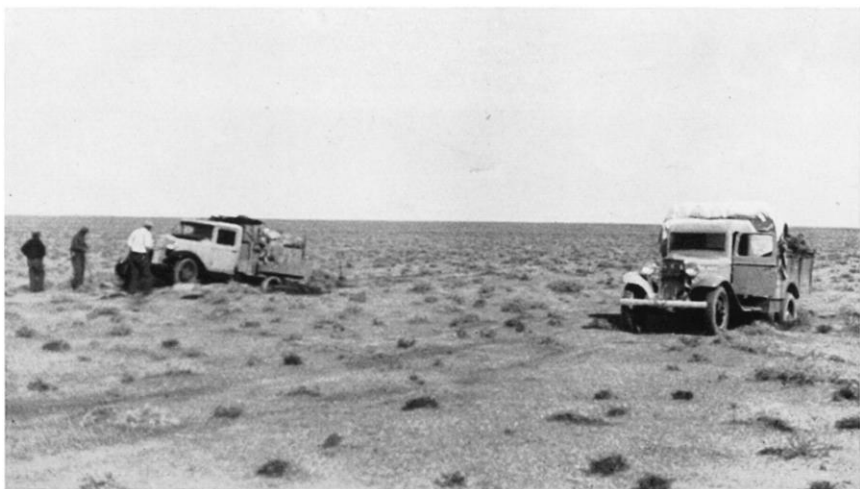
The late autumn, or early winter, is probably the best season for traversing Chinese Turkestan by motor, and the spring thaw time the worst. In the summer also the rivers and streams and irrigated ground are troublesome. In mid-winter the country north of the T'ien Shan is snow-bound and too cold for motor travel.

*Serais*, or house accommodation of some kind, are everywhere available in Sinkiang, and from Hami on it is unnecessary to carry tents or large supplies of food.

It took me thirty-eight travelling days to cover the 2550 miles by motor truck from Sui-yuan to Kashgar, but I encountered various mishaps on the earlier part of the journey. With proper organization and preparation it should be possible to do the journey by motor truck in a month, as compared with four to six months by camel caravan or cart.

My transport consisted of two Ford trucks, one new and one old, the latter having already done some thousands of miles of expedition work with Dr. Sven Hedin the year before. The old truck suffered several mechanical breakdowns and had eventually to be abandoned 500 miles short of Kashgar; the new one reached the end of the journey in perfect condition, and had the distinction of being the first motor vehicle to be driven through from the Chinese border to Kashgar. The moral is that only new machinery is good enough to stand up to the strain of Gobi travel. My native staff of six included two Mongol driver mechanics who had been with Dr. Hedin on his last journey. One of these was the Mongol Serat, whose invaluable services I obtained through Mr. George Söderbom of Kwei-hwa-ch'eng. Serat was my right-hand man throughout the journey. Starting as a youth in the service of Mr. Larson, he had spent his life wandering across the length and breadth of Inner and Outer Mongolia. Subsequently he made two expeditions with Dr. Hedin to Sinkiang, and he can now probably claim to know more than any one else about the routes and practical details of motor travel in Mongolia and Chinese Turkestan. The adventures of Serat and the other members of the Sven Hedin Expedition of 1934-35 are graphically described in Dr. Hedin's recently published book, 'Big Horse's Flight.'

We started in the latter part of September from Sui-yuan (Kwei-hwa-ch'eng), which from time immemorial has served as the terminus on the Chinese border of the Central Asian caravan trade. Sui-yuan can be reached by the Peking-Sui-yuan railway in twenty-four hours or so from Peking, thus avoiding the



*Soft ground in the desert near Hoyer Amatu*

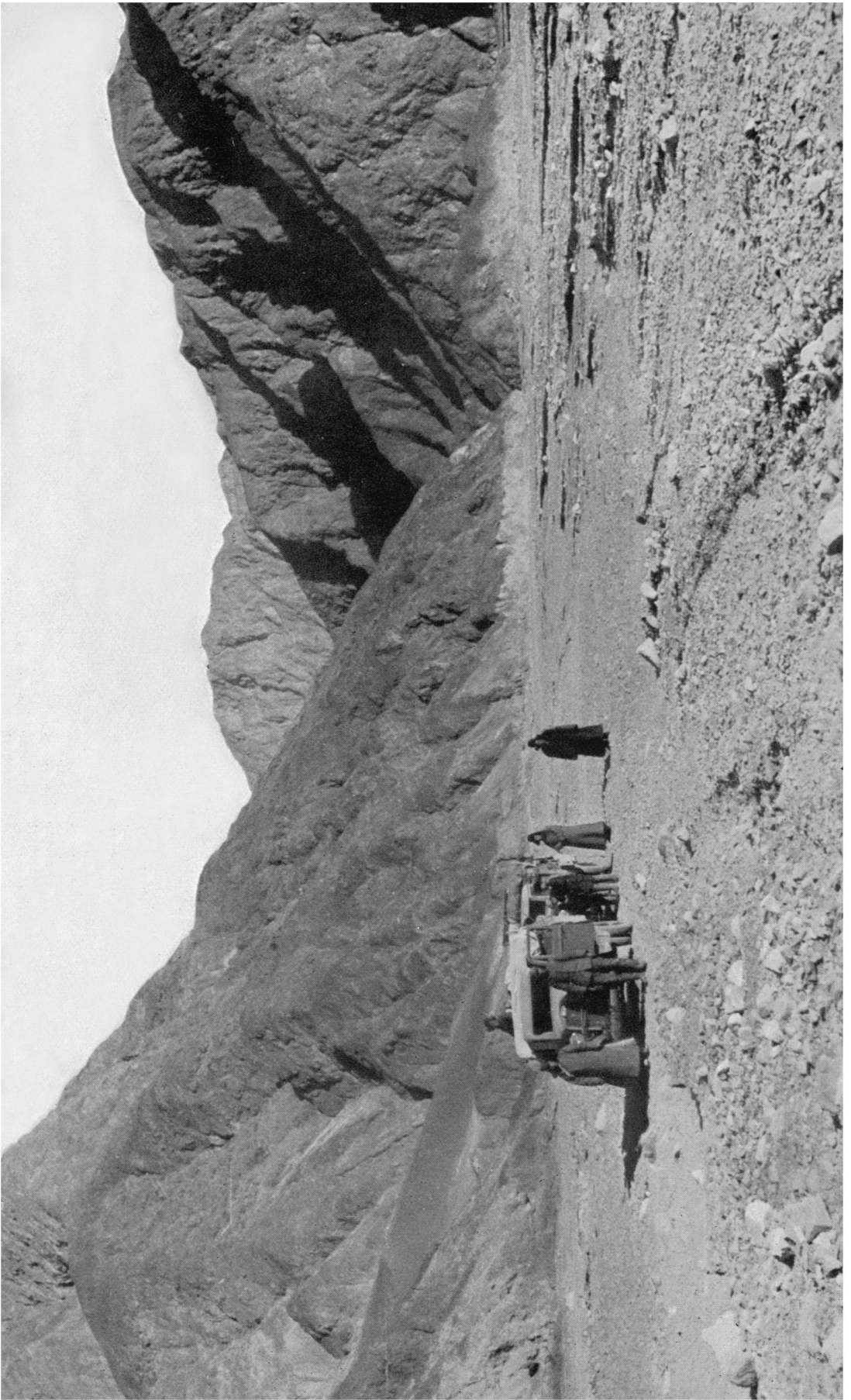


*Good going across the T'ien Shan*



*Working on the road in the Toksun gorge*





difficult Nankou pass and 300 to 400 miles of rough going along the Inner Mongolian border. Starting the motor journey from Sui-yuan, one ascends by a stony cart track through the mountains leading up to the grasslands of the Mongolian plateau. Once on the steppes the going improves and a day's run across grassy prairies brings one to Pai-ling Miao (Mongol Batur Halak), one of the biggest monasteries in Mongolia. In 1935 a village of *yurts* alongside the monastery housed the newly established Government of Autonomous Inner Mongolia.

From Pai-ling Miao the trail continues across the Mongolian steppe for 160 miles to Uni-Ussu ("Cow Water"). The going is good on this stretch, except for some miles of heavy sand in the Yang-ch'ang-tzu Kou ("Sheep Gut Valley"). At Uni-Ussu begins the crossing of the Gobi, which, except for the Etsin Gol country half-way, extends for near 1000 miles to Hami, the first big oasis in Chinese Turkestan. It is therefore also at Uni-Ussu that the difficulties of desert travel really begin. The main camel trail here turns south to Shan-tan Miao, while the new motor track continues west along the Outer Mongolian border. Some 70 miles west of Uni-Ussu, near the well of Bayen Unter, the track is crossed by a line of sandhills impassable to motor traffic stretching across one's front into Outer Mongolia. These sands can be detoured either by making a dash to the north through the forbidden land of Outer Mongolia (this has been done but is *not* recommended), or by turning south and following along the dry bed of the Meringen Gol.

Beyond Bayen Unter the motor track continues west-north-west across a gravel Gobi plateau. This is probably good going in dry weather, but we were unfortunate enough to be travelling across it during the autumn rains, which made the surface of the desert too soft to bear the weight of the trucks. Rain and waterlogged ground are not the kind of trouble one expects to meet with in the Gobi; but in this neighbourhood towards the end of September it rained continuously for nearly twenty-four hours, and, after a day's delay in camp waiting for the desert to dry, we spent nearly twelve hours in covering 20 odd miles. All the time the twin peaks marking the well of Hoyer Amatu were in sight, but it seemed as though we should never reach them, when finally, as night was falling, one of the trucks sank up to its back axle in the bed of a sandy stream. Again we had to camp where we had stuck, and it was not until the next day, after struggling across some higher ground and picking our way laboriously through rocks and sandhills, that we reached Hoyer Amatu, a well and the *yurts* of a Chinese trading post lying in an immense plain bounded on the north by a range of low mountains on the Outer Mongolian border, here about 10 to 15 miles off.

For the next 100 miles, from Hoyer Amatu to Bandin Tologoi, we continued to have trouble with sand and soft ground. Twenty-five miles out we passed Abter well, where we were obliged to leave the camel trail we had been following on account of the sand and turn north towards the Outer Mongolian border. After various adventures and misfortunes, including a serious mechanical breakdown involving a further delay of twenty-four hours, we reached and camped near some lagoons 50 miles from Hoyer Amatu and a few miles north of the well of Yingen, which we had failed to find. Yingen well lies at the meeting point of the borders of Outer Mongolia, Sui-yuan, and

Ning-hsia, and, so far as I could make out, we were here actually camped in Outer Mongolian territory.

The next day we covered the remaining 50 miles to Bandin Tologoi, where there is quite a settlement of *yurts* belonging to local Mongols and Chinese traders. Here our route crossed a camel trail from Urga to Kansu, which in 1927 was one of the main lines of communication between the Chinese revolutionary forces and the U.S.S.R.

This region of the Gobi consists of immense plains of gravelly sand sparsely dotted with tamarisk bushes, all tinder dry and invaluable for fuel, and interspersed with the flat sandy beds of dry rivers, which are usually troublesome to cross. Most of the way the view to the north is bounded by a low range of mountains marking the Outer Mongolian border and the northern edge of the Gobi desert. From what I heard the camel trails to the north of these hills in Outer Mongolia should lie across grassy steppe country and afford much better going for motor traffic bound from China to Turkestan. Unfortunately the local political situation prevents their being used.

My map of the motor route across the Gobi is decorated with numerous place-names, but most of these are only bare wells, which it would be impossible to find without a guide who knows their whereabouts.

Beyond Bandin Tologoi, in spite of many bad patches of sand, we found the going better, with some long smooth stretches of firm gravel where we travelled at a good pace. The trail, after crossing a broad sandy depression, runs through range after range of low Gobi hills, often grotesquely shaped and coloured red, yellow, green, and blue. Finally one emerges from the last range of hills to reach, 150 odd miles from Bandin Tologoi, the poplar belt marking the eastern edge of the oasis of the Etsin Gol. Coming from the east trees and pasture are first reached at the well of Wayen Torrai, where the Chinese Government have recently established a small wireless station in a Mongol *yurt*.

The Etsin Gol is known higher up to the Chinese as the Hwei Ho (Black River), where it issues from the mountains of the Kokonor and waters the oases of Western Kansu before flowing north into the desert. Beyond the township of Mao-mu it splits up into two or three main and other subsidiary channels and flows north for 200 miles or so to end in the twin salt lakes of Gashun Nor and Sogo Nor on the border of Outer Mongolia. This is the Etsin Gol oasis, a long narrow strip from 30 to 50 miles across, a region of desert poplars, tamarisks and thin reedy grass, inhabited by a tribe of Torgut Mongols and surrounded by the desolation of the Gobi. In the summer most of the river water is used by the farmers in Kansu for irrigation purposes and in the winter the streams are frozen. In both these conditions it is possible, if one knows the way through the sandhills, to drive motor trucks across the various channels of the river. At the time we made our journey, in the autumn months however, motor traffic had to make the long detour round the twin lakes to the north. This involves an extra 100 miles as compared with the direct route. It is a hard run through heavy sand and a terribly desolate region round the two salt lakes and along the base of the range marking the Outer Mongolian border. Then one strikes another camel trail running south from Urga to Kansu and Tibet, which affords good going for the rest of the way south to

Ulan-chonchi, a remote little tax station on the western edge of the Etsin Gol oasis.

From Ulan-chonchi it is a run of 300 miles across the Black Gobi to the Sinkiang border. The going is rocky and mountainous much of the way, but there is less heavy sand than on the stretch east of the Etsin Gol. This region of the Western Gobi gives an impression of extreme emptiness and desolation. It is practically uninhabited, and over considerable stretches there is no scrap of vegetation, even the desert shrubs and tamarisks giving out. There are *yurts* of Chinese traders at only two points, Shih-pan Ching and Kung Po Ch'uan. From Ulan-chonchi to Shih-pan Ching we found the going fairly good, at first across a vast plain and then through low Gobi hills. Over a distance of 90 miles on this stretch there are no wells, involving great hardship for the camel caravans but, given ordinary precautions, none for the traveller by motor truck. For, though we were on occasion forced by misadventure to camp where there were no wells, we always carried an ample supply of water in empty petrol drums.

Beyond Shih-pan Ching there is some rather difficult ground through a range of mountains near the top of which lies Yeh Ma Ching-tzu ("The Well of the Wild Horse"). This well lies just off the route, being inaccessible to motor traffic owing to the narrow pass.

About 200 miles from the Etsin Gol we reached Kung Po Ch'uan. The neighbourhood is marked by the ruins of a fortress on a nearby hill-top, an unusual sight in this empty land. These are the ruins of the stronghold of the outlaw lama chief, a Russian Mongol, who established himself in this remote region in the early nineteen-twenties, when Mongolia was in a state of turmoil. For some years he levied tribute on the passing caravans and surrounding countryside, until he was eventually killed and his followers dispersed by an expedition sent by the Outer Mongol and Russian authorities. Versions of this singular story, which is still told and re-told round the camp fires of the Gobi caravans as they pass the neighbourhood, will be found in the books of Mr. Lattimore and Mr. Haslund.

The Western Gobi is a jumble of mountains, and it is not easy to distinguish the continuity of the different ranges. One of the more distinctive features is the Ma Tsung Shan range, which runs much of the way along the southern horizon on the left hand as one travels west. Beyond these mountains lies the old Kansu cart road across the Gobi.

From Kung Po Ch'uan, where one first meets with sweet water springs (*Ch'uan-tzu*) in place of the often bitter Gobi wells (*Ching-tzu*), the trail ascends through the mountains to the Sinkiang border. This is a remote and desolate region, utterly empty save for the wild ass and antelope. The Sinkiang border is reached at Ming Shui ("Clear Water"), which figures prominently on the map but comprises actually only a ruined hut and well in uninhabited desert mountains. Near by are some ruined forts and towers of great antiquity marking the Mongolian-Turkestan frontier.

The Ming Shui pass (6700 feet) marks the highest point on the Gobi crossing, and one descends across an immense slope of hard gravel, good going for the trucks, into the desert plains of Chinese Turkestan. To one's front rises the eastern end of the T'ien Shan, the snow-capped Karlik Tagh,

a fine view which impresses itself all the more on the memory because it marks the end of the weary Gobi crossing. Rounding the southern base of the Karlik Tagh and passing the outlying oasis of Miao-erh-Ku, where Turki peasants are first met with, we reached Hami, the eastern gateway to Sinkiang. Here the traveller finds himself in a new country, China and Mongolia are left behind, and the people, language, scenery and buildings are those of Eastern Turkestan.

Hami lies close under the southern face of the T'ien Shan, and the road to Urumchi (368 miles) runs north-west and crosses the main range by the Ta-shih-t'ou gap between the Karlik Tagh and the Bogdo Ula peaks. The pass, 5300 feet, is relatively easy for motor traffic and the going is good most of the way on the long descent across the plains of Dzungaria on the other side. We were now in Northern Sinkiang, known to the Chinese as *T'ien Shan Pei Lu* ("the Circuit North of the T'ien Shan"), a cold bleak land resembling Mongolia and Siberia rather than Turkestan. The first large city to be reached is Ku-ch'eng, a Chinese trading centre and the terminus of the camel caravan route from China. From Ku-ch'eng to Urumchi, 126 miles, the road is generally bad, as one passes through a series of agricultural oases watered by streams and irrigation channels from the T'ien Shan. The countryside is full of game, especially partridges and hares. All the way the snow peaks of Bogdo Ula are in full view, as one circles round them to reach Urumchi.

This road which we followed from Hami is the summer motor route to the Provincial Capital. In the winter, from November on, it is snow-bound and motor traffic follows the road *via* Turfan south of the T'ien Shan.

Urumchi, known to the Chinese as Ti-hwa, is too well known to call for much description. It is the capital and administrative centre of Sinkiang and comprises three towns adjoining one another, the Chinese city (seat of the Provincial Government), the Moslem city (Turki and Tartar bazaars), and the Russian quarter. It lies close under the T'ien Shan, on their northern face, in a basin-like break in the main range, backed by the snows of Bogdo Ula and nearly surrounded by hills, with an opening to the north, where the Urumchi river flows out on to the steppes of Dzungaria to end in a vast marsh farther north. The climate is severe, resembling that of Harbin in Manchuria. Before we left, in the middle of November, the countryside was already under snow and the thermometer had fallen to zero Fahrenheit at night time. There is not much to be said for Urumchi as a place of residence, but it is a centre of the first importance in Central Asian politics and history.

From Urumchi to Kashgar, about 950 miles, the motor route follows the old cart road. We travelled *via* Turfan, involving a detour of 25 miles, in order to visit this important and interesting oasis, famous for its situation some hundreds of feet below sea-level, its archaeological remains, its seedless raisins and other fruits, and its terrific summer heat. In mid-November however the climate was pleasant enough, with some degrees of frost at night. The road from Urumchi across the Ta-pan pass in the T'ien Shan presents no special difficulties for motor traffic and we were glad to be back in the relative warmth of the country south of the T'ien Shan.

The main south road (*T'ien Shan Nan Lu*) is rejoined at Toksun, an oasis similar to, but smaller than, Turfan. A few miles farther on one has to pass

through the famous, or rather infamous, Toksun Gorge, the most difficult and dangerous place for motor traffic between Peking and Kashgar. Nor can these gorges be avoided, as this route, the old Imperial cart road, is the only possible one for motor traffic between the north and the south of Chinese Turkestan. The road traverses a mountain range by a narrow gorge and in two places ascends very steeply over a sort of rock avalanche and between huge boulders. This place has been the grave of many motor vehicles, and we lost one of our trucks on it. It is to be hoped, for the sake of future travellers, that the Provincial Government will turn their attention to blasting a proper passage through the rocks. The present condition of the road through the Toksun Gorge is evidently much the same as it was fifty years ago, since the description given by Captain Younghusband in 'The Heart of a Continent' might have been written to-day.

After our adventures in the Toksun mountains we spent the night in the miserable hamlet of Kumush on the farther side of the pass, where we had to abandon one of our trucks which had broken its differential gear on the ascent over the rocks in the gorge. We twice had to take down the back axle of a truck in the desert, but on this occasion had no spare part to replace the damaged gear. On the following day we covered the remaining 100 miles of relatively good going to Karashar, where one is again in a Mongolian atmosphere, as this is the centre of the Torgut Mongols of Sinkiang, who occupy the pastures of the neighbouring T'ien Shan ranges. Here we encountered the second major obstacle of the Urumchi-Kashgar road, the crossing of the Karashar river flowing down from the mountains into the Bagrach Kol near by. In the summer the Karashar river can be crossed by a ferry boat taking camels, carts and motor trucks, and in mid-winter it is frozen and motor traffic can cross on the ice. We were unfortunate enough to arrive just at the moment when the ice had started to pack, so that the ferry boat was frozen in, and, though foot traffic was already crossing on the frozen surface, it was not expected that the ice would be strong enough to bear the weight of the motor trucks for another two or three weeks. Eventually, with the assistance of a party of Russians, who were interested in getting their trucks across from the other side, we succeeded after two days' work in breaking a passage for the ferry boat through the ice and effecting a difficult and rather dangerous crossing.

From Karashar to Kashgar, 684 miles, we met with no further serious difficulties, though the road is bad and sandy in places and there is one big river, at Aksu, to be crossed on the way. We crossed the Aksu river by a very inadequate bridge built for the cart traffic, but a ferry near by affords an alternative and probably safer method of crossing. The road passes through the chief towns and oases of Southern Sinkiang, such as Korla, Kuchar, Aksu, and Maralbashi, which go to make up the *Nan Lu* ("South Road" or "Southern Circuit") and constitute the heart of Chinese Turkestan. The cities, packed on bazaar days with peasants from the surrounding oases, are purely Turki in appearance; and a Chinese face is nowadays as rare amongst these Turkish crowds as that of a foreigner in the interior of China. For long stretches on both sides of Maralbashi the sand is very bad, involving many hours of low-gear work and frequent recourse to the spade. This neighbourhood is the

edge of the great central desert of Chinese Turkestan where the atmosphere is usually shrouded in dust haze. A thin white dust lies ankle and knee deep on the track which winds through ghostly forests of dead poplars and tamarisks. This white dust is not however a serious impediment to motor traffic, and it is only when one reaches stretches of real sand that the trouble begins.

We had left Urumchi on November 14, but, owing to the delay of some days at Karashar, we did not reach Kashgar until November 29. The latter part of the journey was a race against time, as every day's delay increased the difficulties of the winter journey across the Pamir and Karakoram to India. I was eventually able to leave Kashgar on December 9 and reached Gilgit a month later. This stage of the journey, 400 odd miles across the mountain barrier separating the upper waters of the Indus from the plains of Turkestan, can of course only be done by pack animal, the farthest point possible for motor traffic being the foot of the hills 30 miles or so from Kashgar. The snow on the Mintaka Pass (15,450 feet) on the frontier was rather deep, but we crossed without incident after transferring our loads from our own ponies to some yak furnished by the local Kirghiz. On the whole the winter journey across the Pamir and Karakoram presented no special difficulty, apart from the cold. At one of our camps on the Pamir we recorded more than 20° below zero Fahrenheit at night time. The cold makes itself felt all the more owing to the constant high winds and scanty supply of fuel, *argols* and brushwood, available on the Pamir. It is a relief to cross the pass and reach the comfort of the Mir of Hunza's rest-houses and their abundant supply of firewood. On the other hand the winter route *via* the Ghez defile from Kashgar to the frontier affords wonderful views of the Kungur and Muztagh Ata ranges, both over 24,000 feet high, towering over the Chinese Pamir.

Arriving in Gilgit early in January we found, as was to be expected, that it was impossible to get through to Srinagar owing to the snow on the Burzil Pass. My Chinese and Mongol staff were sent out through Chitral, but I myself was saved this further long tramp through the snow by the courtesy of the Government of India, who fetched me down from Gilgit by air. This was, I believe, the first time that an aeroplane had visited Gilgit during the winter, and on the first attempt the machine, an Avro X, piloted by Flight-Lieut. Jackson, flew into bad weather and had to turn back to Rawalpindi owing to ice forming on the wings. The second attempt, made the next day, was successful; and on the following day, January 16, we flew from Gilgit to Delhi in perfect weather. We crossed the Himalaya at 15,500 feet, following most of the way down the gorges of the Indus with wonderful views over Rakaposhi, Haramosh, Nanga Parbat, and the peaks and valleys of Kohistan. The flight from Gilgit to Rawalpindi took under two and a half hours, as compared with the fourteen days or so occupied by the same journey by road.

#### *Note on the map*

The map is based on a compass traverse by the author. The eastern portion is adjusted to the position of Sui-yuan (Kwei-hwa-ch'eng) on the War Office map of Mongolia (G.S.G.S. No. 2957. Scale 1/4M) and to Sir Aurel Stein's position of Gashun Nor (Serial No. 44 of "Chinese Turkistan and Kansu")

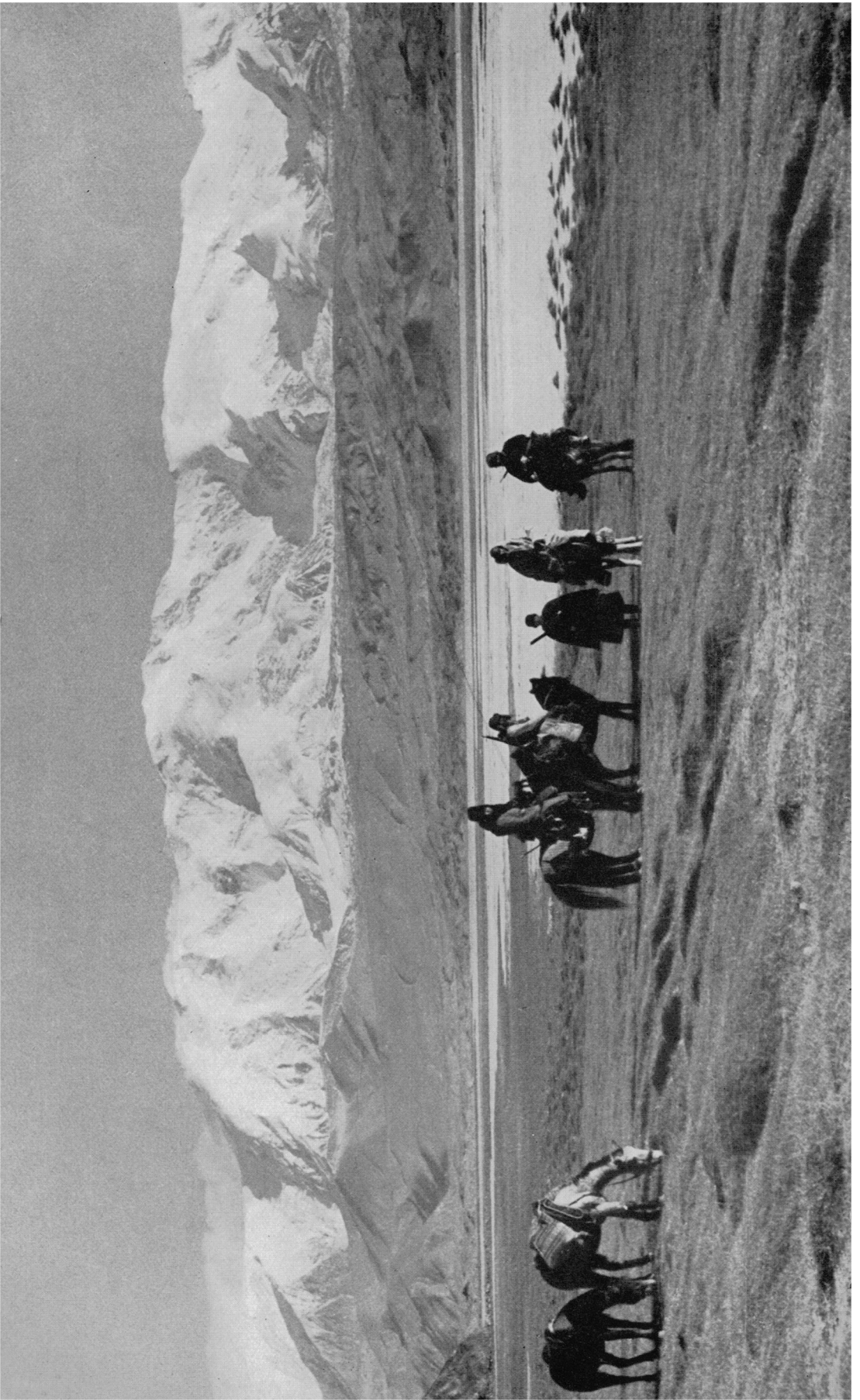


*Ferrying through the ice on the Karashar river*



*Village of Kuchar*





from surveys made in 1900-1, 1906-8, 1913-15. Scale 1:500,000). From Gashun Nor to the Mintaka Pass the traverse is adjusted to Sir Aurel Stein's observations and the position of 'Ti-hwa (Urumchi) has been taken from the War Office map (G.S.G.S. No. 2957. Scale 1/4M) in order to join the traverse between Ku-ch'eng and Turfan. The revision of certain observations in the neighbourhood of Korla noted in the "Memoir on maps of Chinese Turkistan and Kansu" (Trigonometrical Survey Office, Dehra Dun, 1923) has been used. Surrounding detail has been filled in from the War Office 1/4M maps and use has been made of the 1/2M map of Kashmir in the Southern Asia Series of the Survey of India, and of a sketch-map of the Lop Nor in 'Across the Gobi Desert,' by Sven Hedin.

The spelling of names is that preferred by the author and is not always in accordance with the decisions of the P.C.G.N.—Ed. G. J.

## DISCUSSION

Before the paper the PRESIDENT (Professor HENRY BALFOUR) said: We are fortunate in having persuaded Sir Eric Teichman to come and talk to us to-night about the motor route between Peking and Kashgar. It is a matter of something over 2500 miles. I am sure you are anxious to hear what he has to say rather than any remarks of mine, and so I will without further preamble ask Sir Eric Teichman to be good enough to give us his lecture.

*Sir Eric Teichman then read the paper printed above, and a discussion followed.*

The PRESIDENT: I understand that Mr. Peter Fleming is in the hall, and I will ask him to be kind enough to come and speak to us on a country which he also knows well.

Mr. PETER FLEMING: It strikes me that Sir Eric Teichman has made too little of a song and dance about a very considerable journey. He took it all—in his lecture as no doubt on the road—so very much in his stride that I think somebody ought to underline the very great powers of endurance which are needed to cross the Karakoram in December and January on ponies, and the equally great powers of patience and diplomacy which are needed to overcome the various obstacles and delays which you meet with on the motor road. A lorry, I am sure, is infinitely more unsatisfactory than pack animals, and I should say that the psychological strain, the perpetual anxiety and suspense, imposed on the traveller is very much greater than the far rarer annoyances sustained by other travellers who, because they cannot, do not rely on internal combustion. Apart from that, I do not think I have anything to add to an exceedingly interesting lecture, which modestly recorded a feat of which men half Sir Eric's age would have good reason to be proud.

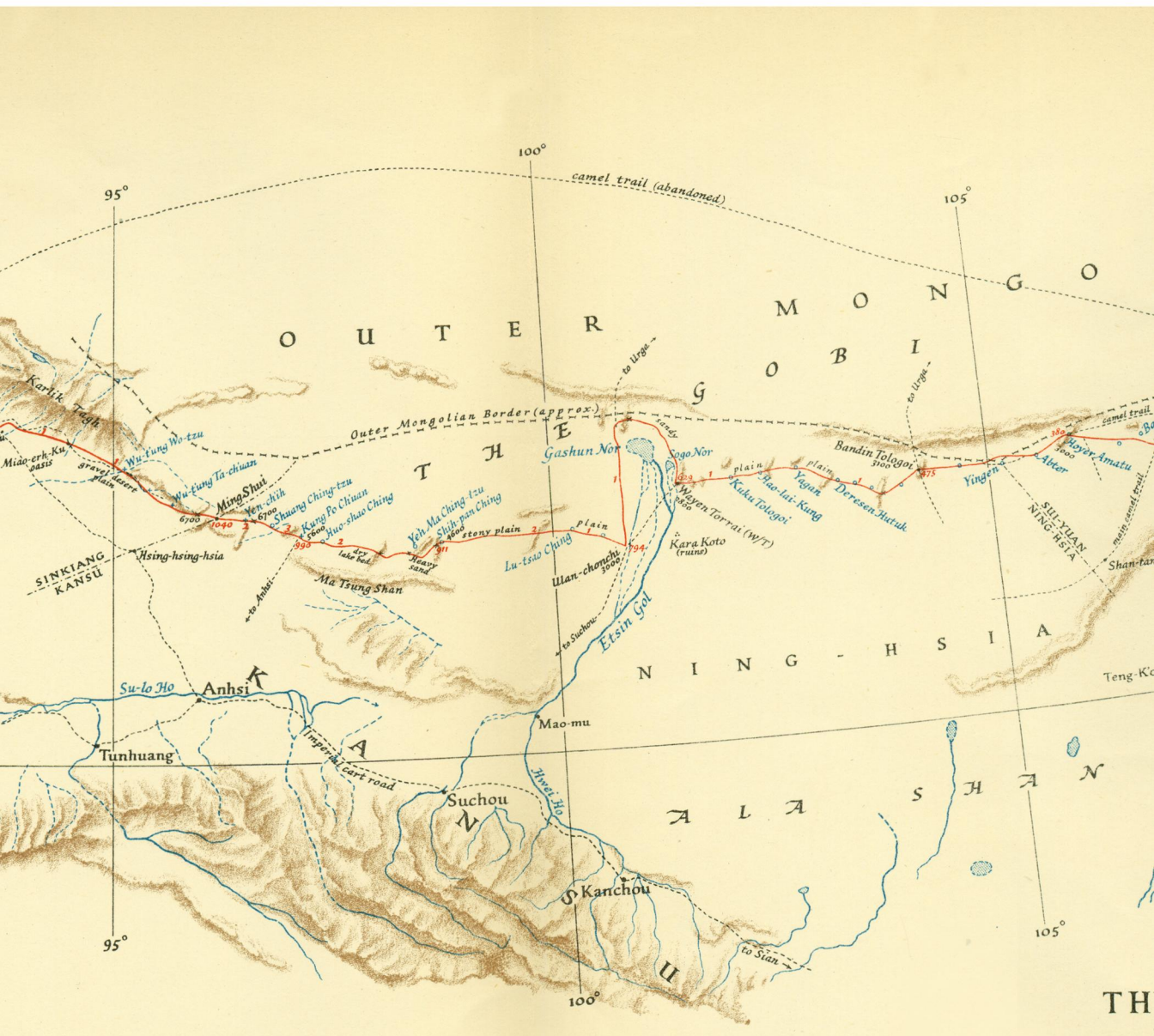
The PRESIDENT: I do not think Sir Francis Younghusband is in the hall, and I am sorry to say that Mr. Lattimore is not with us. We were expecting him but, very unluckily, he has been prevented at the last moment.

I would like to say what a pleasure it has been to all of us to hear this account of what really was quite an adventurous journey. Sir Eric Teichman has been attached to the British Embassy in China for a great many years, and it is perfectly clear that he has made the most of his opportunities. He has travelled very widely indeed, both in North-Eastern China and Tibet, and, as you have seen to-night, right across from east to west, linking up the two extremes of the huge area which is administered by China.

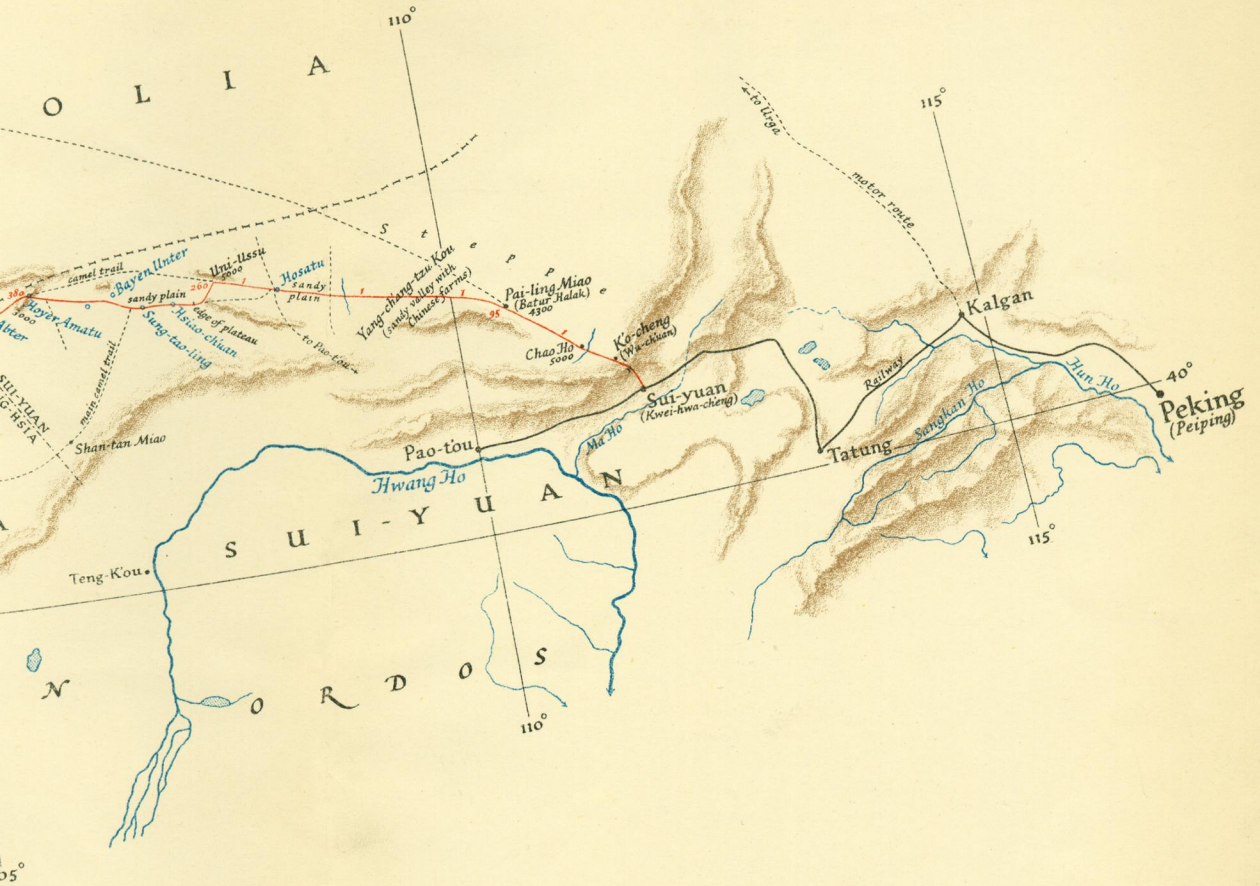
It has been obvious, I think, that what Sir Eric was dealing with, in the main, is a route and not a road. His pictures brought home to us very admirably that







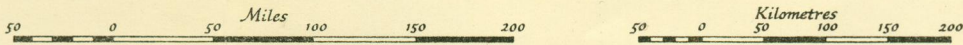
50  
 Route  
 Distances  
 The



## THE MOTOR ROUTE FROM PEKING TO KASHGAR

To accompany the paper by Sir Eric Teichman, K.C.M.G., C.I.E.

Scale 1:6,000,000



Route followed by Sir Eric Teichman's motor trucks (1 = Good road 2 = Fair 3 = Bad) 1 2 3 by pack animals .....  
 Distances in miles from Sui-yuan in red. Approximate heights in feet shown in black. Other roads and tracks .....  
 Pass.. Well.. Spring..+

The spelling of names is that preferred by the author and is not always in accordance with the decisions of the P. C. G. N.  
 See note at end of paper for construction of map.

those who explore the routes in order to find the lines of least resistance between extremes are pioneers, and as a result of their work we see permanent roads which eventually play so great a part in the prosperity of a country. Sir Eric Teichman is to be congratulated on having done some of this work, and at any rate ascertained a possible route which does link the far extremes of Kashgar and Eastern China together. When that route develops into a made road, as undoubtedly it will with the increase of motor transport, one cannot help thinking that the administrative difficulties which confront China will begin to be very much lessened. It always seems that one of the great difficulties that China has had to contend with is means of transport and general locomotion within its vast area. Sir Eric and others who have explored the region are playing their part in bringing about what eventually will be a very great benefit to this apparently rather incoherent region.

I ask you to express your cordial thanks to Sir Eric for a most interesting lecture describing an adventurous journey, likely to lead to very important developments.