

Letters from Colonel Prejevalsky.

THE following letters, giving interesting information regarding the progress of the Tibetan Expedition, were written by Colonel Prejevalsky to H.L.M. the Czarewitch, and published in the *Invalide Russe* of the 4th January (new style):—

IDOL TEMPLE OF CHOBSEN, PROVINCE OF HAN-SU,
March 10th, 1884.

We left the town of Urga on the 8th of November last. The caravan consisted of 21 men, 56 camels, 27 saddle horses, besides a small flock of sheep destined for our provisioning on the way. We had accumulated a very large amount of baggage (about 300 poods), as we are obliged to take with us all necessaries down to the last trifle. The detachment was placed on a war footing; all rode with Berdan rifles slung over their backs and revolvers in their belts; watches were kept in turn night and day; inexorable discipline was maintained. All this was absolutely necessary, our strength lay in our watchfulness; the Asiatics would in all probability never venture to attack us openly.

Immediately beyond Urga the fertile, well-watered region of Northern Mongolia, abounding with meadows and forests, comes to an end, and the mighty Gobi lies stretched out instead—that desert which measures from west to east, from Pazawi to Khingan, 2650 miles, and is about 700 miles wide from north to south. We had now to cross this desert just where it is widest. The northern part, three degrees of latitude from Urga, is still composed of steppes, covered by excellent grass, giving pasture to antelopes and innumerable herds belonging to the Mongols. Then you come to the real desert, Central and Southern Gobi. The first of these consists of perfectly bare flat spaces covered with pebbles, cut up at intervals by low stratified ridges, likewise barren. Southern Gobi is covered all over with quicksands, the remains of shoals and dunes of the once wide Central Asian sea.

Terrible frosts in winter, without snow; almost tropical heats in the summer, with frequent storms, more especially in the spring; want of rain, and the consequent absence of lakes and rivers; finally, an extreme general barrenness—such are the characteristics of the Central Asian desert. Nevertheless, the Mongols inhabit all parts of it, and their flocks and herds manage to subsist on the poorest fodder; in return for which, however, they are free from the winter imprisonment and tiresome summer insects of our climes. The flora and fauna of the desert show very little variety, as might be expected from the monotonous physical conditions of the country.

At first, too, Gobi gave us an unfriendly reception. The frosts at night exceeded sometimes the freezing point of mercury, and by day, too, it was generally cold enough, particularly when there was a wind. It is true that further south it became somewhat warmer, but here fodder was almost unobtainable for our beasts of burden. Lucky it is that the camel can go several days without food and suffer hardly any diminution of strength, and is contented, in general, with the most miserable rations. Even the horses of the desert are accustomed to all its inconveniences, and trot along beneath the riders whole months in places where our spoil animals would not survive a single week.

The days of our journey through Gobi passed slowly and monotonously. At sunrise we loaded our camels, and having marched an average 13½ or 16½ miles, bivouacked near some well; or if such was not to be found, took with us a supply

of ice from our last night's resting-place. For fuel we used the dry dung of animals, which we collected in the neighbourhood of our halting-places. Such fuel burns pretty well, and the felt tents become sufficiently warm; without fire the temperature in our dwellings by night went down to 26 degrees of frost Celsius (- 15 Fahr.).

The Khurkhu ridge forming the eastern edge of the Altai, and stretching diagonally from Lake Zaisan almost to the northern bend of the Yellow River at Ordos, served along our line of march as the boundary between the central stony Gobi and the southern part known by the name of Alashan. This region is almost entirely covered with sand strewn over a firm substratum of clay, and at places of stone, and blown up by the wind into numberless shifting hills 50 to 100 feet high. There is no water, and, as in Central Gobi, vegetation is poor in the extreme, birds and beasts are very few; often enough there is nothing but naked sand for tens and hundreds of versts. But in spite of Nature, who is here a very stepmother, the Mongols wander in places. In the western part of Alashan, where the range of that name runs like a great wall separating the desert from the cultivated banks of the Yellow River, is the town of Din-yuan-in, or, in Chinese, Fou-ma-fou [Wei-ching-pu?], the residence of the local ruling prince. I had made the acquaintance of him and his two brothers in my former journeys, so that the princess gave us a fairly good reception, though, as before, they were not ashamed to importune me every day for presents, not omitting bits of soap, penknives, and such-like trifles.

Resting a week at Din-yuan-in, whence I sent news of the expedition through Peking to St. Petersburg, on the chance of its arriving, we set out for Tibet. We had only 200 miles of desert to traverse, which we got over without mishap. In the distance, more than 66½ miles away, we could see before us the towering mountain slopes of Tibet—that is to say, its advanced spurs on the side of Gobi. These mountains, at first under the name of Nan-Shan, then Altin-Tag, Tugus-Daban, and lastly Kuen-Lun, stretch in one unbroken wall from the Upper Hoang-ho to the Pamir. Everything here, as usual in Asia, is on a gigantic scale. The ridge above-mentioned was not more than 20 miles wide where we crossed it, yet behind it lay quite another world from what we had seen hitherto. The absolute height of places we passed, which until now had alternated between 3500 feet and 5000 feet, suddenly rose to 9000 and 10,000 feet. Instead of shifting sands, barren and waterless, we came across numberless brooks and rivers, a fertile soil, a rich flora and fauna. We were entering now the limits of the Chinese province of Kan-su, and throughout February, which we spent in these mountains, we repaid ourselves almost, especially in the matter of zoology, for the time involuntarily wasted in the Desert of Gobi. We hunted whole days in the magnificent forests of Kan-su, and enriched our collections with many splendid specimens of birds and beasts.

We are now staying near the Idol Temple of Chobsen, 33¼ miles to the north of Sining, where we must necessarily make various purchases before continuing our journey to Tibet. We shall go there in a day or two, through Koko Nor and Tsaidam.

In the latter, at the foot of the mountains Burkhan-Buddha, we shall form a depôt, where we shall leave all spare camels and baggage, under charge of five Cossacks. We ourselves, to the number of sixteen men, in light marching order, shall start for the source of the Yellow River, and on through Eastern Tibet, if it prove possible: I calculate upon spending the spring and summer, till August, in these regions, which are utterly unknown to science. Then, after returning to the depôt, I shall go either to Lhassa, if the Tibetans agree to let us pass, or, which is much more probable, to Western Tsaidam; and having established a new depôt at Gast, employ myself in exploring Northern Tibet.

EASTERN TSAIDAM, August 8th, 1884.

In the middle of March last we left the mountainous district of the province of Kan-su, and took to the plateau of Lake Koko Nor. The absolute height of the spot was 10,800 feet. The forests had disappeared, and had been replaced by meadow-like steppes, affording excellent pasture for domestic cattle, alongside of which roamed large herds of antelopes and wild asses, or khulans. The ground was honeycombed with the numberless burrows of the marmot. These little animals, which are also very abundant in Northern Tibet, very often lay waste large districts by their constant burrowings and devouring the roots of the grass.

The lake Koko Nor itself, wide (166½ miles * in circumference) and very beautiful, was still covered with ice, although we were at the end of March, and now and then the days were warm; much more frequently, however, cold and snowstorms prevailed. The ice on the Koko Nor broke up only at the beginning of April, and threw huge masses upon the shores, where the ice lies, according to the natives, until the beginning of May. Birds of passage, and even water birds, do not remain in any numbers here, in consequence of the length of time during which it is ice-bound, and the absence of suitable places for nesting and food (reed-beds, bushes, &c.); they hurry on without a glance to the more convenient regions of Russian Siberia. The fish in the lake are numerous, but there is no great variety. The inhabitants of the surrounding steppes are Mongols and Tangutans. The latter oppress the former cruelly, often in company with robber bands from Tibet. It is very probable, indeed, that in no long time the Mongols of Koko Nor will be exterminated altogether by the Tangutans, and the same fate awaits the Mongols of the Tsaidam, the country lying to the west of Koko Nor. Tsaidam is a vast salt-marsh basin (533½ miles by more than 67 miles), which was at a comparatively recent geographical epoch the bed of a mighty lake. The absolute height falls here to 9200 feet. The climate, therefore, is warmer than at Koko Nor. But the air is always filled, as with smoke, by clouds of dust, blown up by the wind from the saline surface, which is often quite bare, and at the best covered with bushes of tamarisk and kharmik (*Nitraria Schoberi*). The latter plant is of great importance to the inhabitants of the Tsaidam, for it furnishes in the autumn an abundance of little sweet berries, in appearance something like our currants, upon which the local Mongols feed.

At the beginning of May we reached the foot of the mountains Burkhan-Buddha, guarding on the side of Tsaidam the lofty tableland of Northern Tibet. Here began a new phase of our expedition. We left all unnecessary camels and baggage in East Tsaidam, under charge of seven Cossacks, and set out, to the number of fourteen, for the source of the Yellow River, and the southward, according to opportunity.

We were three days climbing the ridge of Burkhan-Buddha, the pass through which is 15,700 feet high; its descent on the other side is much shorter; for there lies already the tableland of Northern Tibet, which is itself no less than 14,000–15,000 feet above the sea-level, and occupies a vast space abutting on the prairies in the west, the North Himalaya in the south, and the chains of China Proper in the east. Upon the tableland and in its eastern division lie the sources of two famous Chinese rivers—the Hoang-ho and the Yang-tsze-kiang. In spite of the attempts made by the Chinese, before the Christian era and again last century, to explore the sources of these rivers, they never succeeded. And, indeed, Northern Tibet in general up to the latest times has remained, and even now in part remains, a region quite unknown to geographers.

* In his former work Colonel Prejevalsky stated the circumference at from 200 to 230 miles. But this was an approximate estimate.—'Mongolia,' ii. p. 140.—[ED.]

Crossing the Burkhan-Buddha, and continuing about 67 miles further through the desert tableland, we reached at last the wished-for goal, the source of the Yellow River. It is formed at a height of 13,600 feet by two streamlets, flowing from the south and west, out of the mountains scattered about the plateau, and is fed by numerous springs of the wide marshy valley (40 miles by $13\frac{1}{2}$ miles) known by the name of Odon-tala, known to the Chinese as *Sing-su-hai* or starry sea. The Hoang-ho, or Yellow River, itself is here a very modest stream, consisting of two or three branches, each 12 to 15 fathoms broad and two deep at fords, and at low water generally. After a course of about 14 miles in this fashion, the Yellow River falls into a wide lake, the southern shores of which it colours with its muddy waters, then pouring out of it to the east soon enters another similar lake, which it leaves already a considerable river; further on, having made a sharp bend to get round the ridge of Amne-machin, covered with everlasting snow, its mad current tears through the cross strata of the Kuen-lun and flows towards the boundaries of China Proper.

Hardly had we entered the mountains of Northern Tibet when we found a terrible climate. Though it was the second half of May, wintry snowstorms were not unfrequent, and the frost by night reached -9° Fahr. Nevertheless, the coarse grass did not perish, and after the keen frost the sun revived the scanty flowers. But not only in May, but in June and July, there were frosts (23° Fahr.) every clear night, and it rained nearly every day, sometimes many days running. The amount of moisture brought here by the south-west monsoon from the Indian Ocean, from beyond the Himalayas, is so great that in summer Northern Tibet becomes almost one vast bog. It is unnecessary to describe how difficult it was for our laden camels to get through these bogs, and how injurious the humid, cold climate was for those animals, accustomed to warmth and dryness.

But the savage desert of Northern Tibet, so inhospitable to man that throughout its greater part even nomads refuse to tarry, is covered with numerous herds of large animals—yak, wild asses, antelopes, mountain sheep, and even bears. In spite of the want of woods, bears are very numerous here. We met several every day, sometimes as many as ten, and killed some thirty specimens. This bear is very cowardly, and even when wounded runs away—only the mother with cubs sometimes attacks the hunter.

Having spent some days at the source of the Yellow River, we went southward towards the Blue River or Di-chu (the Yang-tsze), as the local Tangutans call it. The country, as before, was a hilly, sometimes even mountainous, plateau, for the most part covered with hillocky bogs, overgrown by the Tibetan reeds, stiff and hard as wire. The watershed between the two great Chinese rivers was 14,500 feet high at the spot where we crossed it. Further south, in the basin of the Blue River, the character of the ground changes rapidly into an Alpine country, where the herbal flora becomes sufficiently rich and varied. Here wander with their flocks of goats and sheep the Mongols of the tribe of Kam. They received us not very hospitably, but still not as enemies.

After an arduous journey of 67 miles through the mountains, we reached the banks of the Blue River, here at an altitude of 12,700 feet. Hemmed in by the mountains, the river has a width of 50 to 60 fathoms, the water is very muddy, the current extremely rapid, and very deep. It was impossible for us to ford such a river with our camels, so that we could not continue our journey to the south. We determined, therefore, instead, to explore the great lakes of the Upper Hoang-ho. But we spent a week on the banks of the Yang-tsze first, making excursions in the neighbourhood. On one of these excursions the Tangutans fired at us several times from the opposite bank.

Returning by our former path to the basin of the Yellow River, we took a new route to its lakes. We found the way by scouting, as we had no guide. We met no inhabitants, but the nearest Tangutans followed us all the same, and at length, at daybreak on the 13th June, made a sudden unexpected attack upon us to the number of 300 horsemen. Stealing up in the dark to our bivouac, the horde dashed upon us with shouts. Luckily we were already awake, and speedily prepared for defence. First rang out the single shot from the Cossack on guard, then a second and third—and the rifles rattled away merrily. Our little bivouac was instantly surrounded with a line of fire. . . . The robbers, thinking to take us by surprise, could not stand our fire, and promptly turned back. We accompanied their flight with file firing and volleys, till they were out of range. Then loading the camels we made for the Tangutan camp, attacking them in turn and putting them to flight. After this encounter we took greater precautions than before, but continued our route along the lakes, which by right of discovery I named Russia and Expedition Lake. They both lie at a height of 13,500 feet, surrounded by mountains; they are very beautiful, and each is more than 80 miles in circumference. Fish are abundant, but again there is no great variety. Of water birds only Indian geese are numerous. Once we came upon a vast flock in a little neighbouring lakelet, and three of us in an hour and a half killed 85.

Six days after the first encounter a second attack was made upon us by another Tangutan tribe, the most renowned robbers of the Yellow River, and this time by day, the band numbering again about 300 horsemen. Coming down the nearest mountain, and riding up at a trot from a distance of nearly a mile, they rushed to the attack with yells. The hoofs of their steeds sounded hollow on the damp soil, their long spears bristled and glistened, their long cloth robes and black floating locks streamed behind them on the wind. Like a cloud this savage, bloodthirsty horde dashed upon us. Every moment the outlings of the horses and horsemen grew more distinct, and against them in front of their bivouac silently with rifles ready stood our little handful of men, fourteen in all, for whom there was nothing now but victory or death. When the distance between us and the robbers was no more than 500 yards, I gave the command "Fire!" and the first volley sped: then followed a rapid irregular fire. The first volley did not stop the enemy; they continued to gallop towards us, their commander crying, "Charge, charge! God is with us! He will help us!" But when horses and men began to tumble before our fire, the robbers turned their steeds aside and hid themselves behind the nearest rocks. Then they dismounted and opened upon us with their flint-locks at 300 yards. So I left in charge of the bivouac my lieutenant, Robarofsky, with five Cossacks, and with the other seven started to drive the Tangutans from their cover. They fired at first at short range, but hit no one, and as soon as the first of us climbed the rocks the Tangutans made for their horses in hot haste and fled. We kept firing as they retreated, and killed several more. But as usual they carried off their killed and wounded companions with them; only seven dead horses and one or two men remained whom they were unable to carry off; the valley was strewn with cloth cloaks and hats which they had lost in the confusion of flight. The robbers, after being driven out of their first caves, took station behind the rocks and again opened fire upon us, but were driven out again with equal success. A part of the band meanwhile, supposing their own bivouac remained unprotected, attacked it, but were driven off by the fire of the people left there. Then the Tangutans, unsuccessful at all points, began their retreat to the mountains. We fired volleys at them while within range. We killed and wounded altogether in both fights forty men and many horses. We ourselves, by great good luck, suffered no loss beyond two horses wounded. The firing only ceased at dusk. We watched all night, sitting on two

mounds at either side of our bivouac. Unluckily, the weather became very bad; rain fell ceaselessly; a strong, cold wind blew, and the darkness was impenetrable. However, the Tangutans had met such a reception that they could not make up their minds to attack us again, although a night attack would have given them many advantages, saving them from the deadly effect of our rifles, at least at a distance.

Our return journey from the lakes of the Yellow River to Tsaidam was not marked by any particular adventures. We were harassed only by the frequent rains, and, in spite of its being the end of July, occasionally wintry snowstorms. Through the Yellow River we passed very successfully, for the water had fallen only the previous day. We met no more Tangutan robbers. Only not far from the southern foot of the Burkhan-Buddha we met a peaceable party of some thirty men occupied in gold-washing. Gold is very plentiful throughout Northern Tibet. At the diggings we visited the Tangutans went no deeper than one or two feet from the surface, and the washing was of the most primitive description. Nevertheless, they showed us whole handfuls of gold in lumps as big as peas, and often twice and thrice as big. Without doubt, with more careful working, vast treasures would be found here. I believe, on the whole, that I shall not be over bold in predicting that in the course of time Northern Tibet will become a second California, perhaps even richer than the first in precious metals lying in the soil over the vast surface of the desert table-land.

Crossing the Burkhan-Buddha once more, we went down into the plain of Tsaidam, which now seemed to us, after the horrors of Tibet, a favoured land in spite of its hideousness. We have now to visit Western Tsaidam, where we shall form a new depôt at Gast, and occupy ourselves with the exploration of the surrounding country during the winter.

*Recent Dutch Expeditions to the North Coast of New Guinea and
Ascent of the River Amverno.*

THE well-known Dutch geographer, Mr. Robidé van der Aa, has recently published * an account of two voyages to the north coast of New Guinea, undertaken by Mr. D. F. van Braam Morris, Resident of Ternate, in 1883 and 1884.

The chief points of interest recorded may be summarised as follows:—

On the earlier voyage (in the steamer *Sing Tjin*), the first place visited was the Mapia group of islands, which lie about $1\frac{1}{2}^{\circ}$ N.E. from Dorei, in E. long. $134^{\circ} 23' 9''$, and being nearer to New Guinea than to any other land, is considered by the Dutch to belong to them. The population consists of the remains of an aboriginal population, nearly all killed by the Gébé people, and of immigrants brought in by Europeans for the trade in coco-nut fibre from Yap (Carolines).

The *Sing Tjin* proceeded thence to Jamma (Tastu), a small island west of Walckenaer Bay, which, itself producing nothing, is the depôt for the coco-nut fibre collected on the mainland. The houses here are long and rectangular, with very high roofs, and built on dry land, and

* In the 'Bijdragen tot de Taal-, Land-, en Volkenkunde van Nederlandsch Indië,' 4th series, x. 1, 1885. The article has been kindly translated and abridged for us by Mr. Coultts Trotter.