obstacles to prevent boats from passing; the chief obstruction in this, as in all East African streams, would arise from the sand banks which had begun to

appear where we turned back.

"In the dry season I cannot think that a boat of the size of the steam cutter we had would be able to reach very far, although in July, before the water has fallen and the river dried up, there seems no reason to doubt it might pass a very long way up inland.

"The natives we spoke with knew nothing of the river above, but I have been assured that about 200 miles, if not near the coast, it is full of rapids. In comparison with other African streams I have explored it will rank as

slightly larger than the Rovuma.

"The slave crossing, where caravans pass from Kilwa to Dardalam and the north, was still some distance beyond where we reached, the muddy delta lands being avoided both on account of the difficulty in crossing creeks, and

the scarcity of food, which, higher up, is cheap and abundant.

"I have the honour to forward herewith a plan of the river delta and river so far as examined, which has been kindly placed at my disposal by Captain Wharton, and that may be of interest to the President of the Royal Geographical Society as a small contribution to the map of Africa.

"JOHN KIRK,
"H.B.M.'s Political Agent and
Consul-General, Zanzibar."

3. On Captain Prshewalsky's Explorations in Mongolia and Northern Tibet, 1870-73. By NEY ELIAS, Gold Medallist B. G. S.

OF the numerous exploring expeditions sent into the interior of Asia of late years, by the Russian Government, one of the most important and best conceived has just been brought to a close by the return of Captain Prshewalsky and his party to St. Petersburg, from Northern Tibet. This officer, who had long been known as an able explorer and naturalist, was deputed by the Russian Geographical Society, under the sanction and supervision of the Ministry of War, in 1870, to lead an expedition, as then announced, to Southern Mongolia; and from that time to the present, many in this country and on the continent have followed his movements with the keenest interest, so far as the meagre accounts from time to time received, would allow of.

He was despatched from St. Petersburg in August of that year, and reached Peking in the early winter, there to make all necessary preparations, and to obtain information regarding the western territories he proposed to traverse. His arrival, however, was ill-timed; for the so-called "Mahomedan rebellion" was just then at its climax, and the whole of North-western China may be said to have been in a state of blockade. During the spring victory after victory had been gained by the rebels in Shensi; its capital, Si-Ngan-fu, had been invested; the valley of the Wei had been cleared of Imperialist troops, and a Moslem invasion of the inner provinces had only been checked at Tung Ruan by the passage of the Yellow River. About midsummer Kuei-hua-Chêng, one of the strongest frontier cities of China, was entirely blockaded from the side of Mongolia, and raids were frequently made into the very suburbs of the town. Uliassutai had been attacked in October, and burned to the ground; and so great were the fears of the Chinese that its fate would be shared by Urga, where the Russians have a considerable interest, that they allowed the place to be garrisoned with Russian troops from Siberia, for the common protection.

Under these circumstances Captain Prshewalsky found it necessary to wait for more peaceful times before commencing his undertaking, but occupied himself meanwhile with an exploratory journey into Eastern Mongolia. Leaving Peking on the 25th February, 1871, and passing out of China by the Ku-Pei-Kou Pass, he visited the Dolo-nor and the Peitcha range of mountains, and re-

entered China by the Kalgan Pass on the 24th April.

Affairs in the West having by this date become more encouraging, he reformed his party, and, after only a few days' halt at Kalgan, commenced, on the 3rd May, to put his main project into execution. The expedition now consisted of three Europeans besides the leader—viz., Mr. Pyltsoff and two Cossacks, and, with a caravan of eight camels and some ponies, the course was directed along the southern edge of the Mongolian table-land towards the town of Bautu, t on the Yellow River. Here the river was crossed, and followed up for some distance through the Ordos country, when summer having set in, a halt of nearly three months was made for the purpose of resting the camels, In September they again proceeded towards the south-west, re-crossing the Yellow River at Dyn-chu (i. e. Tchagan-Subar-Kahn) into the Ala-shan country, and following up the left bank of the stream to Dyn-Ioan-In, the chief town of the district, and now almost entirely destroyed by the Tunganis. From this point Captain Prshewalsky made some short excursions into the neighbouring ranges, and added many specimens of birds and quadrupeds to his collection; but becoming convinced that he had not sufficient funds to continue his journey successfully, and his companion, Mr. Pyltsoff, being in an uncertain state of health, he, with great reluctance, decided to return to Peking; and on the 15th October commenced to retrace his steps, reaching Kalgan, his original starting-point, on the 31st December.

During the next two months he employed himself in making preparations for a renewed attempt, his late experience having taught him what was most needful to ensure success. Five more Cossacks were obtained from the Government, and the whole seven were armed with breech-loaders and revolvers, and thoroughly drilled in the use of them; a quantity of obsolete muskets and pistols were bought at Tientsin for purposes of barter with the native tribes of the West, who are but ill-acquainted with the value of silver; and a certain amount of time was devoted to learning from Dr. Fritsche, the Superintendent of the Russian Observatory at Peking, the more simple operations in nautical astronomy. No competent Chinese interpreter, however, was attached to the expedition, which is a circumstance greatly to be deplored, for undoubtedly it was to the inability of any of the party to communicate with the Chinese, in the towns and settlements passed through, that is to be attributed most of the ill-will and annoyance experienced on both this and the former journey. A large and well-armed party of strangers, though perfectly independent among the lawless tribes of the desert, is just as much at the mercy of the inhabitants of the towns for supplies of food and animals as a single unarmed traveller; and, moreover, the show of power causes them to be shunned by guides and others who might be of assistance. These, combined with a general inexperience of Chinese human nature, are some of the disadvantages from which Captain Prshewalsky's expedition is known actually to have suffered; and which, by the presence of a trustworthy interpreter in the party, would certainly have been modified, if not entirely obviated.

^{*} For a short account of this exploration, see Petermann's 'Mittheilungen,' No. iii., 1873.

[†] This place is not marked on any map that I am aware of; it can, however, be at no great distance from Piliotai, and is probably at, or near, the mouth of the Poto tributary of the Yellow River, as marked on D'Anville's map. It is generally spoken of as 320 li by the road from Kuei-hua-Ching, and called Si-Pau-To.

‡ i.e. Wei-tching-pu, in about lat. 38° 55', and long. 105° 45'.

[§] An interesting notice of this second exploration also appeared in the 'Mittheilungen,' as above.

The final start was made from Kalgan on the 3rd March, 1872, and somewhat the same route as before was followed as far as Dyn-Ioan-In (Wei-tchingpu), in Ala-shan, which was reached on the 26th May. Here the party joined a Chinese caravan, and in company with it travelled a month's journey through Kansu to the lamasary of Techebsen, situated at 60 versts (34.5 geo. miles) north-east of Sining-fu, which latter city was still in the hands of the Tunganis, though a considerable Chinese force, sent to retake it, had for some time past been in occupation of towns in the immediate neighbourhood. During July, August, and the greater part of September, Captain Prshewalsky remained at Tschebsen, shooting specimens for his zoological collection, and studying the flora of the neighbourhood,—occasionally, during his excursions, falling in with bands of roving Tunganis, who, though a terror to the native Mongols and Chinese settlers, had héard of the efficacy of his arms, and never ventured to molest him.*

From this point we are enabled to follow Captain Prshewalsky's exploits from his own account, as given in extracts from two letters dated from Dyn-Ioan-In, while on his final return journey towards Siberia, and lately read before the Geographical Society of St. Petersburg:—†

LETTER I.

From Staff-Captain Peshewalsky to the Russian Minister at Peking. Dated from Dyn-Ioan-In, in Alashan, the 17th (29th n. s.) June, 1873.

"... We finally left Tschebsen on the 23rd September, 1872, turning our faces towards the Koko-nor across the territory occupied by the Tunganis, and following a mountain path leading between the towns of *Da-toun*; and *Sin-huan*. During this passage we ran great risks, but were incredibly fortunate. We passed the most dangerous positions without meeting with anyone, and it was only on the day after our departure that we discovered, in

a defile, a party of about 100 Tunganis.

"At the first sight of our caravan they fired a few shots at us, and then, as far as we were able to judge from the distance of two versts by which we were separated, prepared to attack us. The Mongols, who were acting as our guides, became terrified, and begged us to return at once to Tachebsen, but I well knew that a retreat on our part would only embolden the Tunganis, and, moreover, they being on horseback, would easily have overtaken our caravan; I resolved, therefore, to advance at once. Forming an advanced guard of four men, with their rifles in their hands and revolvers at their belts, we moved on, followed by the camels which were being led by the Mongol guides. These latter were strongly tempted to take to their heels, and it was only on my declaring that in that case I would shoot them before firing on the Tunganis that they decided, with the best grace they could muster, to follow The situation was critical, and this was the only means of extricating ourselves; we had on our side superior weapons and the known cowardice of the Tunganis. It turned out as I had anticipated; seeing that we advanced without flinching at their fire, and knowing, no doubt, that we were well armed, they would not allow us to come within a verst of them, but turned

† See 'Journal de St. Pétersbourg,' 6th December, 1873.

^{*} See letter from Prshewalsky, read before the Russian Geographical Society on 18th April last, and published in Petermann's 'Mittheilungen,' No. vii., 1873.

[†] This is the *Tatung* of maps, and the *Ho-Kiao-Y* of Huc, who says (vol. i. p. 286, Eng. ed.), *Tai-Toung* was the ancient name, but is now no longer in use. D'Anville, strange to say, does not notice this place at all, either on the map or in the tables.

and ran like a flock of sheep before a wolf. Thus, though we had not fired a shot, the Rubicon was passed, and the rest of the route to Koko-nor was free.

"Following the Kan-su mountains almost as far as the source of the River Da-toun-he" we arrived in the valley of the Koko-nor, and pitched our tent

on its shores on the 14th October.

"In all my life I have never beheld such a beautiful lake as this Koko-nor. Its salt waters are of a magnificent deep blue, and in the month of October the snow-clad mountains surrounding it formed a frame of sparkling white to the picture. The neighbouring steppes are extremely fertile, and are inhabited by large numbers of the Antilope gutturosa. Mongols and Tangouts are very numerous, and in every direction enormous flocks and herds are to be seen at pasture on the grassy plains. The absolute height of Koko-nor is about 10,000 feet.

"Although the lake was not yet frozen over, but few birds were seen upon it; and, after passing a few days on its shores, we recommenced our journey. I well knew that we should not be able to reach Lassa, for, after purchasing a few camels at Koko-nor, there remained only 320 roubles, but, nevertheless, feeling certain of obtaining a constant supply of food by means of our guns, I

resolved to continue to advance as long as possible.

"After crossing the high mountains, which rise from the south shore of the lake and extend 600 versts [345.4 geo. miles] further towards the west, we entered the Tsaidam country; this district is one vast marsh,—its perfectly plane surface, covered with salt and reeds, showing that, at some not fur distant period, it has formed the bed of an immense lake. Sheltered on the north by the mountains rising from the southern shore of the Koko, and on the south by the chain of the Bourkhan-Bouda, these marshy valleys of Tsaidam stretch far away to the westward; indeed, according to the Mongols, they extend uninterruptedly as far as Lake Lob. In this region, and at a distance only of some 300 versts [172.7 geo. miles] to the westward of our . route, wild camels roam at large and are hunted by the Tsaidam Mongols. For want of money I unfortunately found it impossible to go further in that direction, for it was now necessary to save every rouble, and, in order to go hunting wild camels, I should have been forced to hire a guide at the rate of 20 lanes † a month; and, besides, it would have been necessary to buy three or four fresh camels to carry a supply of water, or ice; for, in the region where the wild camel occurs, the soil consists only of clay and salt, and no water is to be found. Thus the failure of my pecuniary resources prevented me from finally setting at rest the interesting question of camels in a wild state; though their existence to the west of Tsaidam I look upon as incontestable. I begged the vanet of Koko-nor to procure me the skin of one of these animals, but on my return to his country from Tibet he had not yet done so. §

[•] The Tatung-ho, or Tutung-ho.

[†] Chinese, liang, viz. the tael of commerce, equal at Peking to about 6s. 6d. sterling.

¹ Chinese, Wang, or prince.

[§] Hitherto, to have faith in the existence of wild camels, has, I believe, been considered zoological heterodoxy: but recent evidence on the subject would seem to prove, not only their existence, but also that the area over which they are distributed is a very extensive one. Besides the Tsaidam valley, where Captain Prahewalsky heard of them, Colonel Yule informs me that Mr. Douglas Forsyth, in a late letter from Shahidulla, mentions "that the official who had come from Yarkand to meet the party said he had shot them in the desert near Turfan." Again, to the north of the Tian-Shan, the evidence I received on this subject in 1872 from intelligent Chinese travellers, as well as from the native Mongols, is

"In the midst of the marshy valleys of Tsaidam there flows the Basan-gol, a river of 400 versts [230'3 geo. miles] in length, and of great breadth. At the point where we crossed, it measured 230 sazhens [1610 English feet], and, though the depth is but two or three feet, the soil being muddy, the passage is only effected with great difficulty. At the time of our crossing, however, it was fortunately frozen over. The altitude of the valleys of Tsaidam is some 1000 feet below that of the Koko-nor, and their climate is very much warmer. The vane [prince] of Koko-nor (or rather his uncle, for the prince himself had been dead since the previous year) received us most cordially; he even made us a present of a small yourt, or tent, to replace our own, and in return I offered him a revolver and a woollen cloak.

"There are but few wild beasts in Tsaidam, probably on account of the salty nature of the soil, for in some places many square miles are covered with a layer of salt like ice, which wears away the hoofs of animals; but, on the other hand, I found here a new variety of pheasant. In the Koko-nor district I saw dozens of new species of birds, and, amongst others, a new Syrrhaptes, differing essentially from that of the Gobi. Until now but one species of this bird has been known—the one which Pallas named

paradoxa. . . .

"On the 20th November we found ourselves at the foot of the mountains called Bourkhan-Bouda, which forms the edge of the cold and desert heights of northern Tibet. To the south of this chain, and as far as the Tanla Mountains, the country rises to the enormous elevation of 14,000 to 15,000 feet above the sea. Besides these the Chouga and Gourban-Naidji ranges also raise their lofty summits above this tremendous table-land. Both of these attain the limit of perpetual snow, and the Gourban-Naidji chain is that which forms the starting-point of the system of the Kuenlun, which shelters towards the south the western part of Tsaidam and the valleys of Lob-nor. We passed 50 versts [28 8 geo. miles] to the eastward of the Gourban-Naidji, and, after crossing the low range of Baian-Khara-Oula, we at last arrived on the banks of the Yan-Tsy-Tsian [Yangtsekiang], or Mouroui-Oussou, as it is called by the Mongols. Thus we were now on the other side of the Kuenlun, which is at a distance of about 100 versts [57 6 geo. miles] from the Mouroui-Oussou.

"The Blue River [Yangtse] marks the limit of our journey into Central Asia. In spite of all the regret it caused us, it was absolutely necessary to abandon the project of pushing on to Lassa, though we were separated from it only by 27 marches. Cold, storms, want of food—the terrible difficulties against which one has to struggle in these Tibetan deserts—had so exhausted our beasts of burden that out of eleven camels three had died, and the remainder were scarcely in a condition to travel. Not only was the money wherewith to buy fresh ones wanting, but, even had we possessed it,

undoubted. Many of the former, who declared they had seen these animals between Kobdo and Ili, Uliassutai and Kuchên, &c., I questioned as to their being really wild, or having become so subsequent to domestication; but the answers were always, emphatically, that they had never been tame; and in several cases my informants mentioned that, in this respect, they differed from the wild cattle, thus showing a distinct appreciation of the difference of condition. Moreover, the wild camels were always described to me as smaller in size and much darker in colour than tame ones, and on some occasions I was told they had but one hump. The latter feature, however, would imply a specific difference, and as my authorities were at variance on this point, it is perhaps a doubtful one, though instances, I believe, are not wanting of domesticated animals having come to differ specifically from their wild ancestors, and vice versa. In the matter of size, Colonel Yule remarks that Mr. Forsyth's "account agrees exactly with what you heard as to their being much smaller than the tame camel."

it would now have been useless, for all that portion of northern Tibet lying between the Bourkhan Bouda and Tanla ranges—a distance from north to south of 800 versts [460.7 geo. miles]—is an uninhabited country. It was then with the deepest sorrow that, on the 13th January, I left the banks of

the Blue River and commenced to retrace my steps.

"Our journey of three months (23rd November to 10th February) in the solitudes of northern Tibet was the best period for shooting that I experienced during the whole expedition. Intense cold and continued gales, it is true, often prevented our hunting, though, when we were able to do so, the abundance of game was such that we could kill any quantity we pleased. Wherever the smallest quantity of grass grew we met with large herds of yaks (Peephagus grunnicus), gazelles, antelopes, 'orongo,' 'ado,' of a new species; mountain sheep who sometimes go in flocks of several hundreds; a new species of mouflon (Ovis argali) with breast as white as snow, and wolves who followed our caravan to feed on the dead animals we threw away. These wolves, never having been molested by man, allow themselves to be approached without the slightest fear; and at the report of a rifle, and even

the whistling of the ball, they only looked up in astonishment.

"I cannot express to you what a charm these herds of wild beasts had for me! From morning till night I carried my gun and scoured all the mountains and valleys in the neighbourhood. The beasts that interested me most were the yaks; I shot 20 of these without counting the wounded, which must have amounted to treble the number. This animal is certainly most remarkable. The adult male attains to enormous dimensions. whose akin now figures in my collection measured 11 feet in length, without the tail, which of itself was 3 feet; thus the total length was 2 sazhens [just 14 feet English], the height of the hump was 6 feet, the circumference of the body in the middle 11 feet, and the weight of the animal from 35 to 40 pouds [114 to 124 cwt.]. In northern Tibet millions of these great quadrupeds roam at large; their principal characteristics are indolence and stupidity, which renders them less formidable than at first sight they would appear to be. If the yak were possessed of more intelligence he would be far more dangerous to the sportsman than the tiger, for one can never be sure of killing him with whatever weight of ball. It is almost impossible to hit him in the brain, for that organ is extremely small (it weighs only a pound in an animal of 1600 lbs.), and he carries his head in such a way as to prevent the bullet from reaching just that portion of the forehead behind which the brain is situated. If he is shot in the eye, or in any part of the skull, the bone stops the ball, as I have myself proved by firing at a yak at 50 paces.

"... We killed in Tibet various animals—86 in number—which fur-

nished us with meat to the extent of 1000 pouds [16 tons, 12 cwt.] As it was useless to load ourselves with unnecessary burdens we usually retained only sufficient for one day's consumption and threw the rest away; and this meat, together with barley-flour, and brick tea, formed our only food during the whole period of our wanderings in Tibet. Our clothes were in such ragged condition that we looked like beggars; for some time past we had had no soles to our boots, and had had to repair them by sewing on pieces of the skin of the yaks we killed, and thus miserably shod we had to endure a temperature of 25° (Réaumur) of frost. Even now that we have arrived at Dyn-Ioan-In we are in such a dirty and tattered condition that, as soon as the Mongols see us, they exclaim, 'They are just like our fellows; they are

regular Mongols!

"On account of the altitude of northern Tibet it is extremely difficult to breathe, and especially if one walks quickly, sickness, trembling of the legs, headaches, and vertigo, are often experienced. Also the bird-droppings we used for fuel burned but feebly, on account of the extreme rarefaction of the air. M. Huc, the missionary, explains these phenomena on the Bourkhanbouda Mountains by the presence of a suffocating carbonic acid gas; but this is entirely incorrect, for in summer a great number of Tsaidam Mongols live on the Bourkhan-bouda, which would be impossible if this gas really existed.

"And now a few remarks à propos of Huc:-

"1st. In the Koko-nor country he describes a difficult passage across twelve arms of the River Boukhaïn-gol,* whilst the fact is that this stream has in all but one channel, at the point where the Tibetan road crosses it, and this channel is only 15 sazhens [105 English feet] broad, and but one to two feet deep.

"2ndly. Immediately after passing the Boukhaïn-gol the high chain of the southern Koko-nor Mountains is reached, which Huc does not even mention.

"3rdly. He depicts the Tsaidam country as an arid steppe, whereas it is in reality a salt-marsh covered everywhere with reeds of 5 to 7 feet high.

"4thly. He makes no mention of the Baïan-gol, or Tsaidam River, which is 22 times broader than the Boukhaïn-gol, and the passage of which, when unfrozen (as it must have been when he passed it), is extremely difficult.

"5thly. What he says regarding the gas on the Bourkhan-Bouda & is

"6thly. He represents the ascent of the Chouga Mountains as very steep; but both the ascent and descent of this chain are so gentle that a railway

might be laid across it.

"7thly. The chain of the Baïan-Khara-Oula, about which Huc relates marvellous stories, is nothing but a succession of low elevations, never exceeding 1000 feet in altitude above the northern valleys, and only slightly steep on the side of the Blue River [Yangtse]. There is here no passage, and the road follows the River Namtchitai-Oulan-mouren, which discharges into the Mouroui-oussou [Yangtse].

"8thly. Huc speaks only of having crossed the Blue River; but the Tibetan road lies along its bank the whole way up to its source in the Tanla mountains, a distance of 300 versts [172.7 geo. miles]. In Koko-nor and Tsaidam the great caravan, which Huc professes to have accompanied to Lassa, is perfectly well remembered, and it is somewhat astonishing that

The Pouhain-gol of Huc.

† With the exception of his omission to mention the reeds, Huc's account does not differ greatly. He says (vol. ii. p. 113, Hazlitt's Eng. ed.), "The soil, arid and stony, produces with difficulty a few dry, salpctrous bushes. Mineral salt and borax abound on this arid and almost wholly pastureless soil."

t He distinctly mentions it, under the latter name, thus: "On the 15th November we quitted the magnificent plains of the Kou-kou-Noor, and entered upon the territory of the Mongols of Tsaidam. Immediately after crossing the river of that name, we found the aspect of the country totally changed (see p. 113, as above). This district of Tsaidam must have been traversed by the German Jesuit missionaries John Grüber and Albert Dorville in 1661, on their way from Peking to Benares, and was probably the country known to them as Toktokay. The former, or rather his editor, says of it (see Pinkerton, vol. viii. p. 591), "Leaving this sea behind him, he entered into the country of Toktokay, which is almost desart, and so barren, that it need fear no invasion. One meets with nothing but some tents of Tartars. It is watered by the Toktokay, a very fine river, whence it takes the name. It is as large as the Danube, but so shallow that it may be forded everywhere."

§ He calls this range Bourhan Bota, and explains "that it means Kitchen of

Bourhan; Bourhan being a synonym of Buddha' (p. 115).

|| Here Capt. Prshewalsky must have misread his author, for Huc's words are (see pp. 115, 116), "Mount Chouga being not very steep in the direction where we approached it, we were enabled to attain the summit by sunrise."

nobody has any recollection of the presence of foreigners among its members. Huc further asserts that he passed eight months at Gumbum [Kounboum]; but I saw many lamas who had resided in that temple for 30 and 40 years, and all solemnly assured me that there had never been a foreigner amongst them. On the other hand, in the Alashan country, the presence of two Frenchmen at Nin-jia [Ning-hia-fu] 25 years ago was distinctly remembered.

"On the 10th February we again descended into the Tsaidam valley and struck out for the Koko-nor. The whole of the month of March we passed at the mouth of the River Boukhain-gol. Contrary to our expectations the flights of birds of passage * were very unimportant, and, in all probability, took place to the east of Koko-nor, or in China proper, along [sic] the Central Asian plateau. That route is much the best for birds, for they thereby avoid the deserts of Tibet, the lofty mountains of Kan-su and the sands of Alashan. The months of April and May I employed in studying the flora and fauna of the Kan-su Mountains, and on the 15th June I arrived at Dyn-Ioan-In, where I shall stop for a month, and then proceed to Urga through Central Mongolia.

"My collections are very large, for I am bringing back over 1000 birds, 40 large animals, and hundreds of small ones, besides four large cases of plants, which constitute the loads of two camels. I have determined, astronomically, the latitude of Koko-nor at the mouth of the Boukhain-gol, of the foot of the northern slope of the Bourkhan-Bouda Mountains, and of the Mouroui-oussou; besides this we, every day, fixed the absolute altitude by hypsometrical observations; and, finally, I have constructed a chart of the whole of my journey, so that when the old one, which I left at Peking, is joined on to it, my map will comprise the whole of the region of Central Asia lying between the Dalai-noor [Dolo-nor] and the sources of the Yangtse. I shall also make a survey of the route from Dyn-Ioan-In to Urga. Such, then, are briefly the results of the second period of my journey, but they would certainly have been more extensive had my pecuniary resources not failed me. If I had had sufficient money I should have gone to Lassa, if not even further. The road from Tsaidam to Lob-nor was open; it would have been possible to procure a guide, and the distance was but that of a month's

^{*} In a previous letter (see 'Mittheilungen, No. vii., 1873) he mentions that he would make it his object to observe the flight of birds of passage on Lake Koko.

[†] It is much to be regretted that no more precise notice of the distance of Lake Lob is here indicated by our traveller, for it will be remembered its position has given rise to some discussion. Père Gaubil, writing from Peking on the 6th October, 1726, gives the position of the centre (see Souciet, 'Obs. Mathém. en Chine, &c., Paris, 1729, vol. i. p. 179), deduced from a Chinese itinerary based upon Hami, as lat. 42° 20', and long. 25° w. of Peking (91° 28' E. of Gr.); whilst the lat. of Hami he states to have been observed by MM. Jartoux, Fridelli, and Bonjour, with a large instrument, at 42° 53′ 20″, and the longitude to have been fixed from their data at 95° 56′ E. Since that time, however, the longitude of Hami has been more nearly computed at 94° 40′ E.; so that 1° 16′ must be deducted from Gaubil's meridian of Lake Lob, leaving it at 90° 12'.

Assuming from Captain Prshewalsky's description of his route that he crossed the Tsaidam River in about lat. 36° 10′, and long. 97° 30′ E, the direct distance thence to the centre of Lake Lob would be 504 geo. miles, or allowing one-sixth for probable windings of the road, 588 geo. miles, which would be more than a month's journey for camels, for it would suppose them to accomplish 194 geo. miles a day without any allowances for halts. And this is assuming the most favourable case; but taking the position of Lake Lob, assigned by Mr. Shaw, from original native itineraries obtained by him in Eastern Turkistan (see Royal Geographical Society's 'Proceedings,' vol. xvi. No. iii.), as about lat. 40° 30', and long. 84°, the distance from the same point of the Tsaidam valley becomes, in a

LETTER II.

Addressed to M. Koyander, Secretary of the Russian Legation at Peking, and dated Dyn-Joan-In, 17th June, 1873.

"In my letter to the minister I gave a brief outline of the results of my travels during the present year, and now I will attempt to complete that outline in writing to you. I will begin with the human race. In the countries I visited, that is to say Kansu, Koko-nor, and Tsaidam (for northern Tibet is uninhabited), there exist three, or rather four, races: viz., Chinese, Tangouts, Mongols, and Daldes. The first are only met with in Kansu, and differneither in characteristics nor customs from their fellow countrymen at Peking. Together with the Chinese, are found in Kansu, and there only in the neighbourhood of Sining, a distinct race called Daldes, having no affinity to either Mongols, Tangouts, or Chinese. Their type approaches more nearly to that of the Mongols than to the Chinese, whilst their dialect is, according to the statement of the inhabitants, a mixture of Mongol and Chinese. The Daldes occupy themselves with agriculture, and inhabit houses (fanz)* similar to those of the Chinese.† Only having seen these people as a passer-by, I have not been able to study them closely.

straight line, 690 geo. miles; or, still adding only one-sixth for windings, 805 geomiles, a distance entirely impossible for camels to make good in a month. Thusprimarily, the discrepancy is brought to lie between Mr. Shaw's estimated position of the lake and Captain Prshewalsky's statement of its distance, in time, from the Tsaidam valley; but if we confront the latter's short assertion with Mr. Shaw's elaborate and well-considered itineraries, converging on Lake Lobfrom several sides, it must be conceded that Captain Prshewalsky has done-nothing, thus far, to enlighten us on this interesting subject, and the question still remains to be decided between Gaubil and Shaw.

It must be remarked, however, that most modern maps, including Keith Johnston's, Ritter's, Kiepert's, &c., place Lake Lob 1° to 1° 50' w. of Père Gaubil's meridian; but I have taken the latter's position for comparison, as being most favourable to Captain Prshewslsky's view, and also because it is nowhere stated upon what authority any change was made by those geographers. It is in all probability, however, due to the survey of Eastern Turkestan by the Portuguese missionaries, d'Arocha, Hallerstein, and Espinha, between the years 1756 and 1760 (about), the results of which were published, in a map of 104 sheets, at Peking some thirty years after the publication of d'Anville's Atlas, where Gaubil's data are utilised. In the tables of positions supposed to result from this survey, Lake Lob is not given, and it was probably placed on the map by interpolation. (See this table: Amyot's, &c. 'Mémoires concernant les Chinois,' vol. i. p. 399, Paris, 1776; Demailla's 'Hist. Gén. de la Chine,' vol. xi. p. 575, Paris, 1777; &c.)

The position of Lake Lob, estimated by the itineraries of the Buddhist pil-

The position of Lake Lob, estimated by the itineraries of the Buddhist pilgrims, starting from known points in the east, is very indefinite, the cause being chiefly that their distances are always given in li; and though we know that the to five fay (400 to 629 a.D.) was much shorter than the one now in use, yet the amount of difference remains uncertain. (See Julien's 'Contrees Occidentales,' Paris, 1857; Beal's 'Fa-Hian and Sung-Yun,' London, 1869; &c.)

* Chinese, fang-tse, house.

† The description of these people, as also the locality in which they occur corresponds closely with Huc's account of the race he calls *Dchiahours*. The name of *Dalde* may certainly have suffered in copying or printing, but I can find no approximation to it in any work treating of Western China; nor, with the exception of Huc's, it must be added, of the *Dchiahours* either. The only specimen of *Dchiahours* that I am personally acquainted with is Huc's old servant 'Samdachiemba,' who certainly, as regards language, corresponds to Prshewalaky's description of the *Daldes*.

"The Mongols, of whom there are but few in Kansu, though in large numbers in Koko-nor and Tsaidam, belong to the family of Eleuthes, and, judging by their type and characteristics, I should say they are the most ill-favoured offshoot of their race. Physically they resemble the Tangouts, with whom they intermix more and more. The pure Mongolian type has here become much modified and disfigured; the expression of the face is one of stupidity; the eyes are dull and lifeless, like sheep's eyes; and the disposition gloomy and melancholy. They have neither energy nor ambition, and, for all but eating and drinking, they show a brutal indifference.

"The ware [prince] of Kokonor himself, in speaking to me of his subjects, likened them to animals: 'put them on all fours,' he remarked, 'and there

you have them—regular cows!'

"The Tangouts who inhabit Kansu, Koko-nor, and part of Tsaidam in great numbers, remind one, by their type, of our Tsigunes,* and to whom they show even a greater resemblance in character. Gross as the Mongol may appear to a European, still he becomes a civilised man when compared with the Tangout. His dwelling—the yourt—is a palace by the side of the Tangout's tent, in which latter one frequently finds the mud knee-deep, and a few armfuls of bushes strewed on the ground to serve as a bed. One may say, without exaggeration, that the burrow of the marmot, or the 'layomys,' is ten times more comfortable than the dwelling of a Tangout. The animal at least has a soft, warm, litter, whilst the Tangout's tent, made, as it is, of a fabric as open as a sieve, neither protects him from the rain nor the cold.

The chief trait in the character of the Tangouts is their love of thieving and cheating. In this respect they even surpass the Chinese, and, indeed, stand in the same relationship towards them as these latter do towards the Mongols. One tribe of this race, the Khara-Tangouts [Black Tangouts], who inhabit chiefly the Koko-nor district, live entirely by brigandage, and keep the whole country in a continual state of alarm. The Mongols are the victims of their attacks, and these they not only plunder of their cattle but also murder them

or carry them off into slavery.

The Koko-nor Mongols being naturally of a cowardly disposition have never been able to defend themselves against Tangout aggression, for, according to the laws of the Tangouts, if one of their people is killed by a Mongol his family receives from the murderer the enormous fine of 1000 lanes [about 3201], and if he should chance to be a poor man the whole of his tribe has to pay for him. In case of payment being refused, the Tangouts assemble by hundreds and make open war on the Mongols, whilst the local authorities, who have been liberally bribed beforehand, affect to know nothing of the matter.

Gipsies.

[†] These Tangouts would appear to be Sifans. The country they inhabit is precisely that of the Sifans (see Duhalde, vol. i. p. 41; Ritter, 'Erdkunde von Asien,' Th. ii. p. 176; &c.), and thus is part of what the earlier writers understood by "Tangut." Duhalde (p. 41) tells us the Sifans are divided into Yellow and Black tribes (Hoang-Sifan and He-Sifan), though, he also says, they sometimes build a few miserable houses; and Ritter (p. 177) shows them to be the original natives of the soil in the district in question, and the Mongols to be immigrants of a later date. Huc, in speaking of the Sifans, mentions several circumstances tending to identify them with Prshewalsky's Tangouts. He says (vol. ii. p. 80) their tents "are very cold, and a strong wind knocks them down without the least difficulty;" and at p. 82, "they weave a sort of coarse linen, of which they make tents and clothing." He also remarks how their energy, vivacity, and warlike spirit contrast with the character of the Mongols, and says several of their tribes "constantly exercise their brigandage up to the very frontiers of the empire."

"Towards us the Tangouts behaved respectfully enough, being perfectly aware that we should not hesitate to fire on them on the least provocation, and also that we should pay no fines. They also ceased to plunder in the localities where we happened to be, so that the Mongols were delighted at our presence. While on the way to Tibet we left a bag of flour in Tsaidam, having just then no need of it, and the Mongols, in taking charge of it, assured us that it would be the saving of the whole of Tsaidam. And this in reality happened; for the Mongols, having everywhere spread the report that we had confided valuable property to their keeping, not a single brigand dared to show himself, for fear of being implicated in the robbery of Russian property. Nor was this all: on many occasions chiefs of Mongol tribes sought me out, to beg of me to order the Khara-Tangouts to restore cattle they had stolen from their people. Occasionally, also, whole troops of Mongols would come and ask for my benediction, or, sometimes, for permission to pray for me, as a general idea prevailed that I was some great saint."

Of former travellers Huc's route more nearly coincides with Captain Prshewalsky's than any other that I am aware of, and, in spite of the latter's rather severe criticism of that author, the foregoing account must, after making certain allowances for differences of ear, circumstances of travel, &c., be looked upon as confirmatory, rather than otherwise, of his story. Grüber and Dorville's route would seem to have been struck at some point to the westward of Sining, and on, or near, the northern shore of the Kokonor, if we assume those travellers to have rounded the northern shore of the lake as Prshewalsky and Huc appear to have done; though, supposing them to have kept to the east and south of the lake, the junction would probably only occur at some point in Tsaidam. The routes of Hiouen-tsang (628 to 645 A.D.) and Sung Yung (500 to 518 A.D.), are too far to the north for Captain Prshewalsky to throw light upon; Fa-Hian's outward route (A.D. 400) he certainly crossed at some point in southern Kansu, and Marco Polo's he must also have touched upon, or nearly so, though further to the north-east, in the Alashan country, and probably not far from that traveller's Culachan ('Yule,' ii. 248), or Calacian* ('Pauthier,' p. 206), the "capital city" of Egrigaia.

Captain Prshewalsky's detailed narrative will be looked forward to with great interest, and will, probably, not only explain such matters as "Dalde" and "Tangout," and afford much novel information to naturalists, but will also throw some light on the blankest space of the whole map of Asia, viz., the country between the Tsaidam and Khoten, bounded on the one hand by the frozen' heights of northern Tibet, and on the other by the burning sands of the southern Gobi, a country, we are told, that was once the site of towns and caravan roads, but of which, at the present day, we know absolutely

nothing.

In the mean time it is interesting to consider the few altitudes, given above in round numbers, in connection with the view of the Kuen-lunescarpment of Tibet ably put forth by Mr. Shaw in Vol. xvi., No. V., of the Royal Geographical Society's 'Proceedings,' and commented upon by Sir Henry Rawlinson, General Strachey, and other eminent geographers.

^{*} It is impossible not to remark the similarity, in sound at least, between this name and Alashan.