The CHAIRMAN said he was sure the meeting felt much obliged to Mr. Schuyler, who had told them a great deal about a country of which very little was known before. He hoped that he would publish an account of his journey, which would be of very general interest both in this country and in America.

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2. *Extracts of Letters from Members of Mr. Forsyth's Mission to Kashgar relating to the Geographical Results of the Mission.* With Remarks by Major-General Sir H. C. RAWLINSON, K.C.B., &c.

I PROPOSE to bring before the Meeting some of the Geographical results of Mr. Forsyth's Mission to the Ameer of Kashgar. So much has been written of late years on the subject of the country which used to be called Western China, but which is now better known as Eastern Turkestan, that I may presume you to be acquainted with its general features and history. You know, for instance, that it occupies the great interior basin of Central Asia, intermediate between Russia and British India, being bounded on the north by the Thian-Shan, or Celestial Mountains, and on the south by the Kuen Luen, or mountains of Little Thibet. The skirts of this basin bearing an alluvial deposit, and being watered by streams from the circumjacent mountains, are well cultivated and densely peopled; but the interior is a desert throughout, composed, for the most part, of a sandy waste, with forests of jungle along the river-beds. The people, who are descendants of the ancient Ouigours, are a fine, frank, hardy race; Mahommedans, but not bigoted, very friendly indeed to Europeans, and superior, according to the experience of our officers, to all other Asiatics with whom they had come in contact. Indeed, the pictures given by Mr. Forsyth and his officers of the hospitable and unassuming manners of the people of Yarkand and Kashgar, their industry, intelligence, probity, and activity both of mind and body, impress one most favourably after the accounts one generally has of the sloth, and dirt, and misery, and depravity of the East. This country maintained its independence from the time of Timour to the latter half of the last century, when it was overrun by the Chinese, in whose hands it remained, with some rare intervals of partial insurrection, until eleven or twelve years ago, when the united people rose in rebellion and drove out their Chinese oppressors, placing themselves under the rule of a certain Yacúb Beg, a Kokandí of Andiján, a soldier of fortune, who, having fled before the Russians, came upon the scene at this fortunate moment. Yacúb Beg, or the Ameer—as he is now called in virtue of a firman from the Sultan,—has proved himself a very wise and able leader. He has repressed brigandage, encouraged trade, raised a very

decent military force, and generally strengthened and improved his country: his only fault, indeed, seems to have been a certain lust of territory, which has prompted him to extend his conquests too far to the eastward. Not content, indeed, with Aksu and Turfan, he has pushed on to Ooroomchí and Manas, across one of the spurs of the Thian-Shan, thus coming into contact with his old enemies the Chinese, who still hold Barkul and Hamil, and placing himself in a somewhat difficult relation with the Russians at Kulja.

Our first communications with this Chief were opened by Shaw and Hayward in 1868. Since then Mr. Forsyth, of the Bengal Civil Service, was deputed by Lord Mayo to Kashgar, but got no farther than Yarkand, owing to the chief being engaged in fighting the Tungans at Ooroomchí. During the last winter, Lord Northbrook has resumed the idea of opening out commercial relations with Turkestan, and has sent to Kashgar, under the direction of Mr. Forsyth, one of the best-appointed Missions that has left India since the days of Malcolm and Mountstuart Elphinstone. Lord Northbrook, indeed, greatly to his credit, seems to have recognised that, in visiting an almost unknown country, there are other things to be thought of besides political relations; that it is, indeed, of almost equal interest and importance to investigate the geography and geology, and natural history of the country, to examine into its trade, and products, and manufactures, to collect information regarding its ethnology, and the religion and character, and manners and customs of the inhabitants. All these objects seem to have been duly cared for in the composition of the Mission, of whose reports, relating mainly to geography, I propose to read extracts to you this evening.

The first of these reports which I shall notice is one relating to a journey of 100 miles, made by a portion of Mr. Forsyth's party, to the north, from Kashgar, into the Russian territory. The great result of this journey, and one for which we have been watching for the last ten years, is that we have now joined our Indian trigonometrical system with the trigonometrical system of Russia. The two systems indeed now overlap by 40 miles. Mr. Trotter thus describes his journey:—

1. *Letter from* Captain TROTTER, R.E., *to the* Right Hon. Sir BARTLE FRERE.

"MY DEAR SIR BARTLE, "Kashgar, January 24th, 1873.

"When sending you a few lines from Yarkand, I promised to write more at length, should I have an opportunity of leaving the beaten track or acquiring any really new geographical information.

I have recently returned from a trip to (Lake) Chadyr Kul, on the Russian frontier; our ground, which, although it has been traversed more than once by Russians, is, at all events, new to Englishmen.

"The British envoy, Mr. Forsyth, C.B., having secured permission from the King (or rather, I should say, the 'Ameer,' the title he has recently assumed) for the despatch of a semi-shooting, semi-exploring party towards the north, it was arranged that Dr. Stoliczka and myself should proceed in that direction under the leadership of Colonel Gordon. It was our first departure from the high road, and the authorities here were evidently a little fearful that they might not be able to restrain the roving propensities of so many foreigners, and so insisted before we left that we should trust entirely to their hospitality, instead of taking with us our own tents, baggage animals, &c. Being the King's guests, we had naturally to give way; the consequence of which was—doubtless as intended—that our movements were not so free as they would otherwise have been, and we were unable to carry out the complete programme of our leader, which included a visit to the Chadyr Kul, *viâ* the Chakmák Forts, then a journey eastward across the hills to the Terekty Forts and Pass, and thence back to Kashgar. As it was, we were only able to carry out the first part of the programme, and from Chadyr Kul we had to retrace our steps by the way we went.

"The trip, however, was very interesting, and specially so to myself, as representative of the Great Trigonometrical Survey of India, as the scientific surveys of Russia and England have now crossed each other in friendly rivalry, and the road from here to the crest of the Thian Shan is a link in the chain across Asia common to both countries.

"We left civilisation and our very comfortable quarters at Kashgar on the last day of the old year. The whole of our personal baggage was carried on six ponies. Tables, chairs, and such like luxuries being left behind. For the first two or three days, we were somewhat uncomfortable, and the official who was accompanying us appeared hardly to appreciate the importance an Englishman attaches to a sufficient supply of animal food. As we advanced we fared better in this respect, however; so, after the unbounded hospitality which we have experienced since entering the country, it is hardly fair to grumble.

"Our first day's march was 26 miles to Besák, a village in the Upper Artysh district. The road passes along the east wall of the city of Kashgar, which is distant about 5½ miles in a north-westerly direction from our residence, close by the Yangi-shahr or new city.

The Kona-shahr, or old city, which we have frequently visited since our arrival here, is not nearly so large as that of Yarkand, being under 3 miles in circumference, as against about 3½ at Yarkand; both cities are surrounded by a large mud wall, varying in places from 20 to 40 feet in height, and of great thickness, strengthened at numerous intervals by square towers. As both cities are built entirely of mud, they bear a family resemblance to one another, and there is not much room for comparison between the architectural beauties of the one and the other. Two branches of the Kizil Su, or Kashgar River, flow, the one on the north the other on the south of the city, meeting at a point about 2½ miles south-east of it. Both branches are crossed by well-constructed timber-bridges. At this season of the year there is very little water in either stream, and what little there is is mostly frozen, so that it is impossible to form an idea of the discharge during the spring, when, owing to the melting of the snows, the river is at its highest. After leaving the city and crossing the stream, the left bank of which is covered by tanneries and cemeteries, the road is nearly due north, and enters a narrow lane between two mud walls, on either side of which are enclosed gardens, fields, and hovels, which continue for some 4 miles, when the road emerges on to an open stony plain, forming a very gently-rising slope up to a small spur from a low range of hills running from north to east, and through a gap in which the River Artysh has forced its way; the road passes along the river-bed, through the range, and crossing to its north bank, we arrive in the wide and fertile valley of the Artysh —a name given to the whole district, which comprises several townships scattered over the valley—across which we pursued our way for several miles in a westerly direction, reaching soon after dark Besak, where we found a large room prepared for our reception. Here we passed the night, continuing our journey at about nine o'clock the following morning, still in a westerly direction. The first few miles we passed over fields, well irrigated from the upper branch of the Toyand River. This river, which flows from the Turgat Pass, divides into two branches, where it debouches into the plains in the Artysh Valley; the upper one flows nearly due east, and is the principal source of irrigation of this fertile plain. The south, or main branch, flows south-east into the River Artysh, which is said to rise in the Terek Duvan, on the road to Kokand. On entering the Toyand Valley, here about 2 miles wide, we may be said to have fairly entered the Thian Shan Mountains—the ridge we had crossed in our previous day's journey (and which at its highest part is only a few hundred feet above the plain) being rather an

isolated ridge than a portion of the main range. In marching up this open valley we had in our view on our left the rough serrated edges of the Ming-yol Hill—a prominent object in the panoramic view from the roof of the Embassy buildings in Kashgar, from which it has the appearance of a large isolated hill. On going partially round it, however, it appeared to be only the end of a long ridge of nearly uniform height running in a direction a little north of west, and of which I hope to learn more in subsequent explorations, as it lies in a most interesting spot in the angle formed by the junction of the Thian Shan with the Pamir and Alai Steppes. In continuing our march up the valley we saw in front, at a distance, however, of only a few miles, some snowy peaks, the same that are visible from Kashgar behind the Artysh ridge, and which thence appear to be peaks of the main range running south of the Chadyr Kul. They are not so, however, but form a lower range of hills running nearly parallel to the main range, *i.e.* from west to east. After a march of 20 miles, during which we passed on our right the old Chinese outpost of Tessek Tash (or Khitai [Chinese] Karawul), and 5 miles further on the village of Tapú. We arrived at about 4 o'clock at our camping-ground at Chüng Terek (big silver-poplar), a most picturesque spot, which at any other time of the year would have been most lovely. In the foreground a Kirghiz village, on one side of which, under some large poplar trees, were pitched for our accommodation a couple of akooees, or felt-tents. In the background the valley suddenly narrowed and passed up a gorge overhung by very precipitous mountains, the highest of which was about 2700 feet above our camp, and whose dark outline against the sky formed a most perfect picture. Leaving this camp on the third day, we had another march of 21 miles to the Chakmák Forts, the road steadily up hill, a gentle, but regular ascent the whole march; in fact, this pass to Chadyr Kul is open to laden camels even in midwinter, the slope from the Artysh Valley, height about 5300, to the Turgat Pass, about 12,800 feet, a distance of 80 miles, being of a tolerably uniform slope throughout, and giving, therefore, a regular rise of about 100 feet per mile. The road is good all the way, and the only difficulties are where it crosses the stream, which, at this season of the year, is partially frozen over for almost its entire length.

"From a couple of miles north of our camp the valley narrows in places to a breadth of about 200 yards, and continues confined between steep precipitous hills for about 20 miles. At 10 miles from the commencement of this defile we reached the Fort of Mirza Terek, or Pas Kurgan (Lower Fort), a carefully-constructed

work, which would give a great deal of trouble to an enemy: both here and at Chakmák, 9 miles further up the stream, the overhanging heights are so precipitous and inaccessible that it would be almost impossible for the enemy to effect a lodgment in them. The fort itself, which covers the entire breadth of the valley, about 250 yards, sweeps the whole of the approach, an advance along which would have to be made under very heavy direct fire for several hundred yards; in addition to which, as he approaches the forts, he would be exposed to a very severe flank fire from a long wing wall built parallel to the course of the stream and entirely screened from view up the valley by a natural projecting barrier of rock. Two precipitous hills in the neighbourhood of the fort have small redoubts on top, which would materially aid the defence. A few miles further on we came to the Chakmák Forts, garrisoned by some 200 men; a place which nature, aided by art, has made so strong that, if well defended by an energetic commander with good troops under his orders, it would probably be almost impregnable, and the outworks are so judiciously placed that, under any circumstances, an army would probably be delayed for several days by a very much inferior force. It is well for the Ameer of Kashgar that it is so, for the road across to the Russian frontier is so easy even in midwinter that there is no physical obstacle to the advance of a large army. On the south side of the Pass grass is everywhere procurable in moderate quantities, whilst near the Pass itself there is first-rate grazing ground frequented by large herds of Kirghiz ponies. We saw several hundreds, said to belong to the Kara Kirghiz from Almaty, subjects of Russia, but who pay a certain amount of tribute to the Ameer for the privilege of grazing in his territories during the winter months.

"Firewood is not so plentiful, and from Chakmák onwards has to be carried; although at Balgham-bashee, about 10 miles to the north, a fuel of an inferior quality is to be found.

"There are two roads from the north converging on to a point a few miles north of these forts; one from the Suyok Pass, 2 days' march in a north-westerly direction, is little more than a path, and cannot be traversed by horsemen; but the road from the Turgat Pass, about 30 miles to the north of the junction, is used by laden camels, and is, in fact, the most used caravan-route from Almaty or Fort Vernoye. On leaving Chakmák our conductor tried to deter us from going on by warnings about the cold, and only took us to Balgham-bashee. The following day, however, we made a march of 15 miles to Turgat Bala, an interesting road, as, after passing through volcanic rocks, we came to a place where the banks,

rising to many hundreds of feet in perpendicular height, bore unmistakable signs of being the crater of an extinct volcano. Our geologist, Dr. Stoliczka, who had predicted the occurrence, was of course delighted. The sportsmen of the party now had their turn, and leaving the main valley for a gentle ravine on the west, we were taken for several miles over gently undulating grassy downs to a hill where we were promised great sport after the 'Ovis Poli,' well known by repute, doubtless, to most members of the Royal Geographical Society. Colonel Gordon and myself each got a shot, but the intense cold at this great elevation (about 13,000 feet) militated very much against us, and I regret to say that we failed to secure a specimen, although Colonel Gordon got two fingers badly frost-bitten from the cold contact of his rifle. We were accompanied for the day by some Kirghiz sepoys of the King's, a large number of whom are attached to the Chakmák command; admirably mounted on the sturdy ponies * for which the country is famous, good shots, and knowing each foot of the surrounding country, they would make splendid scouts and mountain soldiers in time of war. In the present time of profound peace they keep their ponies, hands, and eyes in capital training in hunting the 'Ovis Poli' or 'guljá,' the name by which it is here known. Within the last few days no less than 100 specimens of guljá and taká (ibex) have been distributed by the King amongst the poor in the city of Kashgar. We have ourselves several specimens that have been sent to us, whose skins and horns will doubtless some day find their way to Europe.

"You may perhaps think that ponies are somewhat out of place in this mountain warfare, and so I thought myself at first, and was somewhat surprised at the look of astonishment of my Kirghiz guide, when he saw me dismount and proceed on foot to stalk some animals that I had seen on a slope about a mile off. Later in the day I experienced their value, when asking the whereabouts of our camp, my guides pointed to the other side of a range to our north, and said there were two roads, one round the base of the hill, and the other over it; I naturally preferred the shorter one, but was somewhat taken aback when they mounted, and at once proceeded to scale the face of the mountain, going up a spur without any visible path, covered with a few inches of sand, and so steep that it was necessary to zigzag up the whole way—a height of

* Our baggage-ponies all carried a couple of heavy trunks, with bedding, &c., piled over them; on the top of all squatted the pony attendant. Thus, with at least 400 lbs. on their back, they would steadily keep up for several hours, on end, an average pace of 4 miles per hour.

more than 1000 feet. Had we not *done* it, and arrived safely at the top and then descended an equally steep slope on the other side, I should have said that it was an impossible ride. As it was I could but change my opinion as to the utility of these mountain ponies. At the top of the ridge I had hoped to get a good view of the country around, but the evening was closing and the intense cold of the wind (north-west) so bitter, exceeding anything experienced on the Thibet plains on our journey to Yarkand, that halting on the top was quite out of the question, and in the few seconds that I delayed to record the reading of my aneroid my extremities became entirely numbed.

"Next day was devoted to Shikár; and, although unsuccessful, I thoroughly enjoyed a very long day's work, and learned to stalk *à la Kirghiz*, the *modus operandi* being as follows: you leave camp after an early breakfast, with rifle slung on your shoulder, and mounted on a trusty pony, accompanied by a couple of mounted Kirghiz, who have their long matchlocks slung in similar manner. You wander along over hill and dale, always approaching a ridge very carefully, and peering cautiously over the edge. If game be seen, you drop back, and, after carefully reconnoitring the ground, hold a hasty consultation with your guides, and by the use of a good deal of pantomime and a few Turki words come to an understanding as to the mode of procedure to be adopted. Perhaps the ground is very open, and it will be necessary to dismount and stalk in the ordinary manner, with all the science and care necessary on such occasions. If, however, as is often the case, in going along a large, broad, open valley you see a herd disappear behind a ridge, perhaps a mile ahead of you, you exchange glances with your guides, and off you start as fast as your ponies will carry you—tearing along at full gallop, if the ground will admit of it—but somewhat modulating your pace if the ground be difficult or up-hill. Assuming that the herd is advancing quietly and at a moderate pace, you calculate the probable part of the ridge which they are likely to be behind at the time of your arrival, and never draw rein until you reach the spot just below the crest; you then dismount and steal forward, and if your stalk has been judiciously made you get a capital chance. If successful, the guides' ponies carry home the spoil. The 'young men' who were with us brought in four—not bad for one day's work. The great beauty of this sport is the combination of the excitement of the gallop and the stalk, and the great quantity of ground that can be covered in a single day. We were shooting at one time at least 12 miles from camp. In the lower hills are the 'sheep,' and in a high, rocky range to the north ibex were said to

abound, but in ground where it would be impossible for even a Kirghiz pony to follow.

"In the evening I took some star observations for latitude, but you may imagine that I spent as little time over them as possible, considering that the thermometer was standing at 10° below zero Fahrenheit, with a bitter wind blowing and no shelter. At night the thermometer outside our akooee fell to 26°, while inside it went down to 8½°. We have a fire in the middle of our akooee when we turn in, which keeps us tolerably warm until we get to sleep; but our Hindustani servants must have had a hard time of it under a very thin canvas tent. Some poor unfortunates, our pony attendants, had to sleep in the open air; but really they did not seem much the worse for it. What struck me most, however, was the real piety displayed by our Mahomedan hosts (in which, however, I am sorry to say, our own servants did not join), as every morning at break of day we were woke by the call to prayers, and nearly every man in camp would turn out to worship, with the thermometer at 25° below zero. I had always hitherto somehow associated the Mahomedan religion with a warm climate, but certainly shall not do so again after the experience gained on this trip.

"On the following day (sixth from Kashgar) we rode out to the Chadyr Kul Lake and back to camp—a ride of about 32 miles. Starting early in the morning, with the thermometer several degrees below zero, we rode about 13 miles to the pass—a gentle ascent up the open valley until within a mile of the crest, when the rise, though still very easy, is somewhat steeper (about 400 feet in the last mile). We had a lovely day for the trip, and I was able to make careful observations for the height of the pass, which I make to be about 12,800 feet above sea-level (this is calculated from an assumed value of Kashgar of 4200 feet, and liable to subsequent alteration). Whilst boiling my thermometer, a solitary horseman appeared on the crest above, watching me intently. The Sepoy who was with me immediately said it was a 'Roos.' After exchanging a few words he retired, when I followed the rest of the party. On reaching the pass we did not come suddenly, as we had expected into view of the lake, but had to go along a spur for about 3 miles in a northerly direction, when we burst suddenly into full view of the lake and the Tash Robat Mountains beyond—a magnificent panorama, to which full justice had been done in a sketch by Colonel Gordon while waiting for me to come up. We had hoped to have descended to the shores of the lake, but the official who was with us was evidently somewhat in doubt as to the ownership of the country—whether it belonged to the Ak Padsháh, or to Jenáb 'Ali (as the

Ameer is always called by his people); and as we had received instructions not to pass the frontier line, we were obliged to content ourselves with this bird's-eye view of it. Of course, viewing the lake and mountains beyond from only a single point, it was impossible to form any accurate idea as to its size, but the Russian maps make it to be an oblong, about 14 miles in length from west to east, and 5 or 6 miles in breadth. From the place where we stood, about 3 miles north of the pass, the eastern extremity of the lake bore a little to the west of north, while the Tash Robat Pass, as pointed out by our guides, lay about 17° further to the west. The lake itself, which is about 1500 feet below the pass, was covered with ice, and the sleet which lay on the top made it difficult to distinguish between it and the nearly level plain by which it is surrounded, and which was covered by a white saline efflorescence. A single horseman, near the edge of the lake, was the only living object visible—a curious contrast to the other side of the pass, where, within a few miles, we had left a herd of several hundred ponies grazing on the slopes at the foot of the precipitous hills forming the crest of the range. These extensive grassy slopes, somewhat resembling the English downs, are a very curious feature in the country, and attract not only the large flocks of *Guljas* (in one of which Dr. Stoliczka counted no less than eighty-five), but are equally attractive to the Kirghiz as grazing ground for their horses.

"Looking from our elevated position above the lake, there appeared to be two ranges of mountains—the Turgat, on a spur of which we were standing, and the Tásh Robat, on the opposite side of the lake. Both are portions of the Thian Shan range, which westward, like the Karakorum eastward, seems to lose its identity, and merges into several comparatively unimportant minor chains, of which it is impossible to say which is the main one. Hence there is some difficulty in defining the watershed, and consequently the boundary between Russia and Kashgar. The Chadyr Kul Lake lies between the two ridges, and, as far as I can learn from observation and from the Russian map I have seen, there is no drainage out of it, although several small streams run into it. The map includes the lake within the Russian boundary, which they place on the crest of the south or Turgat range, the peaks and passes of which are apparently of the same average height as the northern range. The authorities in Kashgar claim the lake, and maintain that the Tash Robat is the true boundary; but the officials on the spot seemed to take a third view, viz., that the lake itself was the boundary. The Ak-sai River, which rises between the ranges a few miles east of the lake, flows into Turkistan, while the Arpá, rising in a cor-

responding position near the west end of the lake, finds its way into the Syr or Jaxartes River. This would indicate the lake itself as a good natural boundary, the crest of the Tash Robat on the east, and that of the Turgat River on the west completing the line.

"The general run of the crest of the Turgat range is, as far as I could judge, from west to east, although a few miles west of the pass it takes a decided bend to the north-east: the peaks also decrease in height as the range approaches the pass; the highest, within a few miles of it, being about 15,000 feet; others, away to the west, being apparently a couple of thousand feet or more higher. East of the pass again the hills are still lower, and it was impossible to judge of their general direction, though from the Russian maps it would appear to run in a south-east direction. I had hoped that we should have been allowed to cross the mountains, or rather high undulating table-lands, eastwards, and thus get a very complete idea of the whole range; but the officials seemed to think we had seen quite enough, and we had to return to Kashgar. This was of course much to be regretted from a geographical point of view; but, on the other hand, we ought to be duly grateful for having been allowed to stir out of Kashgar at all—a concession on the part of the King which our friends in Hindustan best acquainted with the country and its ways certainly did not lead us to expect. As it is, we have broken the ice, and there is every hope that opportunity will be given during the next few months for a vast increase to our store of geographical knowledge.

"HENRY TROTTER."

Sir Henry then continued: The discovery of an extinct crater on the outer skirts of the Thian-Shan, alluded to in this letter, is a most important addition to our knowledge of the physical geography of the region. It confirms what the great Humboldt always maintained with regard to the Thian-Shan, but what the Russian geographers have recently denied. Severtsoff, in particular, whose paper was published in a recent number of our 'Journal,' asserted that there was no trace of volcanic agency in the Thian-Shan. (See 'Journal of the Royal Geographical Society,' vol. xl. p. 395.)

The next Report which I shall read to you has reference to a trip made by Captain Biddulph to the eastward of Kashgar. This is all entirely new ground, which has never before been travelled by any European. Many of the names of places mentioned are very important and curious. Captain Biddulph's report indeed contains the first really authentic notice I have seen of the name of

Yamanyar, as applied to one of the Kashgar rivers. It would be inconvenient at present to take up the old question of the fictitious travels of the German Baron; but one of the test-points of those travels was this Yamanyar River, supposed to pass to the south of Kashgar. I had always supposed that the name of Yamanyar (stated in the Foreign-Office MS. to mean "having bad banks") was an invention by the author of those fictitious works; but I now find that the name really does exist, and I can only suppose, therefore, that Klaproth, who is now pretty well ascertained to be the author of all those fictitious travels, obtained the name from some of the Chinese authorities.

2. *Report of Trip from Kashgar to Maralbashee.* By Captain J. BIDDULPH.

"Kashgar, 4th February, 1874.

"The Ameer's permission for my going to Maralbashee having been obtained, I left Yengi Shahr on 31st December, 1873, Mirza Suffee Punjabashee being deputed by the Ameer to accompany me.

"Travelling easily, I reached Maralbashee in seven marches. The road runs for the entire distance along the course of the Kashgar River, or Kizzil Su, which it crosses about 60 miles from Yengi Shahr. For the first 40 miles the country is well cultivated, and there is no want of population; the town of Fyzabad, which gives its name to a flourishing district, being reached at 35 miles' distance from Kashgar.

"At a little more than half-way from Yengi Shahr to Fyzabad, the road crosses three considerable streams flowing from the south into the Kizzil River. Their names were given me as the Derbuchek, the Chokanah, and the Fyzabad, and I was told that they are all united into one stream, called the Yamanyar, at no great distance above where I crossed them. Beyond Fyzabad habitations become scarcer, and cease altogether at Yengi Awat, 46 miles from Kashgar. From here the country is covered with low bush-jungle and sand-hills, gradually changing to forest, which becomes continuous shortly after crossing the Kizzil Su to within 4 miles of Maralbashee. No habitations are met with during the whole of this distance except posthouses, at intervals of about 15 miles, which are erected for the use of travellers. These are all of inferior construction, with small accommodation, one of them only consisting of a single room. As I took no tents with me, I used the posthouses during the whole time of my absence from Yengi Shahr. The forest, though apparently of great extent, contains no fine timber, the only tree being the poplar (*Tograk*), of stunted growth; the undergrowth consisting of a bush,

growing to a height of about 8 feet, a thorny bramble, and camel-thorn, but there is no grass; the soil is very dry, alluvial, and covered with a thin hard crust of soda, which crackles under the foot at every step, and in which horses sink up to the fetlocks. The forest abounds with gazelles (*Antilope gutturosa*) and hares, but, with these exceptions, is singularly wanting in animal life. For a space of about three-quarters of a mile on each side of the river there are no trees, but in their stead a belt of thick high grass, like what is known in Indian jungles as hurkut, growing to a height of from 8 feet to 12 feet. In this are tigers, wolves, the large deer, called by the natives 'Bugha' or 'Maral' (apparently *Cervus elaphus*), gazelles, foxes, and pheasants. This treeless belt is doubtless caused by periodical changes of the river-bed, of which there are many evidences; the fall of the country to the eastward being only a little over 500 feet in 100 miles, according to aneroid readings which I took daily, the river making frequent turns and windings, and being level with its banks, so that a very slight flush of water would cause an overflow—the current not being rapid enough to prevent its freezing sufficiently to admit of loaded carts crossing it with ease. In summer it is crossed by a bridge, which, however, I did not see, as the road I followed, both in coming and going, is more direct, thereby saving several miles, and is always used in winter. Within 4 miles of Maralbashee the forest ceases, and the country is covered with long grass, with occasional patches of scrub and swamp, much resembling the Rohilcund Terai. In this are dotted about small villages, with patches of cultivation round them. The grass jungle extends over a great extent of country, as well as I could gather, both to the north-east, south-west, and eastward, being, doubtless, formed by overflows and changes of course of the Kizzil and Yarkund rivers. The latter river, I was informed, flows close to Aksak-maral, which is about 32 miles south-west of Maralbashee.

"Maralbashee, or Burchuk, as it is sometimes called, contains about 1500 inhabitants, and is at the junction of the road from Yarkand with the Kashgar and Aksu road. It contains a fort and small garrison of about 200 men; it could, however, from its position, be easily and quickly reinforced, either from Aksu, Kashgar, or Yarkand, if necessary. The River Kizzil flows under the walls of the fort, and during the late rebellion against the Chinese was made use of by being dammed up and turned on to the fort to break down the wall. Where I crossed it on the road from Kashgar it is 100 feet wide, level with the bank, but flows here in a greatly diminished stream, about 25 feet wide, between high banks, 20 feet below the level of the surrounding country. Its character was so

altered, that it was only after repeated assurances from the natives that I satisfied myself as to its being the same stream.

"The Hakim Beg, of Maralbashee district, has the title of Dadkhwah: the present one, by name Ata Bai, is an Andijani. He is a man of about 35 years of age, with especially pleasant address, and seems much liked by the people, who all speak highly of him.

"The natives of the district are called Dolans: they have a more Tartar-like cast of countenance than Yarkandees and Kashgarees, and are said to be distinguished for their fondness for music and singing. They are said to be descendants of prisoners brought in the fourth century of the Hejra by Harown Bugra Khan from Mowralnahr, and forcibly settled in the country between Maralbashee and Kuchar. In the jungle villages they excavate houses out of the ground, making grass roofs level with the surface. The term Dolan is applied generally to men of mixed parentage.

"The fort is of the same kind as others we have seen in the country, with earthen rampart, about 30 feet thick and 25 feet high, a low parapet, forming a kind of covered way, and ditch: it forms a square of about 170 yards, with projecting circular bastions at the angles, three of them having square towers on them; also a circular bastion in the centre of each face. Close outside the fort is a palace lately built by the Ameer.

"Nine miles to the north-east of Maralbashee is a huge black rock, with treble peak, rising to a height of some 2500 feet above the plain, apparently basaltic: it is very rugged and quite inaccessible, and forms a conspicuous landmark. It is called 'Pir Shereh Kuddam Moortaza Ali Tagh.' At its foot on the north side is a Mazar of great sanctity. The Aksu road runs within a mile of it, and travellers, on catching sight of the shrine, dismount and say a prayer.

"Four days after my arrival at Maralbashee, the Dadkhwah Ata Bai came in from Ooroomchi, after an absence of ten months: he had with him about 120 men, and had been present at the recent fighting at Manas. I was told that a great number of desertions had taken place from the army: upwards of 400 men, it was said, had deserted into Russian territory. Of the contingent from Maralbashee, four had been killed and twenty had deserted.

"From Maralbashee I went to Charwagh, the first stage on the Aksu road, a village of about 250 inhabitants, and spent several days in shooting and hawking. I was especially anxious to shoot a tiger, of which there are many about, but was unsuccessful in the sea of high grass with which the country is covered. From signs which I was shown, and footprints which are common everywhere,

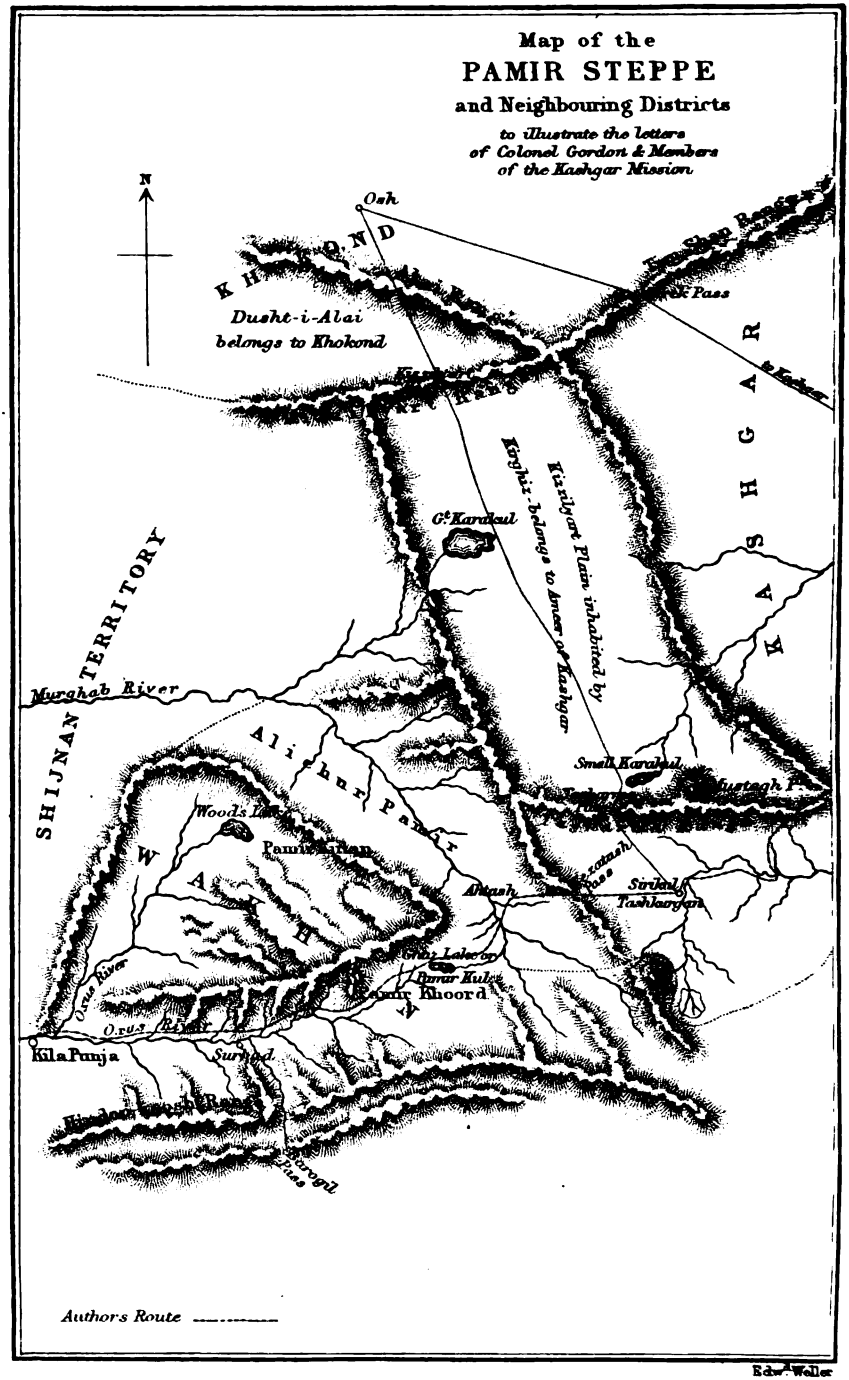
and judging by what I was told, there is no doubt that the tiger here is altogether a smaller animal than his Indian congener; he seems also to differ considerably in his habits, prowling round villages at night, killing dogs and sheep, and behaving more like an Indian panther than a tiger. The natives spoke of men being killed by tigers occasionally; but it does not appear to be a common occurrence.

"The jungle abounds with pheasants, which gave good sport with hawks; and I also saw the burgoots, or trained eagles, kill gazelles and foxes. I was not fortunate enough to see a wolf killed by them; but from the great ease with which an eagle disposes of a full-grown fox, I could see that a wolf would have no better chance. Grasping with one powerful talon the throat of his victim, the burgoot seizes his jaws with the other, keeping them closed with an iron grasp, so that the animal is powerless. Gazelles are seized in the same way, except those with horns, in which case the eagle first fastens on to the loins of the animal, and watching his opportunity, transfers his grasp to the throat, avoiding the horns. It is a fine sight to see the great birds sweeping up to their prey.

"I saw at Maralbashee a Punjabee, serving as a soldier, who gave me much interesting information, which I have recorded elsewhere. The country round Maralbashee is well watered, and the soil rich, and seems only to want population. There are many traces of old cultivation now overgrown with jungle.

"I left Charwagh on the 16th, and returned to Kashgar on the 23rd January by the same road which I went by. I was invited to go further along the Aksu road, and believe that no difficulty would have been made about my going to Aksu itself, as during the whole time I was absent from Kashgar no attempt was made in any way to control or direct my movements. I received whatever supplies I was in need of, and was treated by all officials with the greatest civility. On one occasion a Moolla, having forced his way into my room and asked me for a turban, was severely punished by the Governor."

Sir Henry went on to explain, that on the return of the Mission from Kashgar, Mr. Forsyth detached a party, under Col. Gordon, from Yengi-Hissar to cross the Pamir to Wakhan in the hope that they might be able to continue their route to India, either by Yassin and Gilghit, or by the Chitral valley, or, finally, by the beaten track through Badakhshan and Kunduz, and across the Hindú-kúsh to Cabul; but on arriving at Kila Panja, where the two upper arms of the Oxus unite, they found that, owing to



Author's Route ----------

Edw.d Weller

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troubles in Afghanistan, their further progress in that direction was barred; and they were accordingly obliged to retrace their steps to Tash-kurghan, in order to rejoin the Mission on its march through Thibet. Sir Henry then read the following extracts from four different letters written by members of Colonel Gordon's party from Kila Panja.

3. *From* Colonel GORDON *to* Mr. AITCHISON.

"Kila Panja, Wakhan,
"April 14th, 1874.

"DEAR MR. AITCHISON,—

"I arrived here yesterday, accompanied by Captains Biddulph and Trotter and Dr. Stoliczka, travelling from Yengi Hissar by Serikol and the Pamir Khurd. We left Yengi Hissar on the 21st March, and Serikol on the 2nd inst. I may say that the whole journey has been made through snow more or less. It lay very deep on the Pamir, and as the marches were long there (25 miles), the hard work has reduced our baggage animals considerably, so much so that a rest of ten or twelve days here is absolutely necessary before they can be fit for further travelling. A severe snow-storm overtook us the day we reached Sarhadd (the 8th inst.), and we had it in our faces for two marches down. The storm appears to have reached far below this place. We had repeated snowfalls throughout the journey from Yengi Hissar, adding greatly to the severity of the weather caused by the unusual lateness of the winter this year. We had a heavy snowfall in Kashgar a few days before we left, and that fall appears to have been general all over the mountains and highlands here. The Toksabai (governor) of Serikol warned us of what we might expect in the way of snow on the Pamir, and we found it as he said. The Ameer of Kashgar went to great expense in laying out supplies for us the whole way from Yengi Hissar, and across the Pamir to Sarhadd; yaks and ponies accompanying us with them the latter portion of the journey.

"The Resaldar starts to-morrow morning, and should reach Faizabad on the 18th. I expect him back about the 23rd. In the mean time I will be making all ready for the return journey over the Pamir. I am greatly afraid that the extreme lateness of the winter, and the recent heavy snowfall, will prevent us taking the road by Wood's Lake.

"The Meer says that it is impracticable at present, the snow being up to a horse's girth, and that it will remain so for six weeks to come. However, he has consented to send two men with one of my people off to-morrow to go as far as possible to the lake (four days),

and report on the state of the roads. Regarding the information we have obtained on and about the Pamir, I would refer you to a sketch map and accompanying explanation Biddulph is now despatching in the same packet with this to Colonel Earle.

"The map represents all our discoveries so far. You will see by it that the *whole of the road to India* from Khokan lies through the Atalik's and the Meer of Wakhan's dominions. From Yengi Hissar to Serikol the road is bad; thence to the Pamir Khurd Kol good; after that bad almost the whole way to this; but, I believe, that from the Kizil Yurt Pass to this, by the Great Pamir, it is good, with grass in abundance.

"But there is then the very bad bit from this to Sarhadd (55 miles), whence the easy Barajhil Pass is approached. Wakhan is a very poor country, inhabited by about 300 families. Though poor, however, they are proud of their descent from 'Sikandar.'

"I found and sketched some very interesting 'Greek remains' in a hut in which we all lodged (without disturbing the family) for a night during a severe snowstorm. Our latest news from Mr. Forsyth is dated 29th March. We cannot expect at this distance to hear often or regularly. If we leave this on the 24th or 25th we may expect to reach Leh about the middle of July. This allows for short halts on the way, to rest and recruit the baggage animals. My party here consists of 48 men and 72 ponies, inclusive of 6 men and 7 ponies belonging to Kashgar. A party of this strength is increased considerably, of course, when 12 or 13 days' supplies accompany. Our journey hitherto has been made without any serious loss, illness, or accident.

"T. E. GORDON."

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4. *From* Captain BIDDULPH *to* Colonel BIDDULPH, R.A.

"Kila Panja, Wakhan,
"April 14th, 1874.

"This, if it reaches you at all, will arrive considerably before the letters I have written to you from Kashgar, so I will recapulate our movements. We left Kashgar on the 17th March, and after two days at Yengi Hissar, Gordon, Trotter, Stoliczka, and self, came on here, and arrived yesterday. We had an uncommonly rough time of it, having been travelling in snow, with bad weather, from the day of leaving till now. The cold was not so severe as on the Karakorum; but the great amount of snow creates much discomfort, and cuts our faces about tremendously.

"We came through Sirikol, Tashkurgan, to Aktash, and over the Little Pamir, by the lake marked on the map as Burkut Yassin, though the name is a pure invention. The Pamir is not, as far as we can gather, a great steppe which can be traversed in any direction, but consists of a series of broad, elevated valleys, along which the different routes run. The way we came is the winter route, the elevation being 13,000 feet; but we had to cross four passes between Yengi Hissar before getting on to the Pamir. It appears that the drainage of the Pamir is all to the west, the Pamir itself not being the true watershed, but the Kizzilyart Plain, extending from north of Tashkurgan to the Alai, belonging to the Ameer of Kashgar. We have also solved the drainage of the Karakul, which has hitherto been a favourite subject of geographical discussion. There are two Karakuls, one draining east and one west. The most important geographical fact we have ascertained, though, is that the uninhabited parts we have come over, instead of belonging to nobody, are the property of the Meer of Wakhan, our present host, whose boundary marches with that of the Ameer of Kashgar.

"I send you a map, which will give you a fair idea of the drainage and boundaries.

"Luckily the Meer of this place is very civil, and gives us all we want, or we might be in a fix, as our animals are so broken down that they require a fortnight's rest before we can face the Pamir. We hope to go back over the Great Pamir by Wood's Lake; but they tell us it is impossible on account of the snow, of which more has fallen this year than usual, so we are sending two men to see. These tributaries of Shere Ali are very independent fellows. It is, however, a most miserable country; has only about 1000 inhabitants, all most wretchedly poor. Meer Futteh Ali Shah, a very feeble old man, is at present in great straits, having a remorseless creditor sitting on his head for the sum of 400 rupees. We are thinking of paying off his national debt, and so earning his eternal gratitude. We saw great herds of *Ovis Poli* on the Pamir, and their great horns were sticking out of the snow at every step. Shooting, however, was quite out of the question, as we were marching 25 miles a day, and the snowdrifts were so deep that walking out of the beaten track was almost impossible. I shall have a try, though, on the way back. There are no yak on the Pamir, but there are bears, and quantities of wolves. We had to carry firewood for seven marches, and grain the whole way. The celebrated Pamir grass, which is very fine and sweet, is all dried up, besides being covered with snow. If our Aksu trip had come

off, as it ought, we should have come over comfortably at a better time of year. I calculate we shall be in Leh about 1st July, but with the Pamir and Karakorum before us, and the constant snow and ice we have had since 15th September, I feel as if summer was never to come again. There are ibex near here, but we have had such a knocking about that I am glad of a few days' rest. If, however, the weather is favourable, in about four or five days I shall make an attempt. They are the black kind, different from the Cashmere ibex. By-the-by we found an Englishman in Kashgar living in miserable poverty. We noticed a man with an English face hanging about our gates from the first day. He called himself a Nogai Tartar, and said he had been in the Russian service. The day we came away we were hard up for mule drivers, and, as he was hanging about as usual, we took him on. At Yengi Hissar, while Gordon was sketching, the man came behind him, and, crowding in with others looking over G.'s shoulder, began unconsciously to read what was written under the sketches. G. encouraged him to go on, and, after he had read a bit, G. said, 'Ah, you're an Englishman.' On which he put his hands to his face, and ran right away, and we never saw him again. He is, doubtless, an old Crimean deserter, and dare not acknowledge himself.

"The Pamir could easily be crossed by guns, but the approaches to it on each side are bad. Guns could also come all the way down the Kizzilyart Plain, and over the Tagharma and Kizzilyart passes with ease. Still it cannot be too distinctly understood that all the people in these parts are friendly to us.

"This goes viâ Cabul."

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5. *Extracts of a Letter from* Captain TROTTER, R.E.

"Panja, Wakhan, April 14th, 1874.

"Here I am in the heart of Central Asia, but going back again to Yarkand, I am sorry to say, instead of going on to Cabul.

"The place I am writing from is that from which Wood made his ascent to Lake Victoria, and the Meer of which had his brains knocked out in Durbar, by order of the Meer of Kunduz, professedly for having been uncivil to Wood. You will be glad to hear that the present ruler, a near relative of the last, has been uncommonly civil to us, and is therefore not likely to receive a similar punishment. I am sending these few lines through Cabul with letters we are forwarding to the British Representative there. If they reach safely, they will probably anticipate by several weeks, or perhaps months, any other news you may receive of us.

"We have had a very trying journey across the Pamir. We are about twenty days' march from Yengi Hissar (between Kashgar and Yarkand), and are, as the crow flies, not more than 220 miles from Peshawur in the Punjaub, and yet political difficulties prevent us returning to India, except by Yarkand and Ladakh. We are obliged to stay here to recruit the strength of our baggage ponies, before we commence the return journey. We have had five passes to cross during our twenty days' march, besides three or four days' travelling over the 'Roof of the World,' as it is popularly called, which was entirely under snow. Fortunately for us, the weather, while crossing, was fine, although the wind was intensely bitter; but on descending through the Wakhan Valley we have had snow falling every day, and altogether had a very hard time of it, although happily we are none of us any the worse for it, except that we have lost all the skin off our noses. We have only received *two* lots of mails from India during several months past, the roads over the Himalayas being closed by snow. We expect to be back in Yarkand about May 20th, and shall probably be in Ladakh early in July, and back at Simla some time in August. We have, however, a good deal of exposure to sun and heat, snow, wind, rain, hail, and cold, to go through 'twixt this and then. I have not had a day's illness since leaving Cashmere, and hope to be equally fortunate during the return journey.

"Our party consists of four,—Colonel Gordon, Biddulph, Dr. Stoliczka, and myself,—and we are necessarily encumbered with much baggage, and more than fifty ponies, so that we cannot move except with great previous preparation. Wakhan is a very poor country, and we find that we shall have considerable difficulty in provisioning ourselves for the journey back to Sirikol, half-way to Yarkand. We were guests of the Ameer of Kashgar till we arrived in the inhabited portions of the Wakhan Valley (about four marches from here), although his territory only extends to about two marches on the side of Sirikol. Wakhan is a province of Badakhshan, and is therefore the most eastern portion of the territories of the Ameer of Cabul, so the two monarchs between them have a goodly strip of territory from Herat on the west to Ooroomchí and Turfan on the east.

"We hear that a Russian Embassy arrived at Kashgar a few days after we vacated our quarters there, but have heard no news since we left Yengi Hissar."

6. *Copy of a Letter from* Captain J. BIDDULPH, *Aide-de-Camp to the Viceroy on Yarkand Mission, to* Colonel W. EARLE.

"Kila Panja, 14th April, 1874.

"Here we are in Wakhan, having arrived here yesterday. As you are not likely to get our letters from Kashgar till some time after this should arrive, I will recapitulate our movements. We left Kashgar 17th March, our Aksu trip being ignored in a curious way though the Ameer had given his permission for it. After a two days' stay at Yengi Hissar, we—that is, Gordon, Trotter, Stoliczka, and self—left on 21st for Sirikol, which we reached on 30th, and, after two days, came on across the Little Pamir here. With the exception of the first day we have been travelling in snow the whole way, and have had an uncommonly rough time of it. Before we reached Tashkurgan we crossed three passes, which will give you some idea of the ground, and of course the Pamir itself was wild and desolate, and what little firewood we could get had to be dug up from under the snow. All supplies were brought with us, sent by the Ameer, whose liberality all through has been unbounded. We had sent on Mahomed Afzul ahead of us to announce our coming, and found Mir Futteh, Ali Shah's son, ready to meet us at the first village. Of course they had not expected us, and were in a great state at our coming, but finding that we wish to pay our way and will not eat them up, they are more satisfied; but you can hardly imagine a more miserable country, there are not more than a thousand inhabitants, and the climate is so severe that for five months they never go out of their houses, except to collect firewood. Futteh Ali Shah is a very feeble old man, very ill, and just now much oppressed by a debt of Rs. 400, for which he has an inexorable creditor living on him. We are thinking of paying off the national debt and thereby earning eternal gratitude. The people are peaceable and *Gurreeb*, and have a great respect for the *Dowlut* (English Government). We have just got a despatch from Cabul, written, of course, before they knew of our leaving Kashgar, and are sorry to find that there is no chance of our going back that way; so we shall load up and start back for Yarkand, across the Great Pamir by Wood's Lake, but shall require ten days here first to repair damages and prepare for the journey, as our cattle have suffered considerably, and the Great Pamir is 2000 feet higher than the little one.

"We have got some rather important information about the geography of these parts. The uninhabited tract that we have just traversed, instead of being a 'no man's land' as had always been

imagined, belongs to the Mir of Wakhan, who joins hands with the Ameer of Kashgar, within two marches of Sirikol. This is also acknowledged in Kashgar, and is a well-known fact to travellers and others, and there seems no doubt about it. The real watershed between the east and west is the Kizzilyart Plain, which belongs to Kashgar. I send you a rough map which will show you how the rivers run, quite differently to what has been hitherto accepted; the proportions are a little out, but otherwise it will give you a good idea of boundaries, &c. The Pamir, instead of being a steppe which you can march across in any direction, consists, as far as we can make out, of a series of broad valleys at a great elevation, called by the names of different Pamirs, along which the different roads run. The whole way from Aktash to Sarhud, four days' march, we were in one broad valley, there being no perceptible rise between the lake and the commencement of the waters flowing west. We saw great herds of *Ovis Poli*, and at every step their gigantic horns were sticking up out of the snow, but there was no possibility of stopping to shoot, and our marches were so long that we were obliged to start our baggage animals off before light, and they effectually frightened all the game off the road."

Summary of Results of the Pamir Excursion, enclosed in Colonel BIDDULPH'S *Letter.*

"There are two Karakul Lakes, one flowing east, and one flowing west. The one flowing east from the Ghiz stream and passing through the Ghiz Dawan, becomes the Kashgar River. The one flowing west joins the stream from the Ghaz Lake or Pamir Kul, and forms the Murghabi River, enters Shignan at Burtang, and traversing Shignan falls into the Oxus at Vamir, five days' journey below Kila Panja.

"Shignan is perfectly independent, ruled over by Yussuf Ali Shah, who also owns Roshan and adjoining Pamir.

"Wakhan territory extends up to junction of Aktash stream with stream flowing from Lake Karakul, and contains the Great, Little, and Alichur Pamirs.

"The true watershed between east and west is the Kizzilyart Plain belonging to the Ameer of Kashgar.

"The Shignan Pamir and the Kizzilyart Plain are inhabited by wandering Kirghiz, the other Pamirs have been abandoned of late years.

"From Tashkurgan to Small Karakul Lake is one day's march,

from Small Karakul to Great Karakul is five days, and to Osh from Great Karakul is six days' march.

"The Barogil Pass into Chitral is extremely easy and open the whole year, with the exception of about six weeks in March and April."

Sir Henry then continued as follows: I may observe, with regard to the information we now receive that there are two lakes named *Karakul*, that Mr. Shaw had previously assured us of the same fact.* Captain Biddulph's letter incidentally mentions that they still believe in the country that Wood's Lake is at least 2000 feet higher than the southern lake: Wood having made his lake by boiling water 15,600 feet; while the Great Pamir Lake was determined by the Mirza, also by boiling water, to be 13,260 feet, so that there would seem to be nearly 2400 feet of difference between them. This difference of level has been hitherto accepted as a well ascertained geographical fact; but there now seems good reason to doubt it. The water, indeed, from this lower lake runs first to the eastward, till it joins the stream of Aktash, after which it turns to the north-west, and passes at the back of the Great Pamir, so that if the latter were really 2400 feet higher than the Lesser Pamir, the water would be running up-hill. The only possible explanation of such an anomaly would be to suppose that the Great Pamir were an isolated plateau, raised 2000 or 3000 feet above the surrounding steppe, but the routes do not give any such indication. On the contrary, Feiz Bukhsh passes along a level plain from Wood's lake to Isligh, where the drainage of the Lesser Pamir passes to the North-west ('Journal of the Royal Geographical Society,' vol. xlii. p. 465); and Mahomed Amin's route, given in Davies's Reports (Appendix, p. 367), describes the route as passing between two sections of the insulated Pamir Chain. My expectation, therefore, is, that if Col. Gordon's party are able to return by Wood's Lake, they will find the height of the Great Pamir to have been much exaggerated. In the mean time it is curious to observe that Captain Biddulph, in his letter to his brother, takes it for granted that the levels are right, and says that the lake that they will cross in the Great Pamir will be 2000 feet higher than the other.

Those Fellows of the Society who remember the discussions of last year with regard to Wakhan and Shignan, will be interested to find that the real country of Shignan is the valley of this river of Aktash, which, after its junction with a stream from Lake Karakul,

* See 'High Tartary,' p. 461.

takes the name of Murghábi (as already known from Abdul Mejid's route) and enters the Oxus at Vamir. It is also of importance to remark that Colonel Gordon confirms Abdul Mejid's statement that the Wakhan country extends as far North as the Murghábi, where it marches with Kokand, so that there is no intermediate Pamir Steppe held by independent Kirghiz.

Sir GEORGE CAMPBELL said he had been extremely interested in the accounts which had been given,—on the one hand by the Secretary to the American Embassy of the discoveries on the Russian side, and on the other hand by Sir H. Rawlinson of the discoveries on the British side. It was quite a surprise to find in such an almost unknown place as Wakhan a ruler who was friendly, civilised, and peaceable, and that the inhabitants of the great mountains and steppes were also friendly. He could see no reason why our contact with the Russians should be otherwise than peaceable and friendly. There need be no fear of the armies of the two nations marching against each other over snowy passes 18,000 to 19,000 feet high; but he hoped that the energy of the English and Russians would extend commerce and friendly intercourse.

Mr. DREW expressed his great admiration of the ability with which the Yarkand Mission had been carried out. When he considered the time of the year when some of the journeys were made, and the great elevations to which the travellers had ascended, he could not help being struck by the power of endurance, and the great energy which the officers had shown. From the first start from the Punjaub exceeding care and ability had been displayed by the leaders of the expedition as well as by the Government, and the journey had been carried through with perfect success, partly due to the admirable arrangements made with regard to the baggage-animals, and partly to the exertions and good management of his friend Mr. Johnson, Governor at Leh under the Maharajah of Cashmere. The Embassy received the hospitable treatment which everybody expected from the Atalik Ghazee, and when the full accounts were made public no doubt exceedingly valuable information would be obtained. He wished to ask if the watershed between the basin of the Kashgar River and the basin of the Sir Daria was at the furthest point which the travellers reached, or at the point which they had fixed as the boundary. He also wished to know to what extent, and with what accuracy, the measurements from the southern side had been united to those of the northern side.

The CHAIRMAN said the real watershed seemed to be the Chadyr-kul Lake itself, for between the two ranges—the southern being called the Turgat range, and the northern the Tash Robat range—one stream flowed westward to the Jaxartes, and the other eastward to the Kashgar River. There was no water, however, flowing from that valley directly south to Kashgar. It was only fromt he southern slope of the Turgat range that the Artush River, the upper branch of which was called the Toyand, flowed down south to the Kashgar River. The Aksu River, which rose to the north of the Turgat range, joined very much further to the east. No details had yet been received as to the triangulation. The Expedition had intended to keep up a rough series of triangles by the peaks to the westward as they went along from Yarkand to Yengi Hissar, and so on to Kashgar; but, as they would have no objects to the right by which to correct their triangles, the triangulation would not of course be rigidly accurate. However, Captain Trotter had stated that the scientific surveys of Russia and England had now crossed each other, the distance from Teshek-tash to Chadyr-kul being common to the two surveys, so that it might now be considered that a series of triangles, more or less to be depended on, had been obtained from Archangel to Cape Comorin. The term Atalik Ghazee, he might add,

was no longer applicable; for Yakoob Beg had received the title of Ameer of Kashgar direct from the Sultan of Turkey, and that was the only name by which he proposed to be known in future. The treaty which was negotiated by Mr. Forsyth, and which was very much of the same character as that previously negotiated with Russia, simply providing that the trade between India and Kashgar should be carried on at an *ad valorem* import duty of 2½ per cent. on merchandise entering the country, had been ratified by the Governor-General, and sent back to Kashgar under the charge of Mr. Shaw, who was by this time well on his way to Turkestan. Whether Mr. Shaw would or would not remain at Kashgar as representative of the British Government would probably depend on the movements of the Ameer. If he was engaged in war on the eastern frontier, Mr. Shaw would no doubt return, but he would remain in Kashgar and Yarkand as long as the Ameer was there. Nothing definite, however, was known as to that point, but the treaty provided for a permanent Agent at the discretion of the Government.

Mr. SCHUYLER said the terminations *kand* or *kent*, which were so frequently found in Central Asia, were merely different forms of one thing, and meant "town." In the Toorki language there was what is called the harmony of the vowels. If the vowel of the first syllable were broad, the termination would be *kand*; if close, it would be *kend* or *kent*. Tashkent was incorrect, though consecrated by usage; it should be Tashkand—Stone-town. He had always heard in Central Asia Yarkand, not Yarkund, which was the Indian pronunciation; from *yar*, a steep bank, and *kand*, town. The word Karakul was frequently applied to a lake. *Kul* meant *lake*; *kara*, *black*, and *Kara-kul* was applied almost indiscriminately to lakes by the Kirghiz and Usbegs. If there was no special name for a lake, it was always a *karakul*, and that name is found in all parts of Central Asia. In the same way the word Aksu occurred as the name of a river. *Ak* meant *white*; *su*, *water*; and in every part of Central Asia there were rivers known to Europeans as Aksu, though they were not known to the natives by any particular names at all. There were a number of similar names, merely appellative. He knew one Russian colonel who asked near Khojent the name of a certain small range of mountains, and the Kirghiz replied, "God knows," and the Russian immediately marked the mountains on his map as the "God Knows Mountains."

P.S.—Extracts are appended of further letters that have been received from Colonel Gordon, announcing that he had decided to return from Kila Panja by the route of the Greater Pamir (so that he would be able to determine the moot point of the altitude of Wood's Lake), and also that he had made arrangements for the examination of the passes leading from the valley of the Panja into Yassin and Chitral respectively.

Extract from a Letter of Colonel GORDON *to* Mr. AITCHISON.

"DEAR MR. AITCHISON, "Kila Panja, Wakhan, 24th April, 1874.

"The guide sepoy with the two Wakhis whom I sent up to Wood's Lake to report on the practicability of the Great Pamir road for our party at present, returned on the 22nd with favourable intelligence, and we accordingly take that route on the way back to Sirikul. Captain Trotter and Dr. Stoliczka accompany me

over the Great Pamir, while Captain Biddulph, with Resaldar Mahomed Afzul Khan, proceed by the Little Pamir (the road we came) in order to visit the Baraghil, Ish-Kaman and Durkút passes leading into Chitral, Mustuch and Yassin. The two first are open throughout the year, except for a few weeks a little later than this, when the great melting of snow takes place and the streams become flooded. The latter is closed for horse-traffic six months in the year from snow. The two former are the important ones. The Meer here has undertaken to send men with them to show the roads and passes and look after them. He owns the country right up to the summit of the passes, and has summer villages (yelaks) at them, where the people of Sarhadd and Baba Zungi resort to for pasture in the warm months. The Baraghil and Ish-Kaman passes are only half a day's journey from the Sarhadd villages. The visit to the passes will be carefully managed. There have been several falls of snow here since I last wrote, but the weather promises now to remain clear, and I think there is every prospect of our journey back by Wood's Lake being a successful one. Mir Futteh Ali Shah is doing everything for furnishing supplies right over to Tashkurgan, and his treatment of us throughout has been remarkably good.

"25th April.

"All is ready for our start to-morrow, and everything promises well for our return journey to Sirikul and Tashkurgan. I have written to Hussun Shah, the Toksabai at Sirikul, regarding our further journey towards Yarkand by the direct road to Kargalik, instead of retracing our steps in the Yengi Hissar direction by the way we came. In my last I wrote that to reach the Baraghil Pass from the Great Pamir, it is necessary to pass this way, and then up by a bad bit of road to Sarhadd. I now find that I was wrong. There is a good road-track from the Great Pamir to the Little Pamir, joining the latter 10 miles below the Lake; and, moreover, there is another cross-road (not so good, however) from the Great Pamir to Sarhadd. But none of the roads in question are fit for the purposes of an army moving with anything heavier than 'mountain artillery' (mule batteries).

"T. E. GORDON."

The following letter from Mr. T. D. Forsyth was received after the preceding were read:—

"DEAR SIR BARTLE FRERE, "Yengi Hissar, 10th April, 1874.

"I sent you a letter from Shahidulla, in October last, giving an account of our journey across the Karakorum, which I hope

reached you. Since then Captain Trotter has, I believe, sent you some account of our travels in Kashgar territory. During the severe winter months travelling about was anything but pleasant. However, we were able to make one or two excursions. Of the visit to Chadyr-kul, on the Russian frontier, you have probably received an account. In February I made an expedition into the hills north of Kashgar, in the direction of Oosh Turfan, and was absent about a fortnight, living amongst the Kirghiz in their tents. The cold was intense, and snow fell heavily, so as to interfere greatly with Captain Trotter's observations. However, we got a tolerably correct notion of the geography of the country and mountain-ranges. The mountain-chain which girdles Kashgar territory has been at times laid exceedingly plain before us, and we have had a glorious panoramic view extending from Taghanna in Sirikol to the peaks which look down upon Oosh Turfan. Circumstances have interfered with the execution of my project to explore the north-east country as far as Lob: but, though this is personally a great disappointment, I am glad to think that by yielding now to considerations of prudence, I am far from sacrificing the interests of science; for when these people become more accustomed to see Europeans travel without any political object, they will render future explorers greater facilities than even we enjoy. But we have collected a large amount of information from Toorkee books and from the people of the country, which enables us to form a tolerably accurate idea of the north-east portion of Ameer Yakoob Khan's dominions. Our desire to visit Lake Lob has been considerably lessened by the discovery that it is only a series of marshy swamps, with here and there a stream running through it, and is evidently only a large edition of swamps which we have seen in many parts of this country. The most interesting objects in that direction are the moving sands of Gobi and the buried cities. But I have discovered that it is not necessary to travel so far east for this purpose. As we were approaching Kashgar from Yarkand, last year, I was told that a distance of about 40 miles north-east of Yengi Hissar, and in the Great Desert or 'Küm,' there was an ancient city buried. Further inquiry only added to my curiosity, and, on coming again to Yengi Hissar, I determined to visit the spot. Dr. Bellew and I were the explorers on this occasion. Leaving Yengi Hissar on the 1st April, we rode for about 12 miles through well-cultivated land, over which farmsteads are dotted about, giving a very homelike appearance to the scene. As yet spring had not actually burst, but the poplar-trees were shooting forth their blossoms, and the willows looked ready to take advantage of the first

hot day. These are the two staple trees of the country, and, with the exception of fruit-trees of all kinds, including walnuts, we have seen no other timber. There is a tree resembling the elm somewhat, but Dr. Stoliczka classes it with the poplar tribe.

"As soon as we left the village we plunged into a vast desert, with sandy hills and undulations. The water at once became brackish and scarce, and at a distance of six or eight miles a well might be seen, covered over with a little hut, in which lived the usual fakeer who supplied pilgrims and preserved the well from being filled by sandstorms. At one spot we came to a tomb by the side of a well, and the fakeer or rather the servant of the shrine offered us a loaf of bread on a wooden platter and a cup of tea, his usual gift to all passers-by. Passing this place we rode on for another 10 miles, and came upon the shrine of Huzrut Begum, a lady regarding whose identity there is considerable doubt, some saying she was a daughter of the Padshah of Rum, but she died in the ninth century. The shrine is nothing more than a mound of sand with a forest of sticks, bearing the usual votive flag of pilgrims planted on the top; but immediately adjoining it is a regular hospice. You enter by a curious gate a large enclosure, in which are rooms, after the manner of ordinary serais, for man and beast. Passing through another gateway you come to an inner courtyard, on the west of which is the mosque, at one corner of which a poplar of enormous size is propped up by walls and poles. Its appearance seems to vouch for the truth of the stories we were told of the age of the institution. Very comfortable rooms, for the higher class of pilgrims who visit the shrine, are ranged round three sides, and in one room is the holy well, containing what they called drinkable water, but it was fearfully salt. But I ought not to have taken you so far into this hospice without introducing you to the Shaikh who has the charge, and is the abbot, as it were, of this and the other hospice which I shall presently describe. Shah Mukrood, Shaikh of the Oordum Padshah and Huzrut Begum shrines, is an old man of about 87 years. He has never been beyond the nearest village in his life, and I fancy I am safe in asserting that he never tasted a drop of sweet water. Yet he is hale and hearty, has a most jovial abbot-like countenance and manner, has perfect eyesight, and rode his 18 miles across from one shrine to the other as briskly as any of us. I hope his green old age is not to be attributed to the virtues of salt-water, for length of life would be dearly purchased at the price of being compelled to drink it. Shah Mukrood gave us much interesting information, for many a wave of insurrection and revolution had flowed over the land in his time; and, doubtless, as each con-

queror or usurper came to this celebrated shrine to invoke a blessing on his arms, this old Shaikh welcomed each one in as glowing terms of praise and flattery as he bestows on the name of the present Ameer. He evidently has nothing to fear from the storms of human strife. His danger comes from the sea of sand which he has watched advancing on him for the last eighty years, and seen it overwhelm and obliterate building after building.

"The story of Oordum Padshah, briefly told, is this:—When Sahík Boghra Khan, King of Kashgar, turned Mahommedan in about A.D. 970, his zeal for the new faith led him to make war on all his neighbours. His son, Aralau Khan, regarding whose birth a miraculous story borrowed from our New Testament is told, attacked and destroyed many of the forts and towns in this direction, but was finally overcome and destroyed with his whole army at Oordum Padshah. It was then a flourishing country, so the story goes. Aralau Khan's brother came too late to save his life; but he pursued his enemies as far as Kagyar, and defeated them, after which he returned to give honourable burial to his brother and the martyrs to the faith. But when he reached the spot he found what he had left a flourishing country had been suddenly turned into a wilderness of sand, and the bodies of these 'Shahuds' had been entombed by the elements. A city which he had sacked, as he had passed by to Kagyar, had likewise disappeared from view. This was about 800 years ago; and I fancy, from that day to this, no one had cared to visit its ruins. The old Shaikh had vague notions of its existence; but he said he could point out the direction. We lost no time in going off towards it, with English spade and pickaxe, to see what we could find. There was a slight elevation in one part of the desert, which seemed to indicate the site, and, on closer examination, we found what perhaps might be the ruins of two towers. The ground was slightly strewed with pieces of old pottery, and there was no doubt about habitations having existed there at some time or other. We were not very successful in our excavations; but I collected a quantity of little bits of *glass*, glazed pottery, and found two coins, one of which has a tolerably legible inscription, but in characters unknown to anyone here. This coin will, no doubt, be deciphered in course of time and may throw some light on the subject. The glass is a very curious feature. No glass is now in use in this country; but, from the shape and appearance of the bits I have found, it is evident that, 800 years ago, glass cups and vessels were in use. Most probably they had been brought from China. As all the buildings in the country are, and apparently always have been, of mud, and stone or burnt-brick edifices are exceedingly rare, it is

not surprising that the traces of any town should become obliterated.

"From Huzrat Begum we rode for 18 miles across the desert to Oordum Padshah, and found on our way quite a different appearance to that which presented itself at Huzrat Begum. After crossing a long low ridge we came upon the veritable 'kûm,' or great moving sand. As we looked upon it from the height the appearance was that of the sea in a violent gale, where billows upon billows rise mountains high, all flowing in the same direction. These sand-billows were often 100 feet high, all in the same course from north-west to south-east, and, sloping up from the north-west side to their crest, fell precipitably on the south-east side. Between these billows the original soil of the desert, with here and there some shrubs and reeds, was to be seen. Old Shah Mukrood told us how these sandy waves had gradually advanced in his day. We passed a 'Sungur,' or hospice, half-buried in the sand. He told us that it had been built a century ago, and he remembers the time when it stood out on the plain, free from all apparent danger. Thirty years ago the advancing sand-wave warned the inmates to seek a safer abode. When we passed it the building had all the appearance of having been abandoned yesterday, so fresh and sharp were the lines of the walls and arches. But desolation and destruction are not far off. Just behind it and touching its walls a hillock of sand, full 100 feet high, hung over it, from the crest of which sand seemed to have rained down into the courtyard, and in course of time the whole will be completely buried. We came to another such spot, where the Shaikh informed us a hospice was buried, which he himself had built. There is no trace of it now left. These sand-hills are distinctly separate from the soil they overwhelm: it is an interesting question where they came from. From their appearance, as well as from the testimony of the Shaikh and others, they advance in one direction from north-west, and with such regularity, that the Shaikh said any buildings erected on one side or other of the line would be perfectly safe. Moreover, the motion of this sand only takes place during two months in the year—April and May—whereas in other parts of the desert portion sand and dust are blown about at all times. The Desert of Gobi (Gobi, by-the-by, means 'great,' and is a Toorkee word) lies to the east of this; so that if these sands came thence they must be borne first west till they are stopped by the Thian Shan range, and then swept round by the eddying current to a south-east direction. But I cannot venture at present to form any theories, and merely record the facts, which perhaps you may think interesting.

"At Aralau's shrine the present Ameer has erected a very fine hospice, with mosque and rooms for travelling devotees. It is at present in an open plain; but I dare say some future explorer of Central Asia will have to search in vain amongst the sandy billows for a trace of its existence.

"I am glad to think that if no other result to geographical knowledge be attained, this Mission will have the honour of unfolding to the world the mysteries of the Pamir. The question of our return by Cabul is not yet decided; but the chances are all against it, so that I am glad I have secured this exploration, and I have given instructions to Captain Trotter to take advantage of every opportunity to gain information. Colonel Gordon, Captain Biddulph, and Dr. Stoliczka, who are also of the party, will make good use of their eyes, ears, and hands. I find that the word Pamir, or Pamûr, is applied in Toorkee to waste tracts of land, and this undoubtedly is what is understood when speaking of that part of the country which we know as Pamir.

"I will not, however, lengthen this letter by going into the description of Sirikol and the country to the south; but on the return of my exploring party shall hope to offer information which perhaps may be interesting.

"I am exceedingly sorry that I cannot add Khoten to the list of places actually visited; but my inability to go there arises from no want of desire or pressing on my part. In Central Asia one is not a perfectly free agent; and I may propose, but Ameer Yakoob Khan disposes.

"I am yours very truly,

"*The Right Honourable* "T. D. FORSYTH.

"*Sir Bartle Frere*, G.C.S.I., *&c.*"