event will not, however, put an end to the search, as a successor has been appointed in the person of Mr. Campbell.

In concluding these brief observations, I beg to congratulate you on the completion and erection of an obelisk to the memory of that great and successful discoverer, the lamented Speke. Cut off, alas! as he was before he received those honours to which, with his companion Grant, he was so justly entitled, it is gratifying to know that his numerous friends and admirers have been enabled, by the Queen's special permission, to place this memorial in one of the avenues near the broad walk of Kensington Gardens. I invite you to inspect this obelisk, which, like that also erected by our private subscriptions to commemorate the noble daring of the French Lieutenant Bellot, who was lost in the search after Franklin, does great credit to Macdonald and Field, the well-known granite-workers of Aberdeen.

This mention of the name of the renowned Arctic navigator, to whom I was so deeply attached, and to whom I wished "God speed" when he left our shores for the last time, in 1845, prompts me to announce to you that the uncovering of the fine statue, by Mr. Noble, which was unanimously decreed to his memory by a vote of Parliament, will take place on Thursday next, at half-past two o'clock.

When I inform you that Sir John Pakington, as First Lord of the Admiralty, has most willingly assented to the request to attend, made to him by myself, in the name of all geographers, and particularly in that of the many gallant Arctic naval officers and explorers who are Fellows of this Society, I feel certain that you will desire to congregate around the monument on this touching occasion, and thus cheer up Lady Franklin by a fresh proof of your high estimation of the great deeds of her illustrious husband.

The Paper of the evening was the following:-

1. On the Recent Journey of Mr. W. H. Johnson from Leh, in Ladakh, to Ilchi in Chinese Turkistan. By Major-General Sir H. C. RAWLINSON, K.C.B., M.P., &c.

SIR HENRY C. RAWLINSON said the journey of Mr. Johnson was a most remarkable one, not only for the boldness with which it was undertaken into an almost unknown country, many hundred miles distant from the British frontier, but for the scientific precision with which the places traversed were made known to us, and without which exploration in unknown countries lost half its value. Mr. Johnson was born and bred in India, and, having received his

education at a school in one of the hill-stations, was very early engaged on the Great Trigonometrical Survey, and instructed by Sir Andrew Scott Waugh and other officers of the Survey. that position he showed so much ability that he was afterwards intrusted with the direction of various subsidiary works. was whilst carrying out one of these operations, on the extreme northern limits of the territory of the Maharajah of Kashmir, that he was enabled, at the invitation of the Khan of Khotan, to perform the remarkable geographical exploit now under con-The territory up to the mountains which limit Turkistan on the south, belongs to the Maharajah of Kashmir: that is, to the Hindoo chief of Jummoo, the son of the famous Gholab Sing, to whom, at the conclusion of the Punjab war, we granted Kashmir and its dependencies. The inhabitants of Tibet are Buddhists; those of Kashmir are principally Mahommedans; whilst the people of Chinese Turkistan are Turks of an old stock, speaking the Jachatai Turkish to the present day: they are Mahommedans of a somewhat bigoted character, but intelligent and rather good specimens of the Turkish race. The city of Ilchi or Khotan had been visited by no Europeans except Marco Polo, Benedict Goez, and a few Jesuit missionaries in the last century, who were attached to an expedition sent by the Emperor of China to subdue the Eleuths of Zungaria. Chinese Turkistan is generally called "the Province of the Six Cities," from the six great marts which it contains; namely, Kashgar, Yarkand, Aksu, Yenghi-sheher, Ilchi, and Oosh-Turfan. Ilchi is important as being on the line of one of the great commercial routes between Russia and India. long time there has been an active commerce between the Russian frontier and India; that is, from the great Russian mart of Semipolatinsk, by a road which comes down through Aksu to Yarkand and so on to Kashmir. And this route crosses the trade road from Persia and Bokhara to China, viâ Kashgar and Yarkand. So that although Ilchi would lie on the straight road between Russia and India, the route by Yarkand has been usually found more convenient, the excess in actual distance being compensated for by all the routes converging on that point. This would explain how it is that the city of Ilchi has remained up to the present time so little known and so very rarely visited. Recent travellers between Russia and India had indeed passed in its vicinity, but no one had actually reached the city in question in the present century but Mr. Johnson. Dr. Thomson was the first British traveller who had crested the Karakorum. The brothers Schlagintweit had afterwards advanced from the Karakorum as far as Pushia, a hundred miles to the south of

Ilchi, but did not reach the city. It was necessary to make this remark, as it had been asserted on the Continent that they had really anticipated Mr. Johnson in the discovery (as it might be termed) of Khotan. For this feat, indeed, the Schlagintweits had received from the Russian Emperor the honorary title of Sakunlunski, that is, "he who has penetrated beyond the Kuen-lun." But, if they really merited that title, Mr. Johnson ought to receive the superior titular distinction of "Sailchiski," because he had penetrated not only beyond the Kuen-lun, but beyond Ilchi, a much more creditable and difficult In ancient times Ilchi was the high place of the Buddhist religion in Central Asia; in the fourth century, indeed, the famous Chinese pilgrims found fourteen convents in the city, each of them containing 3000 devotees. In its vicinity, too, there was said to stand one of those magnificent Buddhist temples which excited so much wonder in those days, an edifice which was traditionally believed to have taken eighty years in building. It was a rich and wonderful place for objects of art, and celebrated as a sanctuary throughout the whole of Central Asia. All that had passed away, and the neighbourhood was now almost a desert. Till within the last few years the country had been in the possession of the Chinese; but, owing to the shock which that empire had received through the war with England, the whole of these Turkistan states had risen in rebellion, and thrown off the Chinese voke. The neighbouring city of Yarkand is at present in a state of anarchy, and Mr. Johnson gave an amusing account of the offer which the principal inhabitants had made to him whilst at Ilchi to take possession of the place on behalf of the English. A large inroad of people had taken place from the Jaxartes and Khokan, driven thence by the advance of the Russians: these refugees had pressed eastwards and had occupied both Kashgar and Yarkand; recently indeed they had also endeavoured to possess themselves of Khotan. The consequence was that the whole country was in a state of anarchy and confusion, and it was impossible to say what would be its fate. This state of things had produced a favourable opportunity for opening up relations, especially commercial relations, with these Turkistan states; the supplies which they used to receive from China having been cut off, and the Khan of Khotan, who had formerly travelled through India and become an admirer of British rule, having shown himself most anxious to cultivate trade with us.

Mr. Johnson gives the following description of the Khan:-

[&]quot;The Khan Badshah, of Khotan, is about eighty years of age, of good stature and appearance, and about six feet in height; rather stout, but well built, and of very fair complexion. He is seen to great advantage when dressed in his robes of state, which consist of a choga of silk, worked over with gold-thread,

and a large white turban, tied after the Mogul style. He is reported to be very ill-tempered and very strict in his government. I must, however, admit that he showed me much kindness while in his country, and kept all his promises, with the exception of not allowing me to leave the place after a stay of four days, as had been agreed upon; and in wishing to keep me altogether, which he would have done, had I not pointed out to him the uselessness of his doing so. He wished to detain me as an hostage, until such time as the British Government sent him assistance, in the shape of troops and arms, against the Khokanees or Andajanees and the Russian forces, which latter are daily approaching towards Yarkand and Khotan. On his return from Mecca, through India, in 1863, he was made the chief Kazi of Ilchi, and within a month he succeeded in raising a rebellion against the Chinese, which resulted in their massacre, and his election by the inhabitants of the country to be their Khan Badshah or chief ruler. The province of Khotan was the first in which the Chinese were destroyed, and the example was followed in Yarkand, Aksu, and other cities."

The difficulty of communication between India and Central Asia had hitherto been not merely physical, but political; and a great obstacle still exists in the right maintained by the Maharajah of Kashmir, whose territory lies to the south, and includes the mountain-passes into Turkestan, of levying transit duties: these, indeed, are so high that they almost paralyse commerce. Mr. Johnson, however, describes a road, practicable for wheeled carriages throughout the year, which passes from Ilchi into India, to the east of the Maharajah's dominions. If this information prove true, it will be one of the most valuable results of Mr. Johnson's expedition. The road is called the Polu road, and passing to the east of the Kuen-lun chain, turns through Rudok, towards the south. Mr. Johnson's words are:—

"The usual route from Leh to Ilchi is over the Karakorum Pass and through Sanju; but there are several others which, however, have not been much used till very lately. These are, the Hindotash diwan, the Brinjga diwan, and the Polu route. The last of these is the best, as it lies over vast plains where water, grass, and wood are obtainable at every halting-place. It is reported that wheeled conveyances may be taken from the Changchenmo Valley and Rudok to Ilchi and Yarkand by it; the only difficulty which exists is, that a portion of the route passes across the Chang-thang plain, which is occupied by shepherds, from Rudok, who closed the road last year to travellers proceeding from Leh and Ilchi. . . . This route though circuitous has many advantages over the others, the chief of which are, that wood, grass, and water are obtainable at every stage; that the road passes over no rugged and high snowy ranges. like the Sarsil and Karakorum passes, that it is safe from robbers; that it leads not only to Ilchi and Yarkand, but also, viâ Lob, to the large and important city of Karakashar, situated about 300 miles north-east of Ilchi, and which, with numerous other places of note, are occupied entirely by Kilmak Tartars, and are on the high road from Kashgar and Ili to Pekin. By this route, the highly valued Ustarfani shawl-wool (superior to the Changthang) which is produced from the goat found in the Aktag or Thian Shan rauge of mountains, and a variety of other merchandize, may be brought down in large quantities for the Punjab and English markets. At the present time there is

an excellent opening for exports from India, because all trade between China and the Mahommedan States of Central Asia is at a complete standstill."

Mr. Johnson's route on his journey from Leh, whence he started in July, 1865, was by Tikse and Tanksi to the Pangong lake, thence over the Masimik Pass (18,990 feet) to the valley of Changchenmo: northward from this over the Lumkang Pass (19,533 feet) into the elevated plateau which extends hence to the Kuen-lun range; the first plain of the plateau being 17,300 feet above the sealevel, and containing large lakes, one of them 60 square miles in extent, and the second plain sloping for 30 miles in a north-easterly direction from 16,700 to 15,300 feet. At the northern end of these. he arrived on the banks of the Karakash River of Turkistan, at a point 15,500 feet above the sea-level. From this place to Ilchi occupied sixteen days' march, at the commencement of which he crossed the Khatai diwan (17,501 feet) and Yangi diwan (19,092 feet) Passes of the Kuen-lun, and descended to Brinia. The positions of all these places, as well as of Ilchi and Kiria, were fixed by observations, and a map constructed in India, from Mr. Johnson's plane-table. The altitude of Ilchi was found to be 4329 feet; the latitude 37° 8' N., and the longitude 79° 25' E.

Mr. Johnson remained in Ilchi sixteen days; returned to Kashmir by the Karakorum route, by way of Zilgia, Sanju (37° 3′ 57" n. lat., and 78° 29′ 30" E. long.), the Sanju diwan Pass (16,763 feet), Shadula (36° 6′ 15" n. lat., and 78° 29′ 30" E. long.), the Karakorum Pass (18,317 feet), Yapshan and Khardong to Leh, reaching the latter place on the 1st of December, 1865.

Sir Henry concluded by saying he was sorry to see, by the Indian papers, that this communication of Mr. Johnson with the Khan of Khotan has been rather rebuked by the Government. Of course, he had no authority to enter into any political relations, but being in the place, he could hardly avoid receiving such communications when they were addressed to him. He had not committed the Government in any way. All that we should do at present with reference to Khotan, or to any of the potentates in Chinese Tartary, would be to cultivate friendly relations for the purposes of trade. He thought all must be prepared to admire, not only Mr. Johnson's great intrepidity in venturing alone on such a journey, but also his address in getting away from Khotan, which was a much more difficult matter than getting there. We were further indebted to him for having availed himself of every opportunity which offered for improving our geographical knowledge of the country, by obtaining observations wherever he could; and where he could not obtain observations, by keeping his plane-table, at any rate, with

such accuracy as to enable our geographers, on his return to the provinces, to fill in the whole of the mountain country, and to connect this important position of Ilchi with the great Trigonometrical Survey of India. There were many other matters connected with the subject that he could speak upon, if it were desired. He especially alluded to the political questions connected with Central Asia. If there was any wish to hear what his views were on the politics of Central Asia, he should be happy to communicate them in a few words; but he would not venture to volunteer them, as the subject was not immediately connected with the objects and duties of the Geographical Society.

Mr. Johnson's Paper and Map will be published in the 'Journal,' vol. xxxvii.

The PRESIDENT said that, long as he had presided over the Society, he had never heard a paper which more completely developed the character of a true, bold, and scientific manager of an expedition than this paper of Mr. Johnson. He thought, too, that without the admirable commentary of Sir Henry Rawlinson, most of those present would have been lost in an unknown world; and he, therefore, would connect the name of Sir Henry Rawlinson with that of Mr. Johnson, in asking them to return their thanks for this communication. It was now his duty to call upon gentlemen to offer some observations, even in opposition, if that were possible. Lord Strangford had long resided in Constantinople, and had made himself acquainted with those countries, and certainly no man in the room was better qualified to be the first to rise and

speak upon such an occasion.

LORD STRANGFORD said, instead of opposing Sir Henry Rawlinson, as the President had invited gentlemen to do, he was rather in the position of Oliver Twist—disposed to ask for more; and, as Sir Henry Rawlinson had promised more on the subject of politics, it would ill become him to say anything upon that point. With regard to the paper, he did not hesitate to say that it was one of the most important papers that had ever been read before the Society. Our previous knowledge of the country had been in outline; but this was a filling-in of the picture, and the commentary of Sir Henry Rawlinson was the frame in which the picture was set. The bare facts communicated in the paper were most striking. The political fact was neither more nor less than the complete break-up of the Chinese empire, as regards its external dominions. Concerning that country, we were slaves to the map-maker's conventionality of a "Mongolia." Now, there was no Mongolia; the Mongols, from whom the comprehensive term was derived, were merely a nomadic population, wandering over a single portion of the so-called country. The settled and cultivated part of it was the Turkish part, which lies along the rivers that converge from the interior faces of the inclosing ranges. All that country which forms Chinese Turkistan is said to have cast off the Chinese yoke and to be entirely free, and, more than that, to be eagerly anxious to enter into commercial relations with the rest of the world. More particularly is this the case with the chief of Khotan, who has travelled through India, and who only wants to put an end to the monopoly of the Maharajah of Kashmir in order to to enter into commercial relations with India by this important carriage-road that had been described. Those two facts—the political fact and the commercial fact—were in themselves sufficient to constitute this paper one of the highest importance. Sir Roderick Murchison had alluded to his having

resided at Constantinople, and having a knowledge of the East. The only observation he could make upon that was, that a resident at Constantinople, who has any knowledge of the Turkish language, has only to walk down the main street of Constantinople, and converse with the wild Tartars whom he will meet there gathered from all parts of Central Asia, to realise to himself the extent to which these countries are thoroughly and essentially Turkish. He will comprehend in a living way that from Constantinople to Yarkand in one direction, and from Constantinople to Tobolsk in another, the Turkish language is spoken in every town and village. There is no common political or literary union, but the fact shows the enormous spread of the Turkish race by conquest, and it is a fact which cannot fail to be realised by any one at Constantinople. With regard to the geographical part of the question, the problem of Central Asia was, Where did Tibet end to the north? and what became of the Kuen-lun range of mountains ultimately? We had no European knowledge beyond what we had heard from the Jesuit missionaries. In the work of Abbé Huc there was not a geographical fact from beginning to end; Mr. Bryan Hodgson, who had read a paper before the Bengal Society, has given the names of the stations and the number of the passes between Nepaul and Pekin, from the itineraries of the tribute-bearing embassies; but beyond that there was absolutely nothing at all. regard to the Revolution, he wanted to call attention to this circumstance, that there seemed to be a regular Mohammedan movement in progress everywhere in Central Asia. As far as he could make out, the Tungais, who are most probably of the Chinese race but of the Mohammedan religion, seemed to have all the fervour and "go" of the early Mohammedans; and it really looked as if the future of Chinese Proper were in their hands. Sir Henry Rawlinson mentioned that Mr. Johnson had met with a rebuke. He could not understand this. Mr. Johnson had achieved an extraordinary geographical feat, one of the greatest value that it was possible to conceive; and he could not understand how it was that Mr. Johnson should meet with rebuke. He did not understand why, instead of discouraging them, the Indian Government did not encourage its subordinates to visit those countries where there was now no difficulty in Englishmen going; and he would appeal to the Geographical Society whether, if we persistently neglected the present opportunity of going into a country thus thrown open to us, it would not be most unpardonable remissness on our part.

Mr. J. Crawfurd having also eulogised Mr. Johnson's paper, said he did not think so much of the Turks as Lord Strangford did. Like all other Asiatics, they are capable of advancing to a certain point, and there they stood still. As warriors, and sometimes as governors, they had been very successful. They conquered the Greek empire, and they conquered India. But what else had they done in India or in Europe? In India they had not the skill to propagate their own language; they gave way to a people who invaded India in a much smaller degree—the Persians, and even adopted the Persian language, dropping their own. With respect to the great trade that was expected to spring up, the country, though a large one in extent, is a very poor one in point of fertility. He wanted to know what the Turks had to give us? He should like to submit a sample of their cotton to a Liverpool broker. But what had they got besides cotton? They seemed to have a great deal of gold, which he would advise them to get rid of as fast as possible. He hoped Sir Henry Rawlinson would name a few of their productions.

Mr. TRELAWNEY SAUNDERS said, in addition to the obstacle presented by Kashmir to the development of any communication with the countries to the northward of India, we have had difficulties distinctly interposed by the Chinese Government upon our own frontier, especially in the direction of the great road opened up to Shipki, on our frontier. He should like to know

whether any steps had been taken to remove those obstacles? And with regard to the insurrection which has broken out in the cities that form the western portion of the Chinese province of Ili, divided into the northern and southern circuits of the Celestial Mountains, he should like to know if that insurrection has extended to the other six cities which lie to the eastward, four of which formed a portion of one of the eighteen provinces of China? As to the productions of the countries described by Mr. Johnson, they constitute the largest pastoral region on the face of the earth; and he believed, if we could only secure free communication, there would be no difficulty in bringing down into India such an outpouring of wool as would speedily affect our Australian markets. He must ask that the next time an expedition was got up for the purpose of penetrating across the Himalayas that it would not meet with official rebuke. We wanted to develop friendly intercourse with these warlike and pastoral peoples of Central Asia, and to encourage trade with them. He hoped the President and the Society would encourage, and not discourage, expeditions of this kind.

The PRESIDENT said Mr. Saunders might be quite sure that the President of the Geographical Society would never discourage, but on every occasion

encourage such explorations.

Sir HENRY RAWLINSON observed that the list of products given by Mr. Johnson was not very remarkable in a commercial point of view, because very few of them would be fitted for export. He says "the whole country, especially the Kuen-Lun range of mountains, is wealthy in minerals, viz., gold, silver, iron, lead, copper, antimony, salt, saltpetre, soda, and coal; of this last I have samples. It is found near the village of Duá in Khotan, and to the west of Yarkand, on the road to Kashgar. Gold and precious stones are chiefly found in the beds of the streams which issue from the Kuen-Lun range, and in very large quantities about Karangotak, Kiria, and Chira. It is said that 3000 men are daily employed in the gold-fields. The ordinary value of gold in Khotan is 9 to 10 rupees per tolá, while in Kashmir the same quantity sells for 17 to 18 rupees; this circumstance alone will show how abundant gold is, and how large a quantity there must be at the present time in the country." These are products of the country immediately around Khotan. In other parts of Turkistan, especially in the valleys of the Jaxartes and Zer-Afshan, cotton is the main article of produce, and it is supplied largely to Russia. In fact, the great object of the Russians recently has been to convert Khokan and Bokhara into a cotton-producing country exclusively, with the view of supplying the Russian manufactories with the raw material, to be sent back worked up into textile fabrics suited to the wants of the country. But besides cotton, raw silk is produced in large quantities. The country also supplies a considerable number of horses, carpets, wool to any extent; and in the valley of the Jaxartes many spots are declared to be favourable to the cultivation of madder, indigo, rice, sugar, and opium. The metallic resources of the country are enormous; and from Khotan is procured entirely the supply of jade, which is so much valued in China. All these articles certainly entitled the country to some consideration as a producing country. With reference to what Mr. Saunders had said about the Chinese frontier, he wished to explain that the route from the Niti pass by Shipki crossed only a small corner, from twenty to thirty miles, of prohibited territory. There had been negotiations about it. and he understood that the transit trade in future, from the end of the Hindostan road on to Ghartûp, would pass free over that portion of Chinese territory. At any rate, in the present disorganised state of Chinese Tartary, the Pekin authorities were not in a position to keep up those restrictive regulations on the Indian frontier which had hitherto paralysed commerce; and he expected very shortly that there would be complete free-trade between India and Central Asia. The article which would pay now was tea. The Mohammedans of that country could not live without tea; and owing to the present disturbed condition of affairs, the tea trade from China was entirely cut off. With regard to the state of Zungaria, our last accounts referred to the city of Kuldja. All the Mohammedan cities were, one after the other, throwing off their allegiance. The fighting at Kuldja extended over two years. Kuldja was the Chinese capital of the country, and was situated just within the Chinese frontier to the eastward of the Balkash Lake. The war ended in the withdrawal of the Chinese, not only from Kuldja and the dependent cities, but from the whole province. And with regard to the lower cities of Khamil and Karashar, he believed the Chinese power to be so broken that it would have to withdraw completely to the Great Wall. It was very important, politically considered, that the country should be thus thrown open. He did not believe there ever could be the slightest danger of collision with Russia in this direction across Turkestan. With so many other lines open, no army would ever think of attempting to force a way, not only across those great barren plains of Turkistan, but across the enormous mountain-belt extending from Karakorum to the Punjab, where you have a succession of passes varying from 15,000 to 19,000 feet in height. It is the most impassable of any part of the northwestern frontier of India; consequently, the most unlikely to be the scene of any collision between the two empires. He believed both nations might trade with perfect safety with the cities of Chinese Turkistan. The Russians have long had it so much at heart to open a trade with that country, that the principal commercial concession they demanded in concluding the treaty of Pekin was the right to establish consuls and factories at three different points; at Kuldja, at Chuquchak, and at Kashgar. He confessed he should very much like to see English and Russian consuls established in those cities, for the mere purpose of trade, and without any political power. It would be for the benefit of the country itself, and for the benefit of the trade of the two European empires; also, it might tend to promote good feeling and honourable commercial emulation between them.

The President, in closing the meeting, said he entirely approved the concluding observations of Sir Henry Rawlinson, inasmuch as there could be no risk of war between Russia and ourselves in consequence of our exploring

and trading with these countries.

Second Meeting, 26th November, 1866.

SIR RODERICK I. MURCHISON, BART., K.C.B., PRESIDENT, IN THE CHAIR.

ELECTIONS.—James Burgess, Esq., M.R.A.S., &c.; Roderick W. Cameron, Esq.; Commr. Manuel Jennaro Carrillo (Peruvian Navy); William Chandless, Esq., M.A.; John Collinson, Esq., C.E.; J. Howarth Clark, Esq.; Lord Edward Clinton, M.P. (Capt. Rifle Brigade); Fitzwilliam Dick, Esq., M.P.; W. C. B. Eatwell, Esq., M.D. (Surg. H.M. Indian Army); Edward St. John Faviman, Esq., F.G.S.; William Felkin, Jun. Esq., F.Z.S.; Commr. Thomas B. Hanham, R.N., &c.; Patrick Henderson, Esq.; John Minett Hockley, Esq., R.N.; Henry Kopsch, Esq.; Henry Maudslay, Esq.; A. J. Mundella, Esq.; Frederick Peel, Esq.; Edwin Ransom, Esq.; Richard Proctor Sims, Esq., C.E., &c.; Rev. Dr. James Stewart; Edward