

R.G.S. at meetings of the Society, and by the President A.C. at meetings of the Club. These will be communicated to the Press in advance, so that all newspapers may have an equal opportunity of publishing authentic information on the morning following any such announcement. No exclusive arrangements will be made with any newspaper or magazine, and no information will be given in any other way either by the Joint Committee or by individual members of the committee or of the expedition. The Committee will, in short, use their utmost endeavour to secure that the chronicle of the expedition shall be well considered and accurate; and no credence should be given to any statements other than those published by their authority.

A first estimate of the cost of the expedition shows that it will be necessary to raise a sum of not less than £10,000 to provide for the work of two years, and the President appeals to Fellows for subscriptions.

A VISIT TO BOKHARA IN 1919

Major F. M. Bailey

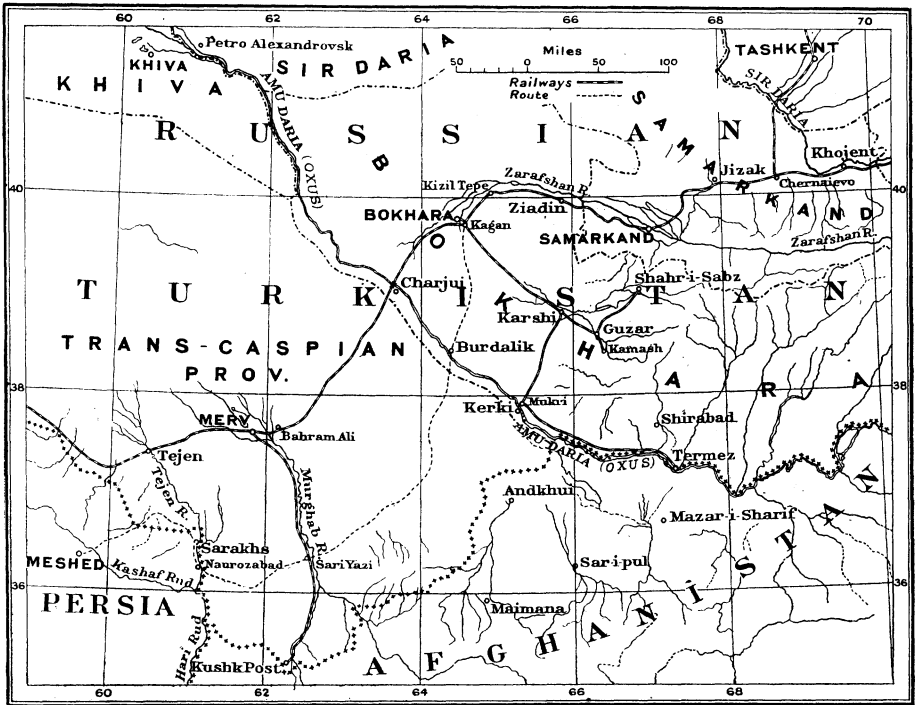
Read at the Meeting of the Society, 22 November 1920.

IN August 1918 a mission was sent by the Government of India to the Soviet Government of Turkistan, who were then suspected of coming under German influence. An account of this mission has been given elsewhere. We are now concerned with a visit to Bokhara which was the sequel to this mission.

The position of Bokhara was similar to that of an Indian Native State. The Russians had complete control of the railway lines. The main Transcaspien line passes through Bokhara territory from Charjui to Ziadin, and at each station was a small Russian colony. There was also a railway line from Kagan to Termez on the Oxus *viâ* Karshi, while there were some Russian garrisons at Termez and at other places along the Northern Afghan frontier. There were also a number of Russian business people in Bokhara city. The population of Bokhara consists of Mohammedans, with a few Jews in the cities. The population is entirely monarchist. When the Bolsheviks first came into power they imagined that they could revolutionize the whole of Turkistan. There was a small band of ruffianly Bokharan subjects, most of whom had been forced to leave the country, who styled themselves the "Young Bokhara Party." These people got into touch with the Bolsheviks and led them to believe that they had a large following in Bokhara. Flushed with their first success, the Bolsheviks imagined that their ideal of World Revolution was at hand and decided to lend a helping hand to their neighbours.

In February 1918 Kolisoff, a former oiler on the railway, and at that time Chief Kommissar, who has I believe since been shot for embezzling

money, took a force down the railway from Tashkent to Kagan, the railway station for Bokhara distant about 10 miles from the city. From here he sent an ultimatum to the Amir requiring him to accede to the demands of the young Bokhara party within twenty-four hours. The Amir, whose foreign relations had always been in the hands of the Russians, had no idea how to deal with such a situation, but sent some equivocal reply; Kolisoff remained with his force at Kagan, but sent some delegates to discuss the matter with the Amir. The next day a disturbance broke out near Kagan between the Red troops and some Bokharan subjects in which lives were lost. The news of this rapidly reached



Sketch-map of Russian Turkistan

Bokhara city, where the people rose and massacred all Russians in the city, including of course Kolisoff's delegates. The trouble then spread throughout the State, and all Russians along the railway lines and some of the small garrisons on the Afghan border were killed. The railway lines were taken up, and the lines to Karshi and Termez have never been repaired. The Bokhara army is of the most inferior quality, and it has always been a puzzle why Kolisoff did not at once move on Bokhara instead of retiring to Kizil Tepe station some 17 miles off. Here a treaty was signed by Kolisoff and the Amir's representatives on 25 March 1918, by which the Bolsheviki recognized the complete independence of Bokhara.



BOKHARA CITY, WITH THE TOWER FROM WHICH CRIMINALS WERE THROWN



THE "ARK" OR CITADEL, BOKHARA



CITY WALL OF BOKHARA



WATER TANK IN BOKHARA CITY

This success on the part of Bokhara made them over-confident that the Bolsheviks were afraid to attack them ; and their whole dealings with the Soviet Government of Turkistan reflected this success, whereas the real reason that the Bolsheviks did not attack Bokhara was the fear of arousing a *jihad* among the Mohammedan population of Central Asia.

From this time the Russians maintained a residential at Kagan in the same way as before the revolution, the chief difference being in the personality of the resident. Instead of the old-fashioned Russian official who never was out of uniform, the agent (a man named Pechatnikoff) had in pre-revolutionary days made a living by hawking lamps in Bokhara city. The Bokharan Government kept a representative in Tashkent, but the Bolsheviks were very desirous that he should have nothing to do with foreigners.

The situation between the Bolsheviks and Bokhara was naturally always very uncertain. The Bokharan monarchy feared that another attempt would be made to install a revolutionary government ; while the Bolsheviks, who were fighting against their enemies in Transcaspia, always had a feeling of insecurity with the possibly hostile State in their rear and on their lines of communication. What exasperated them most was the certainty that a very small force acting with determination could polish off Bokhara, and the only thing that deterred them was the fear of rousing hostility among all the Mussulman inhabitants of Central Asia, including Afghanistan, who all look with some veneration on the fanatically Moslem state of Bokhara.

The whole of the north of Bokhara is desert and steppe, with the exception of the oasis watered by the Zarafshan river, which flows through Samarkand and finally loses itself in the sands west of Bokhara city. The position of Bokhara is very much dependent on the neighbours upstream, who by damming up the river and flooding the area between Samarkand and Bokhara, could rapidly starve the city and oasis and force the government to accept any terms demanded.

The hilly south-eastern part of Bokhara is thickly populated and could make a long stand, but it is probable that with the loss of the city the prestige of the government would suffer such a blow that the State would break up. We shall soon see whether this is so, as the latest news is to the effect that the city has been captured by the Reds.

After having lived a year in Tashkent, in the autumn of 1919 I decided to leave, and succeeded in getting employment in a branch of the Bolshevik Secret Service. The Bolsheviks were very anxious to get accurate information about affairs in Bokhara, and had great difficulty in doing this, as their spies were frequently caught and drastically dealt with. One man brought them information that a whole regiment of Indian troops was hidden in a village surrounded by a cordon of Bokharan soldiers, whose duty it was to prevent the news of their presence leaking out. My duty was to obtain news of this and other matters.

We left in a goods-wagon one morning and reached Samarkand in something under forty-eight hours. Near Samarkand the train passes through a gorge where Tamerlane in the 14th century caused an inscription to be carved. The Russians on their conquest of the country also carved an inscription surmounted by an Imperial Eagle. The Bolsheviks have destroyed the Russian memorial as being too reminiscent of their Imperial days, but have left Tamerlane's inscription. In Samarkand we were told that our train would go on at 9 a.m.; but knowing a little about Soviet Russia I calculated that we should be quite safe to leave the train till 10; this gave us time to pay a hurried visit to the ruins of Tamerlane's capital, and we rushed round with a camera and took a few photos, but the early hour with the low sun and the necessity for secrecy forced us to take views frequently from unfavourable points of view. One of the large minarets in the Registan is in danger of falling and is held up by wire. I found that we had hurried quite unnecessarily, and our train did not go on till the evening.

Our travelling companions on this part of our journey were a party of Afghans, three small traders and three soldiers who were taking messages to the Governor of Mazar-i-Sherif and to the Afghan Consul in Bokhara. These men called themselves an Afghan Mission, and bluffed the railway authorities into giving them special accommodation on the train. They told us that the Afghan troops had occupied Peshawar, Attock, Lahore, Delhi, and were approaching Bombay.

We reached Kagan, the station for Bokhara, in the early morning. Bokhara city is about 10 miles north of the main railway line and connected to it by a light railway, which however was not running. I was here in the character of a Bolshevik secret agent working against Bokhara, and it was necessary for me to obtain permission from the Bokhara authorities to enter the town—a very difficult matter had I been a genuine Bolshevik. I had provided myself with a private letter saying I was a poor Austrian prisoner who wished to go to Bokhara city to make some purchases, and the true Bolsheviks considered me very clever to be able to get this permit in their interests.

We went to an hotel at Kagan, but it was full. While there a typical incident of life under the Bolsheviks occurred. A party of Red Guards from the secret police arrived, and removed a man from one of the rooms; we found out that he was himself a spy but had told some friends so, and this had got round to his employers, who would doubtless deal severely with him.

Stopping in the hotel was Mahendra Partab, a noted Indian revolutionary who had been living in Berlin most of the war. I had a long and interesting talk with him in German. He believed I was an officer prisoner of the Austrian army who had been captured early in the war. He made a curious statement regarding our rule in India. I asked him how it was that when we had the English nearly beaten in the war we

received no help from the 300 million oppressed people of India, on whom we had counted for considerable support; not only this, but we gathered that these Indian troops were fighting valiantly for the English on all fronts. He replied that that was a matter which he had often been asked to explain. The fact was that a victory of the central powers would have resulted in a Mohammedan Empire of some sort being established to replace the British, as Germans and Austrians were not people who had much success in such matters, and this would have been more oppressive for 220 million of the population than the present rule. I then asked him if no Mohammedan troops had fought for the English. He said that there were a few from the ignorant and uncultured frontier tribes.

A curious thing happened in Kagan. We received a telegram in cipher from Tashkent asking us to make careful inquiries about "Colonel Bailey of the Anglo-Indian Service." To this we sent a reply calculated to put the Bolshevik authorities off the scent.

After one night in Kagan I left for Bokhara, driving the distance along an execrable road. I had great difficulty in entering the city gates, and was kept some hours waiting in a tea-house at the gate.

I lived in Bokhara for about two months. Many Russians and some Austrians who had fled from the Bolsheviks were also living there. There were also some of the chief Mullahs from Tashkent and other places who had been obliged to fly from the atheistical Soviet Government.

The bazaars are most interesting. There is a special Jewish quarter and a Hindu Serai, where about twenty-five Hindus were living. They are all small traders and moneylenders, and are found in most large cities in Western Chinese Turkistan, and at Osh, Andijhan, and several cities of Russian Turkistan besides Samarkand and Bokhara, but they do not go as far north as Tashkent. They all come from Shikarpur in Scind; they have suffered great loss under the Bolsheviks, as they are typical "speculators." Once when I was waiting in a chemist's shop two Mohammedans came in who talked in Punjabi; but I could not, of course, speak to them or find out who they were. The Hindus and Jews are not allowed to ride a horse or in a carriage in the town, and are obliged to wear a string round their waist outside their cloaks, and may not carry arms. I talked in Russian with some of the Hindus, but could not say who I was or let them know that I could speak their language.

Russians, when in Bokhara, wear the brilliantly coloured *khalat* or robe over their own clothes, and on their heads the small *sart* skull-cap, or in winter a fur cap of the Russian pattern. The Mohammedans wear large white turbans. Nearly every one in Bokhara speaks Persian, and even when talking Turki, I noticed that the traders often used Persian numbers.

Since the disturbances in Russia the traders have been obliged to go to India for their wares, and large caravans arrived frequently from Peshawar through Afghanistan. One enterprising man brought a quantity

of ladies' boots, clothes, and hats, which by now doubtless adorn Komisars' wives. One occasionally saw some old Bokharan brass money, but the chief currency was Russian and Bokharan notes. Only the old Imperial paper money and that issued by the Kerensky government was accepted in the city, but the Turkistan Bolshevik money could be exchanged at about 10 roubles to 1. When purchased in paper roubles everything was very expensive. For instance, a pound of Indian tea cost 180 roubles, or about £18 at the pre-war rate of exchange; cheap cigarettes ("Scissors" was a favourite brand) cost 10 to 12 roubles for a packet of ten. I was obliged to pay 9 roubles each for 5-grain quinine tabloids. I was offered 200 roubles for a 10-rouble note, and 1600 for a 100-franc gold piece, and no doubt, had I really wished to sell and had bargained, I could have obtained more.

At one time during my stay there was very serious trouble between the Turkistan Soviet government and Bokhara. The Turkistan government used to purchase a good many things from Bokhara, mostly goods of European manufacture imported through Afghanistan. As Bokhara refused to accept their local currency, payments were made either by exchange of cotton oil or by payment in Kerensky or Imperial money. Kerensky's government had issued some 250 and 1000 rouble notes properly numbered and controlled, but also some 20 and 40 rouble notes entirely uncontrolled. When Bokhara asked for Kerensky money the Bolsheviks sent this uncontrolled stuff down, and the bazaar was full of people carrying about large rolls consisting of sheets of twenty or thirty of these notes. Twenty-five million roubles of this paper was sent to Bokhara in a few days, when naturally the traders became suspicious of it, though they had been quite prepared to take small quantities as change. The Bolsheviks then accused the Bokharans of breaking their promise to accept Kerensky money.

The Amir of Bokhara lives in a palace, Sittar Mahassar, about 2 or 3 miles outside the town, and nowadays never enters the city. He is always attended by the Kaznachei, or finance minister, who is the minister who has the greatest personal influence with him, while the Khush Begi, who lives in the Ark or fortress in the city, has chief executive power in the State. The Government, although absolutely autocratic, is very much in the hands of the Mohammedan clergy, and as a matter of fact the Amir is very far from having unlimited power. An important officer is the Kazi Kalan, or chief justice, who was frequently seen riding in the streets with his spare horses all gorgeously clothed following behind him, and preceded by a man on horseback carrying an axe as a sign of office. Official couriers also attracted attention by carrying their passport bound in their turban for all to see. Troops could be seen marching through the streets; they gave the impression of extreme inefficiency coupled with complete confidence. The officers wear Russian badges of rank. I once saw a captain playing a fife in the band. The generals are

invariably respectable-looking old men with long white beards, and are preceded by about a dozen mounted men carrying white wands. All ranks are plastered with numerous medals and decorations. The troops always sing as they go; a favourite song is begun, "Amir Baba, the Amir is our father." Another which they used to sing in Russian in Kagan, while the Bolsheviks from the town looked on and laughed, was "Our General is a brave man and does not fear the Bolsheviks."

Bokhara city has always been famed for its fanaticism, and at the gates of the colleges and mosques may always be seen students arguing (in loud tones for the benefit of the passers-by) about knotty points of their religion.

Every one in the city must be in their houses at dusk, and the streets are paraded at night by patrols of police, who carry a drum which they beat as they go along to scare away thieves and robbers. The city is surrounded by a ruined but still strong wall about $7\frac{1}{2}$ miles in circuit. One day when going for a walk on the wall I was arrested by the police on suspicion of being a Bolshevik spy, inspecting the city's defences, but I was released when I met a man in the street who knew me, though of course the police had no idea who I really was. Photographing in the city was forbidden, but from the roof of my house I managed to take a few pictures, and also some on the city wall. The houses of the city are very densely packed together, and there are no open spaces or gardens, except for a patch of reeds near the city wall, in which one day I put up a pheasant. A curious thing about Bokhara is the absence of sparrows. It is the only large city that I know where this bird is never seen, though it is of course common in the surrounding country.

The weather was quite hot in the daytime in October, but at the beginning of November frost began, and we had a fall of snow. Life in Bokhara was pretty dull after the novelty had worn off. We used frequently to go to eat *Shashliks*; these are similar to the Indian *Kebab*—small pieces of mutton on iron skewers, which are cooked while you wait, over a trough containing charcoal which is kept glowing by a hand fan. They are eaten with bread, onion, and a little pepper and salt. Another diversion was the bath. You enter a large upper room, very much open to the sky, where you undress and wrap yourself up in towels and descend to the hot underground room like a Turkish bath. Here, after waiting a few minutes, you are taken to another room less hot, and a man massages and pummels you and cracks all your joints, and finally stands on your back, which he slowly massages with his feet, using his full weight. It is hard not to laugh at what one must look like, but the solemn white-bearded Sarts treated it like a religious ceremony.

One day I visited the prison and gave some money to the prisoners. I had heard a great deal about this prison, but the men I saw seemed as happy as they should be, and were sitting on nice dry clean mats. The damp dungeon where Conolly and Stoddart were kept in 1840 to be

devoured by sheep ticks is, I believe, still in use, but I was not allowed to see it.

During my stay in Bokhara several large parties of Austrian prisoners arrived, who had travelled on foot from Kokhand, taking three months on the journey. The Soviet government would not allow the prisoners to return to their homes, and some of them had not seen their families for more than six years, having been captured by the Russians in their big successes in Galicia in 1914. They were in an absolutely destitute condition, having no money and insufficient clothing, while many were suffering from wounds received in the war and frostbite contracted in Turkistan. Although I could not disclose my identity to them, I visited them and helped those who were sick. It was impossible to assist all, and the Bokharan government refused to do anything for them. They are doubtless still there. One was a Serbian sixty-seven years old, who told me that the Austrians mobilized *all* their Serbian subjects, as they were afraid of disturbances in the districts inhabited by Serbs.

Preparations for departure included the purchase of horses for the long ride across the desert. The purchase of a horse in Central Asia is done with great ceremony. The would-be purchaser rides the horse up and down the bazaar to test the paces; he then dismounts, and the dealer and purchaser sit opposite each other on the ground, while the friends of both parties gather round. They then hold hands under their long sleeves and bargain by making signs with their hands, so that the spectators cannot tell what prices are being named. This system is also followed in Tibet. When a price is agreed on the parties rise, and all their friends congratulate them.

For food we carried Russian *sukhari*. This is ordinary leavened bread dried in the oven. It keeps indefinitely, and though very hard can be eaten when soaked in tea. We also carried salt, tea, sugar, and raisins, and a little fresh meat for the first day or two. Later a Persian showed us how to fry lumps of meat in fat with a good deal of salt, which kept good a surprisingly long time. Each man carried a leather water-bottle hung on the pommel of his saddle, but we carried no water for the animals.

Having purchased our horses and collected our food, we left one night after dark. We had to cross two danger zones. First, the main Transcaspian railway near Kagan, and secondly, the Khushk-Merv line and the Murghab river, which was in Russian territory. There was also the possibility of meeting Red Guards on the Persian frontier.

Although the area of Bokhara State is large, some 85,000 square miles, a good deal of this is desert. The central part near Karshi is the more thickly populated, while the oasis surrounding Bokhara City itself and the banks of the Zarafshan river also contain large numbers of hamlets; but the western districts, except for the banks of the Oxus, are uninhabited desert and steppe.

Our party consisted of about twenty all told, including guides, but we only had seven rifles. We all wore the large Turkoman sheepskin hat, and threw over our clothes a Turkoman cloak, our object being that if seen in the distance we would be taken for a wandering party of Turkomans, though of course a closer inspection would have revealed that we were not what we seemed. Our first night was spent at the edge of the oasis. The next day we started on our monotonous passage of the waterless steppe. We had to cover some 40 miles to the first well, and evening came on with heavy clouds and complete darkness when we were still 4 miles off the well. It was impossible to travel over the desert in the dark, and we soon lost the track, and sat down to await daylight, without water. Very soon, however, rain began, and we all spent a thoroughly miserable night in the open. At daybreak we found that we were actually on the road all the time, and we followed it to the well and watered our thirsty horses. The second day we only covered 26 miles, as we had spent some considerable time drying and feeding at the well. The third day brought us to the town of Burdalik on the Oxus.

Here we remained a couple of days. The people were very good to us and cooked sheep in our honour. The oven was peculiar: a high mud cone in which they burnt brushwood to heat it. This was then taken out and the whole sheep hung in it on green willow withes, and the top covered over. In a short time it was cooked and given to us.

There is a Beg at Burdalik who is Governor of the district. Once a day, in the morning, all the heads of the different branches of the administration have to report to him, being ushered in by officials with white wands. We were told that a similar ceremony is performed daily in the palace at Bokhara when all officers have to report to the Amir. We looked into the lock-up where a few prisoners were sitting on the ground with one leg in a stock which passes down the middle of the room, while their necks are all chained together. Two of the prisoners were to be executed the next day.

The population is Turkoman, who for the most part live a nomadic life in their round felt tents. They are so accustomed to this form of abode that when they adopt a more sedentary life they build reed huts of the same shape and size as their tents. They keep large flocks of the Karakul sheep, from which is obtained the skin we call astrakhan. The ordinary sheep of the country is fat-tailed, but the Karakul has a long thin tail. The price of these lambskins in Bokhara was 100 roubles a piece, though very much larger sums are paid for specially good skins.

On leaving Burdalik we were told that at that time of the year—December—we should find people camped at all the wells, who would sell us grain for our animals and help us to draw water. This would mean that we could travel without camels, which are very slow. The ropes to reach the deepest wells weigh so much that a pony cannot carry them. We were for the first few days disappointed in this, as we found all wells

deserted, and at one time the position appeared serious, as our guides confessed they were lost and we had brought insufficient food for ourselves and our animals.

At one place we had passed a deserted encampment where we found rude shelters made of saxaul branches, with, to our delight, grass wedged in to keep out the wind. This gave our animals an unexpected treat. I had tried to keep a rough reckoning of our route, and calculated that we were about 60 miles from the Murghab river, the only certain place of obtaining water, and I feared that some of our animals would fail to reach this without water. Having lost the track we travelled across the desert, when we came on a path crossing our direction at right angles. One of our Turkoman companions said he could now take us to a well, though he did not know the way to the Murghab river from there. We followed him, and after 26 miles we reached a well where we were fortunate enough to find inhabitants. The water was pulled up in a leather sack by two camels, and I paced the length of the rope and made it 256 yards, and the well must have been over 750 feet deep. The two camels took about $9\frac{1}{2}$ minutes to lift a skin full of water. Had we reached this well to find it unoccupied as had been the case with all the others, we could not have obtained a drop of water as we had no ropes either long or strong enough. Most of the wells we had used were between 60 and 100 feet deep, and these comparatively shallow ones always contained bitter water. This frequently becomes so bad as to be quite undrinkable when the well is abandoned. The deep ones invariably contained beautiful clear fresh water. A flock of three thousand Karakul sheep had just arrived to water, and were driven out the same afternoon; the man took three camels, a donkey and a dog, the camels carrying water to last the whole party about ten days, with the exception of the sheep, who were to get nothing.

On January 1 we had a blizzard, which deposited about 5 inches of snow, but luckily we had a hut to stop in. Usually we simply lay down on the ground at dusk and got up at daybreak, when it was bitterly cold with a hard frost. This snow was very fortunate for us, as it made us independent of wells and we were always sure of fresh water instead of the usual ration of brine, though it was unpleasant to sleep in the snow at night. About this time of year snowstorms sweep over the desert, but the hot sun soon melts the snow, and as if by magic small shoots of grass appear. It is for this grazing that the Turkomans bring out their enormous flocks of sheep. Later in the year when this grass is dried up the desert is absolutely deserted. The flocks are taken away from the well for about twenty days if there has been rain or snow, which will give the sheep an occasional drink. If the desert is quite dry they are obliged to return for water after eight or ten days.

The desert through which we travelled was covered with small bushes called *saxaul*, which thrives with very little water. It burns very well, and



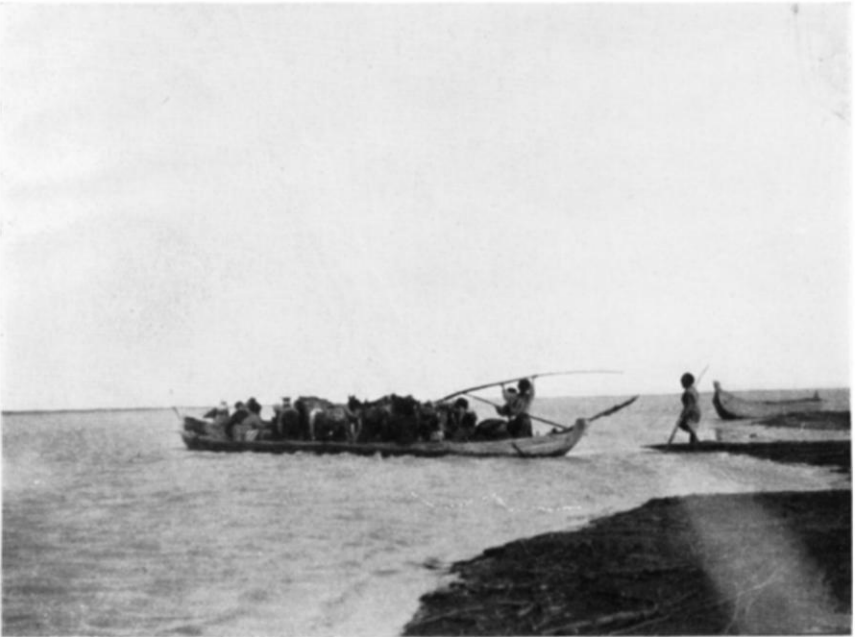
PARTY OF TURKOMANS IN THE DESERT NEAR THE RIVER MURGHAB



THE HORSE MARKET, BOKHARA



WELL IN THE DESERT EAST OF THE OXUS



CROSSING THE OXUS AT BURDALIK

was the chief fuel supply for the railways of Turkistan when they were cut off from the Baku oil. The appearance of the desert was that of a stormy sea frozen solid, the waves or hillocks being 10 to 20 feet high in most places, and the distant horizon appearing absolutely flat.

Animal-life there was none at this time of year, but further to the west in the neighbourhood of the Murghab river there were numbers of gazelle and a few larks and many rats or marmots, while the shells of tortoises everywhere testified to their presence, though at the time of our journey they were hibernating. We also saw a few sand-grouse, and on the Oxus river were geese and ducks and pheasants in the bushes on the banks. At Burdalik we met a hawk who had just killed two pheasants.

The desert is infested with bands of Turkoman robbers, but our party was large enough to be safe from attack, though had it been known that we were mostly unarmed we should probably not have been unmolested.

All travellers agree that the Turkoman is the most persistent robber. He rides about his desert from well to well on his wonderful pony and attacks and plunders all he meets. The ponies are really marvellous. They have several well-recognized breeds, but the quality which they require and which all possess is that of being able to carry a light weight for very long distances without food or water at about 5 or 6 miles an hour; in other words, they would be ideal for mounted infantry work, provided that the soldier does not insist on too many comforts and can travel light. In Bokhara they told me of a Turkoman who had just killed a Bokharan official at Karakul and had fled to the desert. I said it would be easy enough to catch him, as they had only to watch all the known wells and they must get him soon. They said that this did not follow, as he had trained his pony to live on mutton fat, and if this is done a pony can go two months or longer without water. Although one cannot believe all one hears, we had experience of their wonderful endurance. After watering, Turkoman horses are always galloped for two or three minutes even after the longest and most tiring march. If this is not done they say they get ill and frequently die. I bought eight ponies in Bokhara for 35,000 roubles which carried us through to Meshed, a distance of close on 600 miles.

The whole nomad Turkoman population lives in constant fear of robbers of their own race. This was exemplified on several occasions. We were a party of about twenty-five, and on approaching one well we noticed a man riding hard a mile or two on our left. He was soon hidden by a fold in the ground, and presently we came in sight of the well a mile off. A single man rode out to meet us, and we sent one man on to speak with him. It turned out that the man we had seen thought we were a party of robbers and rode in to warn the people at the well. They, on receiving the news, loaded their rifles and lined the walls of the enclosure and prepared to resist, but sent one of their number forward to make sure before any blood was shed. We sent their envoy back, and presently he

signalled that it was all right and we rode up. We then discovered that the people at the well were themselves noted robbers, but the size of our party frightened them. We, however, divided the night up into watches, and took it in turn to have three of our number watching all night. These people had some fine Persian greyhounds which they use for catching gazelles. They told us that they can only catch gazelles when they are thin, as when fat they cannot get a grip with their teeth.

On another occasion, after crossing the Murghab river, when we were very short of food we came to a well at dusk and found one Turkoman drawing water. We asked where his camp was, and after some prevarication he said it was about 2 miles off. We were very short of food, so made him lead us to them in the hope that they would sell us something. When we got in sight of the camp fires he made our party halt while I and an interpreter accompanied him. When about 50 yards off he asked us to stop while he went forward to explain. The Turkoman then shouted that we must move further off as they were afraid, and they would then send a man to us with food. They then called out that they would give us nothing, and that they had loaded their rifles and would fire if we did not go off at once. We were obliged to comply, and the next day we met a man who said that they were a party of robbers, who, thinking we were another party who would attack them, had moved off that night as soon as we had left.

Later we came on a camp of Turkoman shepherds. We had had practically nothing to eat for several days except the ponies' food, which we either parched or boiled according to the individual taste. They were terrified at seeing such a large party, and thought that the worst had happened. However, they soon saw that we meant no harm. These men sold us three sheep, which we ate on the spot, cooking *shashliks* on the cleaning rods of our rifles. They also made us some good fresh bread by laying the unleavened cake on the hot earth after scraping away the fire and covering it with glowing ashes. This was cooked in about twenty minutes. We asked these people to sell us some flour, but they excused themselves, saying that they had only enough left for their own use, but that at a well some 9 versts on we should find all we wanted. We left them, and on approaching the well we found to our dismay that it was quite deserted. We found out that the people at the well had seen our large party ride up to the men who were out grazing their flocks, and, thinking we were a gang of robbers, they had decamped to a man, and intended to live some distance off in the desert and not return to the well until we had moved off. The above incidents will show the continuous dread of robbers in which the Turkoman lives.

We crossed the Murghab river at night. We were in danger of being intercepted by Bolsheviks here, as they patrol the Khushk-Merv railway line which runs near the river. We found the river about 20 yards wide, with steep banks, and our ponies were forced to swim. We were now well out of Bokhara territory.

The western Bokharan frontier is an undefined line in the desert some 5 or 10 miles to the west of the Oxus, but Bokharan subjects graze all over the desert between the Oxus and Murghab rivers, and the control of the Russians over their subjects in the Murghab valley is very loose.

From the Murghab river we had several days more of desert travelling to the Persian frontier, where we had a brush with a Bolshevik patrol, and it was with a feeling of overwhelming relief that we trod on the soil of Persia and were free from the tyranny inseparable from Soviet rule.

The PRESIDENT : We have listened to a long list of Fellows who have been elected, but there was to have been one elected whom I am sorry to say, since he was proposed at our Council meeting a fortnight ago, we have heard has died during a journey on the China-Burmese frontier. I allude to Mr. Reginald Farrer, and we do greatly deplore the loss of this traveller, because he was a man of exceptional refinement and culture, who minutely observed and very carefully recorded and described the natural features of the countries through which he was passing. He also had a peculiar knack of getting on with all kinds and conditions of people, including Government officials, and overcoming those human obstacles which are often the most serious obstacles with which a traveller is confronted. Only a fortnight ago I had a letter from Mr. Reginald Farrer dated from the borders of Burma and China in which he described his present two years' journey upon that frontier, and outlined another travel on which he had set his heart, and in which he had asked my help so far as I could give it, and that was to go to Lhasa in Tibet. We very much regret his loss, because I looked upon him as the forerunner of a new type of traveller, who, taking advantage of the pioneering of his predecessors, would have brought back to us those cultured descriptions of the beauties of Nature and of plant, animal, and human life in the countries through which he was travelling, which I consider are the very flower of geographical knowledge.

Our lecturer this evening is Major Bailey, whom we all know, and we are specially beholden to him, because for many years past he has been suffering some very severe hardships and strain. He was wounded in the battle of Ypres and in both legs in the Gallipoli campaign. He served afterwards in Baghdad, and from there he went to Central Asia, and was in hiding and eventually escaped from the clutches of the Soviet rule in Turkistan. He is, therefore, well entitled to a good holiday, but he has come here this evening to give an account of his experiences in Bokhara, and we are glad to welcome him.

Major Bailey then read the paper printed above, and a discussion followed.

The PRESIDENT : Sir Michael O'Dwyer, the distinguished Governor of the Punjab, is present. To him is due as much as to any living man that the Provisional Government of India of which we have heard never came into actual being. He has been to Bokhara, and knows something also of this great Indian Prince who was to rule in India, and perhaps he will very kindly give us some remarks about the lecture.

Sir MICHAEL O'DWYER : To-night I have had the honour of being the guest of the Geographical Club, and in that moment of enthusiasm which follows a good dinner I rashly promised the President to say a few words on the subject of the lecture. The President's request was based on the fact that I was once in Bokhara ; that is many years ago—as far back as 1896, and one's memory of

those times is getting blurred. But the admirable lecture which we have just listened to, and the excellent slides we have seen, recall a few associations of the days when I was in Bokhara. The memory which stands out more vividly than any other is this. I remember on a summer's evening early in May 1896 being on the railway station at Kagan, close to Bokhara, where there was a brilliant crowd assembled. The Emir of Bokhara was departing in a special train with a splendid retinue to attend the coronation of the Tsar of all the Russias at Moscow. A few months afterwards, being in Moscow, I had the opportunity of seeing again, not only the Emir, but the Tsar at the Coronation ceremonial, and now the two are associated in our minds with the same tragic fate which both have met at the hands of the Bolsheviks. The Tsar has lost his Empire, life, and all near and dear to him, and the latest news of the Emir of Bokhara is that he is a fugitive from his capital, that his kingdom is in the hands of the Bolsheviks, and the great city of Bokhara, which was the centre of Islamic civilization and culture and the great trade emporium of Central Asia, has now become a prey to rapine and bloodshed. One regrets the downfall of a great city like Bokhara. One hopes it may shake off the blight of Bolshevism and recover its pristine glory, which has won for it the title of Bokhara the Noble (Sharif). Most of us here in England may say it is a long way off and does not particularly interest us; but apart from the political significance of the events which have made the Bolsheviks dominant in Bokhara, events which cannot but react on Persia, Afghanistan, and India, this downfall of the Emir and the native Government has also very considerable economic importance. Bokhara is the great mart of Central Asia, and was a great outlet for British and Indian trade. The few days I spent in its bazaar I was astonished at their great wealth—to my mind, far superior to anything in India. The products of Persia, Afghanistan, of Northern India, of Western China, of Europe were all collected there and were being freely exchanged under conditions of order and security; for the Bokharan Government, to its credit be it said, during all the centuries during which it maintained its independence, was conspicuous for two great things. In the first place, it always protected trade and travellers, and, in the second place, it maintained a reliable gold currency which had never been debased, and which was accepted with confidence in every market from Nijni Novgorod to Kabul and Kashgar, if not Further China. When you note these two facts, the great protection given to travellers which attracted traders from every quarter of Central Asia, from India, Turkey, and Russia to Bokhara, and the stability of the coinage, you have the explanation of the wonderful success of Bokhara as a commercial capital. Major Bailey has told us of the great number of Jews and Hindus there. When I was in Bokhara I went to see the Indian bazaar. I found a large colony of Indians, quite happy and prosperous, and they were very glad to meet one who could speak their language. Directly I appeared they produced the Anglo-Indian national drink—whisky and soda! I believe at that time it was the only place in Central Asia east of Baku, if not of Tiflis, where you could get a whisky and soda; but my Indian friends at once produced it and the Russian cigarettes. It was interesting to note where they came from. There were a good many Peshawar Mohammedans amongst them, but the great majority were Hindus from Shikarpur in Sind, and there were a certain number of Sikhs and other Punjabis. I got into conversation with one fine Sikh and asked him how long he had been there. He was a little reticent about answering, but in the end I succeeded in getting from him that he came from a village near Amritsar and had been twenty-two years in Bokhara. I said, "Have you

no desire to go back?" All the others return every four or five years. He shook his head, and finally said, "Tell me, is Warburton Sahib still there?" Mr. Warburton was a famous Punjab police officer whom you find immortalized in 'Kim' and others of Kipling's books. I met Mr. Warburton some years later in India and explained how his name and fame resounded in distant Bokhara, and it turned out this Sikh was one of the men who organized in 1873 the murder of the Mohammedan butchers because they killed the sacred cow. Mr. Warburton got to the bottom of the conspiracy, and some were hanged, but this man got away and never dared to return.

Major Bailey has explained very clearly how Bokhara is dominated from Russian territory. It lies between the Transcaspian province on the west and the Turkistan province on the east. One means by which Bokhara is throttled lies in the railway which runs through those provinces and Bokhara being entirely controlled by Russians, and the other (and, so far as I could ascertain, the more effective method) of strangling Bokhara is the possession by Russian Turkistan of the headwaters of the Zarafshàn, which means "The Gold Scatterer"—that is, the waters of this river are so fertilizing that they produce the magic effect of gold. It brings down from Russian territory enough water for the irrigation on which Turkistan and Bokhara depend, but the Russian authorities control the upper waters and the supply below, and they sometimes say, "We want all this water for our own territory." Bokhara is particularly dependent upon the waters of this river, because so far as I could see the soil was in places steadily deteriorating. Wherever you watered from wells the water was brackish. The result was that the ground was covered with salt, and the only way of working off this was by copious inundations of river water. As I have hinted, Bokhara was the meeting-place not only of men engaged in honourable business, trade, and commerce, but also the refuge of some rather shady customers, criminals and political conspirators, and Major Bailey has told you of one of these who, though passing as an Indian prince, was plotting against the British Government. I saw something of the other side of the movement in the Punjab, and I do know that the information which Major Bailey brought back as the result of his thrilling adventures has been of enormous value politically as throwing much light, not only on the doings of the Bolsheviks, but on the intrigues of all the various anti-British factions which are gathered under the wings of Bolshevik Russia in Bokhara and elsewhere. This man Mahendra Partab was perhaps the most important of those plotters. He is a man who owned very large landed estates—now sequestered—in the United Provinces. He is married to the sister of one of the ruling princes of the Punjab. In his early days he developed a dreamy idealism which characterizes a certain number of the Indian revolutionaries. He read everything Tolstoy wrote and adopted those notions of Tolstoy's which to my mind have prepared the way for Bolshevism in Russia and indirectly for a similar movement in India. When he left India his sole idea was to bring about the downfall of the British Government, and prepare the way for the restoration of the mythical golden age of Hinduism. To do this he got into touch with the Germans at Berlin. He was introduced to the Emperor, I believe, as a representative of the Indian princes, and made a member of the Council in Berlin which during the war dealt with Eastern affairs. It was through him, and another man of the same kind, an Indian Mohammedan named Barkatullah, that the Germans endeavoured to foment rebellion in India. There were several other seditious Indians helping the Germans, but these two men had a certain amount of influence in India, and they deluded the Germans in Berlin into believing they could bring about

a rising there. You will be glad to hear, as showing the spirit of loyalty among the Indian princes, that whenever Mahendra Partab sent letters to his wife, who is the sister of an Indian prince, this prince at once took possession of these letters, and without opening them sent them on to Government. He also insisted that his sister and her family should leave the estates of and sever all connection with this disloyal rebel, and soon after that I think his property was confiscated. One other sidelight on Bolshevik methods came to my notice before I left the Punjab. The Bolsheviks having established themselves at Bokhara sent their agents down to Kabul. A notorious Bolshevik leader appeared there named Bravin. It was interesting to see how clever they were in selecting the right man for the work. Bravin had been attached to the Russian Consulate in Calcutta for many years and made himself very well known there, and when the Bolshevik movement spread he was one of the first selected for special service in the direction of India. When the Afghans invaded India last year on the invitation of the Indian sedition-mongers and threatened all our North-West Frontier, their Generalissimo, Nadir Khan, had a big force at Thal in our territory which was smashed up by General Dyer. The Generalissimo fled in hot haste and left a lot of his papers behind him, including a very detailed plan prepared by Mahendra Partab and Barkatullah for the provisional government of India. As far as I remember, it got over the sectarian difficulty mentioned by Major Bailey of Mohammedan domination by sharing the position of the President of the Indian Republic between one Hindu and one Mohammedan! I do not know that there is anything else except I am sure we all hope that the old historic capital of Central Asia, which has filled so large a part, not only in the political but the commercial world, may be raised again to its pristine greatness. Bokhara has always had a keen demand for the best kinds of English goods. When I was in Bokhara the Russians had brought the Bokharan state within their trade system and imposed very heavy taxation against all goods of non-Russian origin. The Bokharan is as particular about his clothes, especially his head-dress, and cultivates the latest fashions in headgear, as an English or Parisian lady. The Russians had hoped to exclude English goods by putting on a very heavy tariff, but the Manchester muslin was of so fine a quality that no Russian loom could approach it, and the Bokharans at that time were paying fabulous prices for Manchester muslin smuggled in through Afghanistan, because they found it much finer than anything they could get from Russian sources. Bokhara under Bolshevik rule is, I believe, now entirely cut off from British and British Indian trade, and the Indian press reports that the city has been completely looted, and the merchants have all fled. Let us hope that this is only a temporary eclipse.

The PRESIDENT: Sir Aurel Stein, who made those wonderful journeys in Central Asia and more particularly Chinese Turkistan, is here, and we should be very glad if he would give us a few words.

Sir AUREL STEIN: It is a great honour to be called upon to offer any remarks after this fascinating lecture which we have heard from Major Bailey, telling us of wonderful adventures such as one expects to read of only in distant history, and after the most striking observations which my old chief and friend Sir Michael O'Dwyer has just given us on what is a very recent past in India and Bokhara. It is true I have been in Bokhara territory. But though it is only five years ago that I travelled through the whole length of the mountainous part of its territory, I feel as if it were old history. Four years ago there was still the Imperial power of Russia smoothing the way for

me in the service of the Indian Government, making things in Bokhara as easy for me as in any Indian native state ; and now we have had to learn of the wholly different conditions under which Major Bailey had to do his work.

I was travelling there in 1915 for scientific purposes. I wanted to see as much as I could of a very important ancient passage land which had once seen most of the intercourse between the classical West and the Far East. Sir Michael O'Dwyer has been rightly putting special stress upon the important fact that Bokhara from the earliest times has been one of the great commercial centres of Asia. This must impress any experienced observer of modern conditions in Bokhara itself. If reference to ancient history were needed, I have only to mention that Sogdiana (which was the old name of the territory which you have so often seen here on the map between the Oxus in the south and the Sir-darya or Yaxartes in the north) was a chief place of interchange between three great civilizations. I mean the Hellenistic civilization of the Near East which had penetrated through Persia ; then the civilization of India which had spread northward with Buddhism ; and thirdly, the culture, trade, and organized power of China, which for more than one century before and one century after the time of Christ, and again in the seventh and eighth centuries of our era, had maintained a dominating influence over great portions of Central Asia.

I shall not attempt now to give you indications of the many interesting facts we know about the part which Bokhara had played in the history of innermost Asia. I shall mention only one fact which will be of interest to you as students of geography : it illustrates how physical conditions determine the character of the population far more than race or language. We have heard here interesting accounts, and have seen too on the screen glimpses, of the present Turkomans, who have now happily resumed that rôle of nomadic robbers which the beneficent repression of the quondam Russian government had denied to them for a short period. In that very territory, long before the Turks had appeared on the stage of Central Asia, there had lived a people wholly distinct in language and race, but doing exactly the same things. They were those tribes of Iranian speech but nomadic habits whom the peaceful settled population of Persia knew and dreaded as "Turaniens." Considering their ancient reputation it was quite amusing to me in Bokhara City to have to put up in a kind of hotel which called itself the "Turanski Numer." It was evidence how the term *Turan* had been brought to life again by the sort of Pan-Islamic propaganda that went on long before the war.

The historic rôle of Bokhara, I am sure, has not changed in essentials since those days when it witnessed the interchange of Persian, Chinese, and Indian civilizations, and I believe, whatever misfortunes that great city has recently undergone, geographical facts will re-establish its importance within a not very distant period. But I also believe that no change in the controlling power will ever dispose of the facilities which the desert, of which you have seen so many photographs, offers to people on its borders. The same Turkomans who now have taken again to the part of robbers had since the Russian occupation of Transcaspia in the seventies of the last century been obliged to content themselves with making plentiful money by cotton cultivation and the production of wool. Yet that period of some forty years of peaceful prosperity has not killed the ancient fascination of another and more congenial life which such ground must foster.

I wonder whether the present conditions will continue long enough for us to see demonstrated afresh the wonderful performances of the Turkoman

pony. When I was passing down the Perso-Afghan border in 1915—under conditions which, I may note in passing, were not quite those of peace—I had the good fortune to fall in with three Turkomans of the old type, then in the service of the British Consulate-General at Meshed. These men were employed to look after the Indian mail-bags passing through Afghan territory. They told me interesting details as to how those raids which once brought bands of Turkoman raiders right down to Seistan, some 400 miles off, were planned; how the ponies used for them had been trained, etc. I regretted then not to have had enough time for collecting more information on the subject. If conditions continue as at present, it may soon be possible to hear similar stories of modern raids.

There is one more matter with regard to which ancient history can be studied afresh on the same ground. Bokhara is a typical "terminal oasis," to use the proper geographical term, and such oases which derive their irrigation from the terminal course of a river are particularly dependent for their prosperity upon the maintenance of a firm government, not only in their own areas but also higher up. Whenever political troubles or similar disturbances lead to the neglect of, or interference with, the irrigation system at the canal head a terminal oasis is bound to undergo a great crisis, which, on such ground as Chinese Turkistan offers, may eventually result in complete extinction.

I have often been asked for my views as to how those ancient oases of the Tarim basin, now buried in drift-sand, which I had the good fortune to explore, had originally come to be abandoned. In reply I have always emphasized the limitation of the available archæological evidence. This could indeed prove within which period those oases were abandoned, what kind of civilization once flourished there, etc. But archæological indications in the absence of historical records do not suffice to show what was the direct cause which first started abandonment.

The human factor is a very complex one and liable to be affected by changes correspondingly varied in character. Among the possible causes leading to the abandonment of oases the theory which attributes it to "desiccation" also deserves careful consideration. It has found much favour since Prof. Huntington's very stimulating publications have made geographers and others familiar with the idea of pulsatory changes of climate leading to far-reaching historical effects.

It may be safely assumed that since those oases in Chinese Turkistan were abandoned to the desert the climate has become more arid, or anyhow the amount of water available for irrigation much reduced. But this does not prove that it was "desiccation" itself which caused abandonment in the first instance. A *post hoc* does not necessarily mean a *propter hoc*. I am unable to accept that assumption as a "working theory," because I realize the peculiar complexity of the human factor, and also because it is impossible to test such a "working theory" by experiment. This may be unfortunate; but in this respect geography, like history, differs from exact sciences.

If then we cannot have experiments, it must be of additional interest to observe that our own time supplies evidence that the area of Central-Asian oases like Bokhara can be affected very closely by political changes. From reliable information I received, it appears that the maladministration attending the present Soviet *régime* in Russian Turkistan and the consequent neglect of the canal system has led in Farghana to the abandonment of much land in the lower portion of the hitherto rich and closely cultivated tracts. Now, I suppose if I came back myself to that ground after two thousand years and found there

archæologically datable remains of settlements abandoned at the present period it would be so easy to come to the conclusion that this abandonment must have been due to climatic change bringing about increased aridity. Suppose that no records of the present period survive two thousand years hence, and it will be impossible then to prove that this conclusion was wrong and that the abandonment had been the direct result of a great political upheaval. Whether any scientist is prepared to explain the present period of upheaval on this globe of ours as due to increased aridity, I do not know. Anyhow, here is a case where the history of our own time aptly illustrates the difficulty facing the critical student when he is expected to judge of the causes of past events in the absence of actual records.

I wish only to add that all Major Bailey has told you and shown on the screen is indeed most instructive, not only to the geographer and the student of Eastern humanity, but to the historian as well. In geography we cannot make experiments; but here contemporary developments strikingly show us how historical changes affect all the aspects of human life with which geography is dealing.

The PRESIDENT: Colonel Yate was engaged thirty-five years ago in delimiting the boundary between Afghanistan and Russia in that part over which Major Bailey escaped.

Colonel C. E. YATE: I have never been in Bokhara myself, but I well remember coming to the frontiers of Bokhara and being received by a Bokharan Court of Honour, and I must confess I can endorse what Major Bailey has said when he described the Bokharan soldiers as giving the impression of extreme inefficiency. I never saw such an extraordinary collection of men in their yellow leather trousers over long top boots and most extraordinary arms and weapons; the music and band and whole turn-out were a sight I shall never forget. I know the part of the country south of Bokhara stretching from the Oxus to the Persian frontier, where I spent several years in the delimitation of the Russian and the Afghan frontier. After some two years in the country with the Afghan Boundary Commission under General Sir Peter Lumsden, I was finally sent out to build up all the boundary pillars in that whole tract of country. I followed Major Bailey's journey across the desert with the greatest interest. I remember when, after travelling through the desert, we came to the end of our journey on the banks of the Oxus, the Russian officers and ourselves embarked on a boat and floated down that river till we got to the railway, and then went on to Merv, and so home. We had a wonderful time travelling down the Oxus, and we never stopped day or night. I remember we had certain food in tins with us to eat, but the Russians had nothing to eat but a sturgeon, and that we found so good that we all fed for days on it and never touched the other things. When Major Bailey described his crossing of the Oxus I was wondering how he would get across. We saw the picture of the boat he crossed in, and apparently, I understand, they rowed the boat across. At Kilif I remember seeing a similar ferry-boat to the one shown, but that boat was drawn by a couple of horses. They were harnessed to the boat and went into the water, and a man stood in the bows with a whip, and those horses swam across. It was a curious instance of what horses can do. I never dreamt till I saw it that a couple of small horses could take a big, heavy boat across such a deep and swift river nearly half a mile in breadth. I had to demarcate the boundary from Meshed to the Oxus, and had to construct all the pillars as marked on this map. Every one who has travelled in these regions has vivid recollections of the bitter water and salt wells referred to by Major

Bailey. I had to live for a fortnight once on a well of Epsom salts, and I well remember it! Another thing that I sympathized with Major Bailey in was the snowstorm he told us of. I remember starting one April day with thirty camels laden with water out into a waterless tract of desert. That night a most awful blizzard came on, and by the morning there were a couple of feet of snow. The muleteers had left the corn for the mules behind because the young spring grass was up, and the animals would look at nothing else. The snow came down in this awful blizzard, and though the horses and mules tried to get down through the snow to the grass, they could not do it, and were very near starving. There it was that I came to realize what a splendid guide a Turkoman is. He seemed to know every well and road in the country, and carefully guided us through the storm to a place where we could find wood, light a fire, and get some food both for man and beast. I have ridden hundreds, I may say thousands, of miles with these Turkomans, and they never once failed to guide me right. Sir Aurel Stein has told us of the Turkomans who were on the mail line between Meshed and Herat. They were there with me when I was Consul-General at Meshed. All those Turkomans refused to go back to service in Russia when Panjdeh was taken by Russia in 1885, and asked to become British subjects. These men, I believe, are still in the British service, and employed on the same postal duty between Meshed and Herat, and I can only say they have always been most extraordinarily faithful followers of the British Government. They were robbers, it is true, and I suppose when the opportunity occurs they always will be robbers. They used to raid the whole of the Persian frontier in olden days, carry off slaves, and keep them. Whether this will break out again, as has been suggested, I cannot say, but we on the Afghan Boundary Commission found them capital fellows, and I certainly have the most pleasant recollections of them all. While on this frontier we found a most beautiful species of pheasant. When Colonel Peacock of the Engineers and myself were demarcating the boundary, we used to go out with the Turkomans and ride these pheasants down, as after two or three flights they used to hide in the snow, and their tails betrayed them. We brought home half a dozen, and they were declared to be a new species and named *Phasianus Principii*, or Prince of Wales' Pheasant; but it was found that they would not breed in captivity. They were magnificent birds. I was at Panjdeh at the time when the Russians drove out the Afghans. Within the last few days we have heard that the Afghans have now some troops in Merv, but what is going to happen there we none of us can say. Although the Afghans are in Merv, we hear that the Bolsheviks are in Kushk, to the south of it, and consequently I do not think that Merv can be now the frontier of Afghanistan, as I have heard said, because whatever Government is in power in Russia, their hold on Central Asia depends on that one line of the Transcaspian railway, and I cannot think any Government in Russia will allow the Afghans to cut that line. I was at a lecture the other day by a very well-educated young Afghan. He dwelt on the advantages of a Mohammedan federation in Central Asia between Afghanistan, Persia, and Bokhara. Now what has become of the Emir of Bokhara none of us know; he has been driven out by the Bolsheviks, and is in flight. There is no love lost between the Usbegs of Bokhara and the Afghans as a rule, but whether they will join up now under the terrible threat of the Bolsheviks is a question that has still to be settled. There is also no love lost between the Afghans and the Persians. The Afghans overran Persia years ago—they may do it again. We hear a great deal now about the defence of Persia from the Bolsheviks, and the few troops we have in North-West Persia

What will happen there none of us can say. Whether the Persians will accept our agreement or not none of us know. I cannot help thinking that if we do come to a Mohammedan federation in Central Asia it would conduce to stability in those regions, but none of us can say what will happen there. We can only hope that the Afghans will see wisdom, and that they will turn to the British instead of to the Bolshevists, and that we shall not have any fresh trouble with them as we had last year, when they so outrageously and wantonly attempted to invade India.

The PRESIDENT : I am sure we should wish to congratulate Major Bailey upon his wonderful escapes and the great resource which he showed in dealing with critical situations. He is the most remarkable man I know of for getting himself into nasty situations and getting himself out of them again.

MODERN DEEP-SEA RESEARCH IN THE EAST INDIAN ARCHIPELAGO

Prof. G. A. F. Molengraaff, of Delft

Read at the Meeting of the Society, 7 June 1920. Map following p. 152.

SUBMARINE topography all over the world is much simpler than the topography of the subaerial portion of the globe. This is, at least near the continental borders, evidently the consequence of the covering or blanketing influence of continuous sedimentation on the relief of the sea-bottoms contrasting with the carving and sculpturing influence of never-ceasing erosion on the land surfaces. Wherever this rule does not hold good the submarine topography, not yet being obliterated by sedimentation, must be of recent date. A bold relief of the sea-bottom is therefore, at least near the continents, apt to indicate portions of the Earth's crust which either have been warped in recent geological time or still continue to be orogenetically active, and thus continually rejuvenate and remould the sculpture of their surface. In this paper the latter alternative will be discussed for the Australasian seas.

One of the major results of deep-sea research, a branch of science of modern date, has been the statement of the fact that the so-called mediterranean seas are, as compared with the grand oceans, characterized by a bold and diversely developed submarine topography.

Mediterranean seas are, as the name indicates, seas which separate continents one from the other; in a somewhat narrower sense the name is given to those mediterranean seas which separate the great continents of the northern hemisphere from the southern continents, viz. the Caribbean Mediterranean between North and South America, the Mediterranean Sea in the strict sense between Europe and Africa, and the Australasian Mediterranean sea between Asia and Australia.

One of the peculiarities of the topography of the mediterranean seas proved to be the existence of basins, often of great extent, separated from