

CENTRAL MICHIGAN UNIVERSITY EZC  
Documents on Demand



ILLiad TN: 483179

**Borrower:** KARST

Lending String:

Patron:

**Journal Title:** Blackwood's Magazine

**Volume:** 226 **Issue:**  
**Month/Year:** 1929 **Pages:**

**Article Author:** Nazaroff, Paul

**Article Title:** Kuh-i-Sim, the Treasure of  
Turkestan

Imprint:

**ILL Number:**



**Call #:** AP4 .B6

**Location:** Periodical Collection 3rd  
Floor LIB. USE ONLY

## E-mail

**Copy Charge:** invoice  
**Maxcost:**

**Shipping Address:**  
Karst Research Inc  
752 Luxstone Sq SW  
Airdrie Alberta Canada T4B 3L3

**Fax:**  
**Ariel:**  
**Email:**

Scanned/sent initials and date: HD 6/15/13

NOS 1: \_\_\_\_\_ NOS 2: \_\_\_\_\_

**This item may be protected by copyright law (Title 17 U.S. code).**

6/4/2013 11:23:19 AM

## KUH-I-SIM, THE TREASURE OF TURKESTAN.

BY P. S. NAZÁROFF.

MANY years ago, when still a student, I was engaged on a geological expedition in the Kirghiz Steppe, far from any dwelling or *aul* of the nomads. One late autumn day a snow-storm overtook me. The wind blew in gusts of great violence, and obliterated the path; the tired horses could hardly move their legs. Faced with the disagreeable prospect of passing the night in the steppe, and even, perhaps, of freezing to death, I asked my guide, a Kirghiz, "Which is the way now? Where can we find shelter?"

"If we push on, *Khudai khalasa*—that is, if God wills—towards evening we may reach Hazret, and there we shall find a comfortable shelter and a good reception. He has a big stone house; there is not another like it in the steppe, and Hazret is a very learned holy man. It will be nice for you to meet him," replied the man.

With great difficulty late at night we succeeded in reaching Hazret's home. His medium-sized stone house stood on the banks of a stream in a small copse, a great rarity in the treeless steppe.

I had already heard of this Hazret, a learned mulla who enjoyed an immense influence among the Kirghiz, who re-

lated many tales of his wisdom, learning, and sanctity, and so was very glad of an opportunity of meeting him.

I was still more glad when I went into a bright, clean, warm, nice room, the best in the house, which was placed at my disposal. In it there was no furniture at all; it was entirely hung with and spread with splendid Bukhará carpets, and the walls bulged with satin rugs and cushions. How good it was to stretch oneself after ten hours in the saddle, and after the cold of the blizzard to drink boiling hot tea and satisfy one's hunger with a splendid *pilau*, prepared as only they know how who have lived in Bukhará the Noble, 'Bukhará-i-Sherif.'

Hazret received me very kindly. "Live with me as long as you like," he said, "and as soon as the fine weather comes, then I will give you guides and fresh horses, and you can ride straight through to Djaman Kalá."

He was indeed an interesting man. A Kirghiz, son of a rich father, with a thirst for knowledge, he had gone as a young man to Bukhará, the seat of Mahommedan learning. There he had lived as a student in the *medress* or university for eighteen years, and then performed the *hajj* to Mecca,

travelling on horseback through Afghanistan and Persia. He was now living quietly among his own people, reaping the fruits of his wisdom. He produced on me the impression of a mediæval scholiast, crystallised in his opinions. It was curious to hear his account, for instance, of Bukhará, which he quite sincerely considered the most learned and enlightened city in the world.

"Everywhere light comes down from above, but in Bukhará it arises from the ground," he said, repeating the boastful assertion of the mullas of the city.

"In Holy Bukhará you may learn all knowledge, all sciences which are available for mankind," he said.

"And what did you learn in the *medress* at Bukhará?" I asked him.

"Moslem law, historical books, the philosophy of Aflatun, the works of Abu ibn Sina, geography, and the Arabic language in which all these things are set forth."

This was the scope of Moslem teaching, and I recognised in unfamiliar guise the names of Plato and of Avicenna, the famous geographer who lived in Khivá in the eleventh century and became an authority in mediæval Europe.

"Yes," he continued, "I will show you some of my books," and he brought and laid open on the carpet some old tomes in ancient leather bindings.

"These," he explained, "are

all very old and expensive books. For this one alone I paid one hundred golden *till*; it is nearly a thousand years old, and by it I learnt geography."

I smiled to myself that he should pay such reverence, and such a price, about £30, for this treatise on geography, which, of course, did not include one hundredth part of the world as we know it. I took the book, and at once my glance fell on a large map showing the universe in the form of a flat circle surrounded by a broad belt of ocean. Northern Europe, the eastern half of Asia, and the greater part of Africa did not exist. The outlines of all continents and countries were distorted, and in the place of Great Britain were shown the Isles of the Djinns.

I could hardly repress my smiles at the sight of such a strange chart of the universe.

"Are Moscow and Saint Petersburg marked here?" I asked.

Hazret looked at the map and said, "No, these towns are not shown."

"Well," I could not help answering, "what is the use of a geography which does not show such important cities?"

"Here you will find shown rather Mahommedan countries," answered Hazret. "See, here is Bukhará and there is Samarkand."

"But where is Tashkend?" I asked.

"Tashkend is not there."

Then I could not help smiling.

"Well," I said, "what is the use of a treatise on geography like this? You cannot learn anything about the world from it; it is not worth anything!" I exclaimed with a smile.

Hazret thought for a moment. It seemed to me as though a shadow of doubt in his own learning began to dawn in his crystallised Moslem brain.

"Well, you see," he began, after a little consideration, "I do not treasure so much what exists on the world to-day that is new. I value and am interested only in what existed in days of old, at the time of the Prophet, whose name be blessed!"

"An answer worthy of a sincere orthodox fanatic," I thought to myself. In those days I was young and proud of my own knowledge won at the university. Many years later I understood my error and failure to appreciate the lore of this learned mulla and his love of the past.

Noticing some big town marked near Samarkand, I asked Hazret what it was.

"Oh, that is a large and very wealthy city, Tunkent, the capital of the Principality of Ilak; there is a great deal about it in this book," he said, brightening up.

"What does it say about Tunkent?" I asked, never having suspected the existence of such a town in Turkestan.

"See, here among these mountains," and he pointed with his finger to a spot on the map, "is the most famous and richest silver mine in the world; here they quarried pure silver like so much rock. This mine belonged to the principality of Ilak, and in Tunkent they minted money and made various precious objects and works of art which circulated through the entire world in exchange for different kinds of merchandise, which came into Tunkent from all lands. The town abounded in luxury, palaces, mosques, and for a long distance round was encircled by wonderful gardens."

"That must be what in old days they used to call Samarkand," I suggested.

"No, Tunkent was a totally different city and richer than Samarkand; in Samarkand there was only an emir, who governed all Khorassan," replied Hazret.

"Look," he continued, "there is an immense and terrible cavern, to the end of which no one has yet penetrated. There is an underground river, and across the river a bridge, and on the far side there is a terrible dragon which guards the uncountable treasure of gold and precious stones. It kills every one who ventures to go by."

"But that is only an old fable of ignorant folk in ancient days. You, as a learned man, you know yourself that nothing of the sort really exists," I tried to persuade him.

"No; this is truth," he answered. "I myself read in Mecca on the walls of the chief mosque an inscription about this same cavern, and pilgrims from Kokand told me that not long ago three Kirghiz who had returned from Mecca went into the cave to seek the treasure and never returned. Then their relatives collected, no less than forty men, all well armed, and went in to seek them, but they too never came back. After this the folk of the neighbourhood shut it up with stones, and covered the main entrance with earth. The

learned Moslem Abu ibn Sina, who lived nine hundred years ago, describes this cave in detail in his book; it is called Kan-i-Gut—that is, the Mine of Destruction,—and he gives all instructions for prayers to read and for charms against the dragon should any one want to go in and get the treasure."

I was no longer listening. Fatigued with my adventures, I was dozing into a slumber, and do not know what more Hazret went on to say about the cave and the treasures of Turkestan.

## II.

Many years after I was sorry that I had paid so little heed to those rare old books which Hazret showed me, that wise old connoisseur of the Arabic language and ancient Arabic literature. Fate willed that I should spend the best years of my life in Turkestan, seeking out its mineral wealth. I was the pioneer of the mining industry that was just beginning to bud.

The fame of Turkestan as a land rich in gold and other valuable and useful minerals was dissipated like smoke after the Russian occupation. The first prospecting expeditions by miners of the Urals and Siberia soon showed that the country was very poor. This opinion, too, was confirmed by the geological investigations of Professors Mushketoff and Romanovsky, and Turkestan for a

long time ceased to attract attention in this respect.

My first researches into its geology, however, showed these opinions to be false. The more I investigated, the more and more convinced I became that Turkestan is no poorer than the Urals themselves in useful minerals, but, of course, the deposits do not occur near big towns or main highways of communication. Gold, silver, quicksilver, copper, lead and zinc, vanadium ores and wolfram, oil, coal and abundance of excellent iron ore, asbestos, and recently the discovery of radio-active ores and deposits of tin found by me would have enriched the country had circumstances been more favourable. Nature has given it, too, precious gem stones, abundance of marble, and lithographic stone.

Apart from the richness and variety of this mineral wealth, I was struck by the remains of ancient workings, with tools of bronze and stone, that I met at every step. There are also workings of the recent past by the khans of Kokand, but the greater part of the old mines, in places with immense workings, belong undoubtedly to a very remote historical period, the golden age of prosperity and culture of Turkestan.

In one remote spot in the mountains were great hills of slag, covered with grass and scrub, the remains of extensive buildings, old shafts and underground galleries, and immense excavations in the rock, all converted by the lapse of time and action of earthquakes into natural caverns, the walls of which were already covered with a coating of calcareous matter, and here and there from the roof there hung big stalactites. It required a very experienced eye and careful investigation to recognise the work of men's hands, and to see what ores had been worked and from which spots. It was remarkable, too, that in many such mines the chief seams and entrances of the adits and shafts had been artificially sealed, cemented over, and very carefully masked. To the eye of the layman they were simply caverns and natural grottoes. To this concealment nature had added screes, falls of rock, bushes, and trees.

A rich and highly developed

mining industry had flourished in this place; the spot had once teemed with life, and been such a hive of industry as can be seen to-day in England and parts of Belgium. Then suddenly all life ceased; something happened and converted the flourishing industrial district into a desert.

Whatever it was it had happened not abruptly nor unexpectedly, and the miners had had time to make their preparations and conceal their wealth from other and hostile eyes until happier days should return, such as, for this unhappy country, never arrived.

The cavern called Kan-i-Gut, about which Hazret had talked so much, turned out to be well known and had been often explored. In the days of the khans they had sent condemned prisoners, promising them life and pardon if they made their way through to the end and returned to report what they had found in the recesses of the cavern, but not one had ever come back.

The Russians, too, had made several attempts to explore it, but each time some difficulty had stopped them.

That entrance which now opens into the cave leads into a huge open cavity, at the edge of underground abysses, into immense halls and chambers and deep wells, and finally to an underground river. The air in the cave is very pure, it is excellently ventilated, and there are no traces of dead bodies. Inside there is a spring

of splendid pure water, remains of old wooden bridges and timbering of wood that has not rotted, of the juniper known locally as 'argi' (*Juniperus pseudosabina*). But strong nerves are wanted to wander about the narrow and slippery paths over dark and sombre precipices, glittering evilly in the flickering light of a magnesium flare, or white glare of an acetylene lamp.

It was easy enough to see in the endless chambers and passages, to go through all of which would take days, an old mine. A part of these great cavities was made by nature and part by the long-continued work of men's hands through centuries. The regular methodical workings were there, the timbering, the deep shafts, with appliances for going down and coming up, though only a monkey could use them one would think; in places, over steep or vertical descents down marble cliffs, were artificially cut rings for the attachment of ropes.

The path was covered with the dust of ages; when this dust is removed a bright marble floor is revealed, polished by hundreds of bare feet that had walked over it in the course of centuries, smooth as the marble

of ancient statues. There are astonishing, long, pipe-like holes, drilled in some unaccountable manner through the hard rock by the hand of man.

In the cavern there is a very rich silver-lead ore, galena, and gold ore. There is zinc ore, but if that was worked it was only for medicine.

After exploring the recesses of the cavern for two days I came to the conclusion, from various signs, that the air inside was rich in radio-active emanations. A scientific expedition which explored the cave before the Great War confirmed my opinion, and proved that the air inside is strongly radio-active. At the northern foothill of the mountains where Kan-i-Gut is situated, in a lovely spot where there is the tomb of a holy man, the Hodja-i-Tahraut, is a spring of beautiful water forming a green oasis among the barren mountains. This place is considered by the natives to be miracle-working, and they come in thousands to the tomb of the holy man to drink the wonder-working water, which showed upon investigation to be highly charged with radium emanation.

In the big mountain Kara Tau, above the tomb, there has been found pitchblende.

### III.

Another strange mine interested me very much. I came across it by chance in a wild and remote part of the Turkes-

tan mountains, in an isolated, shut in, desert valley. What struck me in this valley was the fact that, in spite of its

inaccessibility, everything in it gave the impression of a remote life long since passed, and activity of man, who left his traces everywhere on every side, but traces already planed over and masked by time and nature.

It was possible to go through the valley only on horseback, and that with difficulty, yet in it, from below to the top of a lofty mountain, there went in zigzags a broad carriage road, admirably laid out. Now it is all grown over with herbage and trees. This road leads to the ancient workings, which are very numerous and extensive: a part has collapsed, another is covered with falls of rock due to earthquakes. In the main workings, which look like an immense cathedral, the floor was covered with a thick layer of blue guano and covered with huge boulders that had fallen from the roof. But the galleries were entire, astonishing, broad, admirably cut out of the hard marble, and blind—that is, they led nowhere. All pointed to extensive workings through the course of centuries, all on an ‘industrial capitalistic’ scale.

After attentive examination of the falls, slag, and workings, I clearly saw that here silver had been worked and some other metals. But the veins themselves, the actual ore, and the ends of the galleries had been carefully sealed and artificially masked.

A layman would find it difficult to discover the spot

where the main ore body occurs and where work might be resumed. For specialists I will say that this mine belongs to the so-called ‘contact-metamorphic’ type, such as occur also in the Banat of the Danube plains.

On examining this ancient mine, the question kept arising in my mind, Who worked these ores? To what historical period do they belong? What kind of people were they? And when was this extensive mining industry developed in this now forgotten and almost inaccessible valley, an industry that is now extinct, and whither did the output go?

Of course, it could not be the work of the present inhabitants of the country, the Sarts, with their very low level of technical knowledge and their indolence. And, too, their character and devotion to agriculture and stock-breeding are quite opposed to the idea of an intensive mining activity.

They remember former workings, but the winning of iron and copper in the days of the khans was of a very primitive character, and the natives discriminate these quite clearly from the ancient mines on a grand scale such as I have described. These, they invariably say, were worked by the Chinese, which is out of the question.

About the time of my tale there was found in Samarkand an ancient astronomical observatory, once the property



of Ulug Beg, grandson of Tamerlane, a famous learned man of the Middle Ages. A Table of the Stars drawn up by him has significance even to-day for astronomers. He is the author of that very true sentence often repeated in his writings: "The study of nature unites mankind, but philosophy and religion disunite." How truly the history of the twentieth century confirms his words of wisdom!

When looking at this observatory I met a Russian archæologist who had paid great attention to the history of Turkestan. He asked me if I had ever come across, in my geological expeditions in the mountains, any ancient silver mines.

"Why do you ask?" I asked in turn.

"You see," he explained, "we are naturally not interested in the actual mines, but in their position on the map, as according to ancient Arabian guide-books we might be able through these mines to determine the position of seven ancient cities of Turkestan which have now disappeared, and, above all, the situation of the town of Tunkent, capital of the principality of Ilak. We hope to find there a good deal of very interesting antiquarian remains of the pre-Mahomedan period of Turkestan and of the first centuries of the rule of the Arabs."

"This mine," he went on to say, "was called Kuh-i-Sim, which in Persian means the Mountain of Silver, or the Silver

Peak. In its day it supplied the whole Moslem world with silver, and also Russia. In the Hermitage in St Petersburg there are quite a number of coins dug out of old stores in Central and even Northern Russia, with inscriptions that they were struck from silver from Kuh-i-Sim in the city of Tunkent."

I then remembered Hazret, and told him about this learned Kirghiz and his old books.

"Yes, indeed," said my friend, "those were certainly very rare books; a pity that you did not pay more attention to them and did not note the titles and names of the authors."

"Yes," he went on, "in Bukhará there are still a fair number of rare old books and manuscripts, but the local mullas value them very highly and conceal them from Europeans."

All this interested me so much that I resolved to take up the study of the history of Turkestan. In the Imperial Public Library of St Petersburg there was a splendid edition of De Gué, 'Bibliotheca Geographica Arabicorum,' but its Arabic text was a closed book to me. Luckily, such Arab writers and geographers as Idrissi, Istakhri, Ibn Khaukal, Ibn Khoroat Bek, and Abulfeda are available partly or entirely in translation into some European language. These writers opened my eyes about Turkestan, which I, like many others, thought was a 'new country,' only recently dis-

covered and opened up to culture and civilisation; that it had hitherto been only a sombre, strange, wild, Asiatic barbarism. It entered my head that the soil of Turkestan contained traces of a high civilisation when the nations of Europe were savages, and in the forests of Russia, in the expression of the old chronicler, men lived "in the manner of beasts."

Already in the seventh century, before the arrival of the Arab conquerors in Turkestan, the country was far ahead of the states of Europe in civilisation. The Arabs found the town of Samarkand rich, and in the highest degree prosperous. It had, for instance, a water supply, which through lead pipes gave the citizens a splendid drinking water from springs in the mountains; the beautiful and luxurious gardens and the streets of Samarkand were watered and irrigated by a special system of canals. I will remark in passing that neither Samarkand nor Tashkent, capital of Turkestan, has any water supply to-day, and the inhabitants are obliged to drink water from filthy wells or stinking gutters.

In the time of the summer heat the poor inhabitants of ancient Samarkand were supplied with ice free of payment, a luxury which is unknown to-day even in Europe!

The open places in the city were ornamented with huge bronze statues of horses, bulls, camels, dogs, &c. The chief

religion at that time was the teaching of Zoroaster, Mazdaism, which inspired love and respect to animals, especially domestic, among which the dog held the first place, as the chief companion of man given him by Ahura Mazda for the protection of his family, home, and flocks, as is set forth in the hymn of the Zend Avesta composed in honour of the dog. Confirmation of the truth of these assertions is afforded by the bronze foot of a camel found in a water-channel at Dirhan, near Samarkand, and now preserved in the Tashkent Museum, unless it has been stolen by Bolshevik commissaries, as is their wont.

The town of Samarkand was full of temples, not only of the Zoroastrians but also of Buddhists, Manichæans, and Nestorian Christians, for at that time in Turkestan there was full religious liberty. The Arab conquerors of Turkestan were not destroyers; Islam was introduced gradually and its acceptance accompanied by sundry privileges, such as the giving of money payments for going to the mosques.

For this reason in the ninth, tenth, and eleventh centuries the country reached a very high degree of prosperity and wealth, which it has never since been able to attain. This was the time when the dynasty of the Samanids, founded by Saïd Nazar, governed Turkestan. The Samanids were distinguished by their love of culture and education, and very

properly soon became emirs, quite independent of the caliphs of Baghdad. Their rule extended not only over the present area of Turkestan, but also over the northern portion of Persia and Afghanistan. All this district then bore the name of Khorassan. Commerce and industry flourished in the land.

In Samarkand excellent paper was made from the bark of the mulberry tree, and the glass made there was famed throughout the world. The Chinese emperor sent a special embassy to Samarkand to request the emir to send skilled craftsmen to China to make glass.

It was famous, too, for its silks. According to tradition a Chinese princess who married an emir of Samarkand secretly hid in her hair and brought with her some silkworm eggs to Samarkand, and thus started the silk industry in the country. The Chinese jealously guarded the secret of their silks, and the exportation of the eggs was an offence punished with death.

In the mountains life hummed. The smoke of the smelting furnaces mounted to the heavens; iron was poured forth, and copper and lead and silver; gold was won and quicksilver; there have been found remains of stone apparatus for the amalgamation of gold and silver; gems and precious stones were won.

Coal-mining began in this country four centuries earlier than in Europe.

All these descriptions of the old Arab geographers strike the

reader by their circumstantial accuracy; they are useful even to-day as guides, for those who know how to read them. They say, for instance, writing about a certain colliery, that the ash from the coal was useful for bleaching tissues. This seems strange, but an analysis which I made of the ash showed that it contains zinc, so that evidently the ancients made zinc white out of it. The Arabs also praise the tin of Turkestan for its purity, although this metal was totally unknown in the country until I came across an easily smelting tin-ore. When I was being hunted by the 'rule of workmen and peasants,' and hid myself in the mountains, I stumbled on a deposit of topaz, sapphires, and rubies.

The commercial relations of Turkestan in those days were very wide. Its iron, famed for its purity, and its '*bulat*,' or steel, was sent as far as Damascus, and formed the blades that gave that ancient city its fame. Turkestan was always, and still is, famous for its melons. These, packed in ice in boxes of lead, were sent by courier express to the table of the caliphs of Baghdad, surely the first recorded instance of the export of perishable fruit in cold storage.

The Arab writers paid special attention to the silver mine mentioned above, Kuh-i-Sim, and to the town of Tunkent.

If we collate all data arising from Arabic sources, I am

convinced that the remarkable silver mine discovered by me is the famous Kuh-i-Sim. Down to the smallest detail everything points to it. Even the statement that not far from the mouth of the river of the silver mine there is an observatory corresponds to facts. I often used to visit this mine, and every time was more and more convinced of its identity and its remarkable richness. I always postponed a detailed investigation and survey till a more suitable occasion, which, alas ! has never arisen.

This highly developed civilisation, this vigorous, industrial, and commercial life, these flourishing cities, and smiling gardens, all were swept away by a wave of barbarians, nomads who came out of the east, the wild hordes of Genghiz Khan. The infusion of Mongolian blood and the material ruin of the country led to the intellectual decay of the population. Only for a short time under Tamerlane and his immediate descendants did Turkestan attain any degree of civilisation again, but this also swiftly passed away.

Islam, once it became the dominant religion, turned a spiritual culture into savage fanaticism and hatred of unbelievers. This state of affairs lasted till the occupation of the country by Russia. It was on the very eve of this conquest that the two English travellers, Stoddard and Connolly, died a martyr's death in Bukhará by the orders of the Emir Muzaffar Eddin.

The rapidity of the spiritual decadence of the population is illustrated by the following incident. In Samarkand was found the original surveying instrument used for making plans by the old surveyors. Its design is so convenient and practical that it was seriously proposed to put it on the market as a modern pattern. It bore an inscription which is admirably preserved, to the effect that it was made in Samarkand by such and such a craftsman. But neither in Samarkand nor in Bukhará to-day can be found a single native, even among the learned mullas, who could explain the significance and use of this instrument.

#### IV.

I was also lucky enough to find the site of the ancient capital of the principality of Ilak, the city of Tunkent.

It was a wintry blizzard on the Kirghiz Steppe that drove me by sheer chance to make the acquaintance of Hazret, from

whom I first heard of Tunkent. By an odd chance it was also through a snowstorm on the steppes of Turkestan that I fell upon the spot where once upon a time stood the proud and prosperous city.

It happened in the following manner.

After a very successful day's boar shooting I sent my man home with the half a dozen pig that I had killed, and proceeded to spend the night on the steppe in an *aul* of Kirghiz. Next morning before sunrise I was off again, calculating that a couple of hours' ride would bring me to a small caravanserai on the road where I could rest and break my fast. It was a cold morning and misty, a drizzle began which soon turned into a thick dry snow, and a strong cold wind sprang up from the north-east.

Riding against the wind was very difficult. The snow covered the ground, and the wind hardened it. The snow hurt my face, covered my eyes. My hands were numbed, but still my good horse pluckily struggled on, as it seemed to me, along the road.

Two hours passed thus ; then three, four. But the familiar caravanserai did not appear in sight. The storm obscured vision, and I realised that I had strayed from the path and was riding in the wrong direction.

I peered round in the hope of finding some sort of shelter where I could stop and rest, get protection from the weather, and wait till the storm passed. I could not see more than ten or fifteen paces ahead. Everything was covered with a thick mantle of hard snow.

At length, unexpectedly there gradually appeared on the right

the outline of something protuberant. I rode up to it, and found a piece of an old ruined wall forming an angle. This made a good shelter from the wind, and I made myself snug there with my horse, which was as glad as I to get into the lee from the blinding hurricane. Hooking the reins over my arm, I tucked myself right into the corner, rolled myself as tightly as possible in my coat, and fell asleep.

When I awoke, the storm had died down, and soon stopped altogether. The sky cleared, and I crept out of my shelter and climbed on to the wall to have a look round to try to pick up my direction.

What I saw caused me the greatest astonishment. For a long distance all round, as far as the eye could reach, there lay stretched out before me the *plan* of a great city, picked out in black lines against the white background, of natural size. Whole streets were clearly marked : the sites of houses, buildings, irrigation canals, cisterns, towers, walls, and the city walls. The dry snow driven by the wind had filled in all depressions in the soil, throwing out into relief the protuberances, and thus marking out the town, which had at some remote time been razed to the ground.

In the summer, when the steppe is covered with grass, and in winter when it is all hidden beneath a monotonous greyish yellow uniform, these small depressions and eleva-

tions are not apparent; but now, when a mantle of snow, a rare occurrence in this part of Turkestan, covered the ground and the wind had planed it off, the plan of the ancient city, long since destroyed, lost and forgotten, appeared once more, like a photographic negative. It was an interesting, rare, and instructive sight.

The next morning the sun would melt the snow, and the wonderful plan again disappear. How sorry I was not to have a camera with me, or that I had not with me the means of making a sketch plan of it on a plane table, which would have been better still.

A long time I spent riding round the streets and parks of this ephemeral Pompeii, trying to imagine what it all signified, the meaning of this or that right angle or curve. It was strange how the city gates were shown. It looked just as though the foundations for a new town had been laid out.

Towards night I came to a large river, where I bivouacked in a hamlet. Home again, I carefully measured out on the map the distances and directions I had ridden, and looked up my notes from the old Arab writers. I came to the un-

doubted conclusion that this was the spot where once upon a time stood the mysterious city of Tunkent, whose momentary plan sketched in snow I had thus strangely gazed upon.

It may be asked, what was done with these discoveries of mine, of Kuh-i-Sim and of Tunkent?

My notes, plans, and manuscripts were taken by the Bolsheviks with all the rest of my property, and burnt by these 'agents of scientific Socialism.' During the hard winter of 1918-19, when I was hiding in the native *auls*, the Bolsheviks for some days fired their stoves with my papers and documents containing the results of my life's work, geological surveys, and prospects in Turkestan.

Kuh-i-Sim, hidden from the savage Mongol hordes, is hidden too from the barbarians of the north, who have wiped out the mining industry which was just beginning to bud in Turkestan. A heavy earthquake, some time before the war, has covered up and completely hidden the approaches to the mine; now there is to be seen only a mass of tumbled rock and stone.