IN EAST-SIBERIAN SILVER MINES.

MR. FROST and I reached Stretinsk (Stray'tinsk) on our return from the mines of Kara (Kah-rah') in a state of physical exhaustion that made rest an absolute necessity. Excitement, privation, and exposure, without sufficient food, to intense cold had so reduced my strength that I could not walk a hundred yards without fatigue, and the mere exertion of putting on a fur overcoat would quicken my pulse twenty or thirty beats. It did not seem to me prudent, in this weak condition, to undertake a ride of six hundred miles, in springless telegas (tel-lay'gas), through the wild and lonely region in which are situated the Nerchinsk (Ner'chinsk) silver mines. For three days, therefore, we rested quietly in the log-house of the young peasant Zablukof (Zah'blee-koff), on the bank of the Shilka (Shill'kah) River, eating all the nourishing food we could get, sleeping as much as possible, and bracing ourselves up with quinine and Liebig's extract of beef.

Sunday morning, finding my strength measurably restored, I walked across the ice of the river to the town of Stretinsk and called upon the zasedatel (zah-se-dat'el), or district inspector of police, for the purpose of obtaining horses. Through the greater part of the Nerchinsk silver-mining district regular post-roads are lacking; but we had received authority by telegraph from the governor of the province to ask the cooperation of the police in hiring horses from the peasants along our route, and I had letters of introduction to most of the police officials from Major Potulof (Po'too-loff). The zasedatel received me courteously, and at once made the necessary requisition for horses, but he said he must warn me that an epidemic of small-pox prevailed in all the region between Stretinsk and the mines, and that it would be unsafe for us to sleep at night in the peasants' houses, or even to go into them for food. This unwelcome intelligence discouraged us more than anything that we had yet heard. The journey to the mines would involve hardship enough at best, and if, in a temperature that was almost constantly below zero, we could not enter a peasant's house to obtain food or shelter without risk of taking the small-pox, we should be between the horns of a very unpleasant dilemma. I was strongly tempted to proceed westward to the town of Nerchinsk and enter the mining district from that side; but such a course would greatly increase the distance to be traveled, and finding that Mr. Frost was willing to share with me the risk of infection, I finally decided to adhere to our original plan. Sunday afternoon we loaded our baggage into a small, shallow telega, lashed on behind a bag of frozen bread upon which we could not comfortably sit; and set out, with two horses and a ragged, low-spirited driver, for the Alexandrovski Zayod (Al-ex-an-drof'skee Zah-vod') and the mine of Algachi (Al-gah-chee').

The silver mines of Nerchinsk are not situated, as one might suppose them to be, at or near the town of Nerchinsk, but are scattered over a wild, desolate, mountainous region, thousands of square miles in extent, known as "The Nerchinsk Silver-mining District." This district is coterminous, on its southern side, with the frontier line of Mongolia, and occupies the greater part of the irregular triangle formed by the rivers Shilka and Argun (Ar-goorn') just above the point where they unite to form the Amur (Am-moor'). The existence of silver and lead ore in this region was known even to the prehistoric aborigines of Siberia, and traces of their primitive mining operations were found near the Argun by the first Rus-
sian explorers of the country. In the year 1700 Greek mining engineers in the employ of the Russian Government founded the Nercinsk Zavod (Ner-chin-skee Zah-vod'), or Nercinsk Works, near the Mongolian frontier, and before the end of the century shafts had been sunk in more than twenty places between the Argun and the Shilka, and eight zavods, or smelting-furnaces, had been constructed for the reduction of the ore. The mines were worked at first by peasants brought from other parts of Siberia and forcibly colonized at points where their labor was needed, but in 1732 their places were taken to some extent by hard-labor convicts deported from the prisons of European Russia. Since that time the mines have been manned partly by colonized peasants and partly by common criminals of the penal-servitude class. With the exception of Poles and a few of the Decembrist conspirators of 1825, political convicts have never been sent to the Nercinsk silver-mining district. Thousands of Polish insurgents were transported thither after the unsuccessful insurrection of 1863, but since that time political offenders as a rule have been sent to the mines of Kara.

Our first objective point, after leaving Streitinsk, was the Alexandrofski Zavod, or Alexander Works, distant in a south-westerly direction about one hundred and twenty-five miles. The "Works," from which the place originally derived a part of its name and all of its importance, were abandoned many years ago and gradually fell into ruins, but the village attached to them still lingers in a moribund condition and now sustains a small convict prison. As we wished to examine this prison, and as the Alexandrofski Zavod, moreover, was a convenient point of departure for the once famous but now abandoned mine of Akatui (Ak-ah-too'ee), we decided to make there a short stay. The weather when we left Streitinsk was cold and cloudy, with a raw wind from the north-east. The low, desolate mountains between which we traveled were whitened by a thin film of snow, but the road was bare and dry, and we were soon covered with dust thrown up by the wheels of our vehicle. By the time we had made the first stretch of twenty miles we were cold, tired, and hungry enough to seek rest and refreshment; but the village where we stopped to change horses had a deserted, pestilence-stricken appearance, and we did not even dare to alight from our telega. Cold and hunger were preferable to small-pox.

Our driver tried to reassure us by declaring that the disease was of a mild type, but Mr. Frost expressed a fear that it might resemble Siberian vermin in being comparatively "mild" and harmless to natives but death to foreigners. When we reached the village of Kupon (Ko-po'oon'), at the end of the second stretch, it was beginning to grow dark, the mercury had fallen nearly to zero, and I was so deadly cold that I could hardly move my stiffened and numbed limbs.

"I can't stand this any longer," I said to Mr. Frost. "One might as well get the small-pox as freeze to death. I'm going to knock at the door of this house and ask whether they have the confined disease or not. If they say they have n't, I'm going in to warm myself and get something to eat."

I knocked at the door and it was opened by a pale-faced, weary-looking woman.

"Will you be kind enough to tell me whether you have small-pox in the house?" I inquired.

"Yes," she replied; "we have."

That was enough. I did not wait for particulars, but hastened back to the telega, and said to Mr. Frost that, as we seemed to be between the devil and the deep sea, I was going for the bread-bag. Another disappointment, however, awaited me. The loaves not only were frozen to the consistency of geodes, but were completely covered with dust and sand that had been thrown up by the wheels of the telega, and had sifted through the loose meshes of the homespun linen bag. I gave one of them to Mr. Frost, took another myself, and for three-quarters of an hour we sat there in the deepening twilight, shivering with the cold and gnawing frozen bread, while we waited for horses.

What we had to do was to warm and aerate with imagination the food that we could get, and congratulate ourselves upon having escaped the small-pox. I proposed, however, that we should sit on the bread throughout the next stretch, and thus protect it to some extent from dust and the refrigerating influence of an arctic climate. The proposition was approved and adopted, but the result was merely to exchange one sort of discomfort for another.

Horses were forthcoming at last, and after another long, cold, and dreary ride we reached, about nine o'clock at night, the comfortable station of Shelapuhina (Shell-ah-poo'gin-ah), on the post-road between the town of Nercinsk and the Nercinsk Zavod. I did not feel able to go any farther that day, and as the postmaster assured us that there had

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1 According to Maximof, who had access to the official records, the number of Poles exiled to Siberia between the years 1863 and 1866 was 18,623. Of this number 9199 — including 4252 nobles — were sent to Eastern Siberia and 7109 of them were condemned to penal servitude. Nearly all of the last-named class went to the Nercinsk silver mines. [Maximof, "Siberia and Penal Servitude," Vol. III., pp. 80, 81. St. Petersburg: A. Transhel, 1871.]
never been a case of small-pox in the station, we brought in our baggage, drank tea, and, without removing our clothing, lay down as usual on our sheepskin overcoats upon the floor of the travelers’ room. Monday morning, refreshed by a good night’s sleep and a breakfast of tea, fresh bread, and fat soup, we resumed our journey and rode all day through shallow valleys, between low, treeless, and dreary-looking mountains, towards the Alexandrovski Zavod. The sky was clear and the sunshine inspiring; but the mercury had fallen to fifteen degrees below zero, our horses were white and shaggy with frost, the jolting of our vehicle made it difficult to keep our furs wrapped closely about us, and we suffered severely all day from cold. About half-past six o’clock in the evening we stopped for an hour to drink tea in a village whose name, Kayvikuchigazamurskaya (Kah-vvee’keochee-gaz-ah-moor’skah-yah), seemed to me to contain more letters than the place itself had inhabitants. We met there a young technologist from St. Petersburg, who had been sent to the mines to teach the convicts the use of dynamite, and who was on his way home. He gave us a most gloomy account of life in the silver-mining district. The convict prisons, he said, were “the very worst in the Empire”; the officials were “cruel and incompetent”; the convicts were “ill-treated, beaten by everybody, with or without reason, forced to work
when sick, and killed outright with explosives which the overseers were too ignorant or too careless to handle with proper precautions." He referred to the mining authorities with bitterness, as if his personal relations with them had been unpleasant; and, in view of that fact, it seemed to me prudent to take his statements with some allowance. I give them for what they may be worth in connection with my own later investigations.

Just before midnight on Tuesday we reached the village of Makarov (Mah-kah-ro-vo), 112 miles from Stretinsk, and stopped for the night in what was known as the "zemski kvaritir" (zem'skee kvar-teer'), a log-house occupied by a peasant family whose duty it was to give food and shelter to traveling officials. As soon as possible after drinking tea we went to bed, Mr. Frost lying on the floor, while I stretched myself out on a bench near one of the windows. The room was intolerably hot, the pine logs of the walls in the vicinity of the oven emitted a strong resinous odor, the air was close and heavy, and for a long time I could not get to sleep. I had just lost consciousness, as it seemed to me, when I was aroused by a loud and prolonged "Cock-a-doo-oo-dle-doo-oo!" which proceeded, apparently, from a point distant only a few inches from my head. Upon investigating this singular phenomenon I discovered that the space under the bench upon which I lay had been inclosed with slats and turned into a chicken-coop. A large cock, thinking, doubtless, that it must be near morning, had put his head out and up through the slats, and crowed lustily in my very ear. This performance he repeated, at short intervals, throughout the remainder of the night, so that, although I finally took a position as far away from him as possible on the floor, I could get little rest. I have slept in Siberian cabins with colts, dogs, cattle, and sheep, but one wakeful Shanghai rooster will make more disturbance in a small room at night than a whole ark-load of quadrupeds.

We reached the Alexandrovski Zavod at ten o'clock Tuesday morning and found it to be a dreary, dead-and-alive Siberian village of two or three hundred inhabitants, situated in the middle of a flat, uncultivated steppe, with a rickety, tumble-down bridge in the foreground, and low, bare, snow-covered mountains in the distance. The convict prison, to which we were conducted by the warden, Mr. Fomin, proved to be nothing more than a "bogadiechnia" (bo-gah-dye'm'nya), or infirmary, to which were sent hopelessly disabled and broken-down convicts from other parts of the Nerchinsk mining district. The main building, which is shown on the right of the bridge in the illustration on this page, is a one-story log structure of the usual Kara type, and contained, at the time of our visit, 137 prisoners. It had been standing, the warden said, about half a century, and its sanitary condition, as might have been expected, was bad. The floors were dirty, the air in the cells was heavy and vitiated, and the corridors were filled with the stench of privies and neglected parshas. In two of the kameras (kah'm'er-ahs) we found lunatics living with their sane comrades. The hospital
attached to the prison is small, but it was not overcrowded, and it seemed to me to be clean and in fairly good condition. The coarse linen on the cot beds was dirty, but the fedsher, or hospital-steward, said that this was not his fault. The supply of bed-linen was scanty, and he did the best he could with what was furnished him. He seemed to be very much gratified when I told him that his hospital, although small, impressed me as being the cleanest and best-managed institution of the kind that I had seen in the Trans-Baikal.

After having inspected the prison, Mr. Frost and I returned to Mr. Fomin’s comfortable house, where we met the ispravnik of Nerchinski Zavod, a tall, well-built, good-looking man about forty years of age, who was making a tour of his district. He was very pleasant and communicative, talked with us frankly about the Nerchinsk mines, and said, without hesitation, that the Government’s management of them was “clumsy, incompetent, and wasteful.” He thought that it would be much better for the country if the whole Nerchinsk silver-mining district were thrown open to private enterprise. Many of the engineers in the employ of the Government were either corrupt or incapable, and the mines did not produce half as much silver as they ought. As an illustration of the

1 Nearly all the mines in this part of the Trans-Baikal belong to the Tsar in person and are known as the “cabinet mines.” How the Tsar acquired title to them I do not know. An educated Russian gentleman

existing state of affairs he referred to two gold placers in his district, which had been carefully examined by engineers of the Tsar’s cabinet and had been pronounced worthless. They had subsequently been sold or granted by the Tsar to private individuals, and had then produced 600 puds (poods), or more than 27,000 pounds of pure gold. The ispravnik intimated, although he did not explicitly say, that the Government engineers who examined the placers and declared them worthless were in league with the private individuals who desired to obtain title to them; and that the proceeds of this robbery of the Crown were shared by

the parties to the corrupt agreement. I have no doubt that such was the case. The Tsar himself is constantly robbed and defrauded by the officials to whom he intrusts the management of his Siberian property.

After a good dinner of soup, fish, roasted grouse, vegetables, and compote of fruits, with vodka and two or three kinds of wine, which Mr. Fomin set out in honor of his guests, the ispravnik, the warden, Mr. Frost, and I started with two troikas of horses for the mine of Akatui, which was distant about twelve miles. This mine had long before been abandoned by the Government and had filled with water; but I was particularly anxious to see how it

of my acquaintance began the compilation of a work that he intended to publish abroad under the title, “The Origin of the Wealth of the Romanoffs,” but he was sent to Siberia before he could complete his investigation.
was situated, partly because it had once been the most dreaded place of punishment in all Siberia, and partly because the Government was then making preparations to transport to it all of the political convicts at the mines of Kara. The road ran across the desolate steppe to the foot of a low mountain range six or eight miles north-west of the Zavod, and then entered a shallow valley between rounded and perfectly barren hills, about a thousand feet in height, whose snowy slopes limited the vision in every direction. As we ascended this valley the hills shut it in more and more closely, of a peculiar, half-ruined log building, which had once apparently been covered with stucco or plaster, and through the middle of which ran a high-arched gateway. On the flanks of this structure, and forty or fifty yards from it, stood two weather-beaten prisons of stuccoed brick, one of them roofless, and both gradually falling into ruins. It was evident that these prisons had once been surrounded by a stockade, and that the log building with the arched gateway was the corps-de-garde through which admission was had to the inclosure. The stockade, however, had long

until, a mile and a half or two miles beyond the small village of Akatui, it became a secluded and inexpressibly dreary glen, where there were no signs of life except the stunted and leafless bushes which here and there broke the uniform whiteness of the snow-covered hills. It seemed to me that I had never seen a place so lonely, so cheerless, so isolated from all the living world. It might have been a valley among the arctic hills of Greenland near the Pole.

"Here is the old political prison," said the ispravnik; and as he spoke we stopped in front

before disappeared, the iron gratings had been removed from the windows, and little remained to indicate to a careless observer the real nature of the ruins or the purposes that they had served. I alighted from my telegra and entered the prison on the right of the corps-de-garde, thinking that I might discover a mural inscription left by some lonely and unhappy prisoner, or perhaps find one of the iron rings or staples in the wall to which refractory convicts were chained. Every scrap of iron, however, that could be used elsewhere had been stripped from the building; the
floors had rotted away; the plaster had fallen; and nothing whatever remained to suggest to one's imagination the unwritten history of the gloomy prison, or bear witness to the cruelties and tragedies that had given to Akatui its evil fame. The prison on the left of the corps-de-garde was in a much better state of repair than the other; and would doubtless have repaid a careful examination; but its windows were fastened, its heavy plank doors were secured with padlocks, and the warden said he did not know where the keys were or how we could gain admission. The entrance to the mine of Akatui was on the hillside, five or six hundred feet above the bottom of the valley, and we could just see, in the deepening twilight, the outlines of a small tool-house that stood near the mouth of the shaft. At an earlier hour of the day I should have proposed to visit it; but the darkness of night was already gathering in the valley, the air was bitterly cold, and as the ispravnik and the warden seemed anxious to return to the Zavoï I was obliged to content myself with such an examination of Akatui as could be made in the vicinity of the prison. Lounin (Loonin), one of the December conspirators of 1825, lived and died in penal servitude at this mine, and somewhere in the neighborhood lie buried many of the Polish patriots sent to Akatui after the insurrection of 1863. I was unable, however, to find their graves. The Russian Government does not take pains to perpetuate the memory of the political offenders whom it tortures to death in its Siberian prisons, and over the moldering bodies of most of them there is not so much as a mound. Since my return from Siberia a new prison has been erected in the dreary valley of Akatui, and to it are to be transported all of the political convicts from Kara. The intention of the Government is to pump the water out of the abandoned mine and set the politicals at work in its damp and gloomy galleries. The change, of course, will be for the worse. If there is in Siberia a more lonely, a more cheerless, a more God-forsaken place than Kara, it is the snowy, secluded valley of Akatui.

At a late hour Tuesday night we returned to the Alexandrofski Zavoï, and about noon on Wednesday, after a refreshing night's sleep and a good breakfast, we set out for the mine of Algachi, distant about twenty-two miles. There was little, if any, change in the appearance of the country as we made our way slowly into the silver-mining district. One range of low, barren, round-topped mountains succeeded another, like great ocean swells, with hardly a sign of life or vegetation, except in the shallow haystack-dotted valleys. From the summit of the last divide that we crossed before reaching Algachi, the country, which we could see for thirty miles, looked like a boundless ocean suddenly frozen solid in the midst of a tremendous Cape Horn gale when the seas were running high. Far down in a snowy trough between two of these mighty surges we could just make out a little cluster of unpainted log-houses, which our driver said was the mining village of Algachi. I wondered, as we stopped for a moment on the summit to look at it, whether in all the world one could find a settlement situated in a more dreary and desolate spot. As far as the eye could see there was not a tree, nor a dark object of any kind, to break the ghastly whiteness of the rolling ocean of snowy mountains; and it was not hard to imagine that the village itself was nothing more than a little collection of floating driftwood, caught in the trough of the sea at the moment when the tremendous billows were suddenly turned to snow and ice. We descended the steep slope of the mountain to the village by a stony, zigzag road, entered a long, dirty, straw-littered street between two rows of unpainted wooden houses, passed through several herds of cattle that sheepskin-coated boys were driving in from pasture, and finally stopped, amid a crowd of curious idlers, in front of the "zemski kvartir," or official lodging-house, where we intended to spend the night. It was already five o'clock,—too late for a visit to the prison or an inspection of the mine,—and as soon as we had brought in our baggage and explained to the people of the house who we were, we set about the preparation of supper. Our resources were rather limited, but our peasant hostess furnished a steaming samovar with a little milk and butter, Mr. Frost produced, with triumph, a can of Californian preserved peaches, which he said he had bought in Stretinsk "for a holiday," and we thawed out and toasted on a stick, before a cheerful open fire, some of our frozen, sand-powdered bread. Altogether we made out so good a supper that Mr. Frost's imagination never once suggested to him the desirability of milk-toast, and we went to bed on the floor about nine o'clock—warm, comfortable, and happy.

Wednesday morning, after breakfast, we called upon Mr. Nesterof (Nes'ter-off), the resident mining engineer, and Lieutenant-Colonel Saltstein, the warden of the prison, for the purpose of getting permission to examine and investigate. Mr. Nesterof received us with generous Russian hospitality, insisted upon our taking a supplementary breakfast with him, and filled and refilled our glasses with vodka, cordial, Crimean wine, and Boston canned lemonade, until we feared that we should have to postpone our investigations indefinitely. Lieutenant-Colonel Saltstein, who lived in a
large, comfortable house full of blossoming oleanders, geraniums, and abution, then declared that we must drink another bottle of wine and eat a third breakfast with him, and it was after one o'clock when we finally set out for the prison and the mine.

Lieutenant-Colonel Saltstein was a Finn by birth and spoke Russian badly and with a strong German accent, but he seemed to be honest and trustworthy, and talked to me with great frankness and good-humor.

"I am afraid," he said, as we drove through the village street, "that you will find our prison the worst you have ever seen. It is very old and in bad condition, but I can't do much to improve it. We are too far away from Peter." (St. Petersburg).

I replied reassuringly that I did not think it could be worse than the common-criminal prison at Ust Kara (Oost Kah-rah'), and said that I had had experience enough to understand some of the difficulties in the way of prison reform. He said nothing, but shook his head doubtfully, as if he thought that my experience would not be complete until I had examined the prison at Algachi. We presently stopped in front of a high log stockade, and, alighting from our vehicle, were received by a sentry with presented arms, and then admitted by the officer of the day to a spacious courtyard, in the middle of which stood the prison. It was a long, low, quadrangular building of squared logs, with a plain board roof, a small porch and a door at one end, and a long row of heavily grated windows. It seemed to me at first sight to be falling down. The wall on the side next to us had sunk into the ground until it was apparently two feet or more out of plumb, and, so far as I could see, nothing prevented it from giving way altogether except a row of logs braced against it at nearly a right angle on the side towards which it leaned. All of the walls, at some remote time in the past, had been covered with plaster or stucco and then whitewashed; but this superficial coating had fallen off here and there in patches, giving to the building a most dilapidated appearance. It was, manifestly, a very old prison; but exactly how old, Lieutenant-Colonel Saltstein could not tell me. For aught that he knew to the contrary it might have been standing since the opening of the mine in 1871. We entered the door at one end of the building and found ourselves in a long, dark, foul-smelling corridor, which was lighted only at the ends, and which divided the prison longitudinally into halves. Immediately to the left of the door as we entered was the pharmacy, and next to it a large square kamera used as a hospital or lazaret. In the latter were eight or ten low beds, upon which, under dirty, and in some cases bloody, sheets, were lying eight or ten sick or wounded convicts, whose faces were whiter, more emaciated, and more ghastly than any I had yet seen. Two or three of them, the warden said, had just been torn and shattered by a premature explosion of dynamite in the mine. The atmosphere of the lazaret, polluted by over-respiration, heavy with the fevered breath of the sick, and pervaded by a faint odor of liniment and drugs, was so insufferable that I was glad, after a quick glance about the room, to escape into the corridor. The first regular kamera that we examined was about twenty-two feet square and seven or eight feet high, with two windows, a large brick oven, and a plank sleeping-platform extending around three of its sides. There was no provision for ventilation, and the air was almost, if not quite, as bad as in the worst cells of the prisons at Ust Kara. I could breathe enough of it to sustain life, and that was all. The first thing that particularly attracted my attention, after I entered the kamera, was a broad band of dull red which extended around the dingy, whitewashed walls, just above the sleeping-platform, like a spotted dado of iron rust. Noticing that I was looking at it with curiosity, Lieutenant-Colonel Saltstein remarked, with a half-humorous, half-cynical smile, that the prisoners had been "trying to paint their walls red."

"What is it, any way?" I inquired, and stepping to one end of the sleeping-platform I made a closer examination. The dull red band at once resolved itself into a multitude of contiguous or overlapping blood-stains, with here and there the dried and flattened body of a bed-bug sticking to the whitewash. I had no further difficulty in guessing the nature and significance of the discoloration. The tortured and sleepless prisoners had been "trying to paint their walls red" by crushing bed-bugs with their hands, as high up as they could reach while lying on the nares, and in this way had so stained the dingy whitewash with their own blood that at a little distance there seemed to be a dado of iron rust around the three sides of the kamera where they slept. How many years this had been going on, how many thousand convicts had helped to "paint" those "walls red," I do not know; but I had suffered enough in Siberia myself from vermin fully to understand and appreciate the significance of that dull red band.

It is unnecessary to describe in detail the other kameras of this wretched prison. They were all precisely like the first one except that they differed slightly in dimensions. All were overcrowded, all were swarming with vermin, and the air in them was polluted almost beyond endurance. At the time of our visit the prison
as a whole contained 169 convicts—about twice the number for which there was adequate air space.

At the first favorable opportunity I said to Lieutenant-Colonel Saltshtein: “I cannot understand why you allow such a prison as this to exist. You have here 169 convicts. Only forty or fifty of them work in the mine; the rest lie all day in these foul cells in idleness. Why don’t you take them out to the nearest forest, set them at work cutting timber, make them drag the logs to the village, and have them build a better and larger prison for themselves? They would be glad to do it, the expense would be trifling, and in a few months you would have here a prison fit for a human being to live in.”

“My dear sir,” he replied,1 “I cannot send convicts into the woods without orders to do so. Suppose some of them should escape,—as they probably would,—I should be held responsible and should lose my place. I don’t dare do anything that I have not been ordered to do by the Prison Department. The authorities in St. Petersburg are aware of the condition of this prison. I have reported on it year after year. As much as five years ago, after calling attention as urgently as I dared to the state of affairs, I received orders to consult with the district architect and draw up a plan and estimates for a new prison. I did so; but you know how such things go. Letters are two or three months in reaching St. Petersburg from here. When our plans and estimates finally get there they go to the Prison Department, where they have to take their turn with hundreds of other documents from hundreds of other prisons in all parts of the Empire. Perhaps for months they are not even looked at. Finally they are examined, and some decision is reached with regard to them. If they require an extraordinary expenditure of money they may have to go to the Minister of the Interior and the Minister of Finance, or await the making up of the budget for the next fiscal year. In any event twelve months or more elapse before their fate is finally determined. Somewhere and by somebody objection is almost sure to be made, either to the plans themselves, or to the amount of money that they require, and the documents are returned to us for modification or amendment in accordance with the suggestions of some official who knows little or nothing about our needs and circumstances. Thus, a year or more after the departure for St. Petersburg of our plans and estimates they come back to us for alteration. We alter them in such a way as to meet the views of our superiors and send them to St. Petersburg again. In the mean time the personnel of the Prison Department has perhaps changed. New officials have taken the places of the old; new ideas with regard to prisons and prison reform have become prevalent; and our modified plans and estimates, which would have satisfied the prison authorities of 1880, are found defective by the prison authorities of 1882. After the lapse of another period of sixteen or eighteen months the papers again come back to us for revision and alteration. And so it goes year after year. Plans and estimates for a new prison at the mine of Algachi have been in existence ever since 1880. Meanwhile they have twice been to St. Petersburg and back, and are now there for the third time. What are you going to do about it? Even when the erection of a new prison has been authorized, the work proceeds very slowly. It is now almost ten years since the Government actually began to build a new brick prison at the mine of Gorni Zerentui (Gor’ne Zer-en-too’ce), and the carpenters have n’t even got the roof on, to say nothing about floors."

“But,” I said, “such a system is all wrong; there’s no sense in such management. What is the use of corresponding for years with indifferent officials in St. Petersburg about a matter that might be settled in twenty-four hours by the governor of the province, or even by a petty ispravnik? All over Eastern Siberia I have found miserable, decaying, tumble-down log prisons, and everywhere in such prisons I have seen able-bodied convicts living month after month in absolute idleness. The country is full of trees suitable for timber, you have plenty of labor that costs you nothing, every Russian peasant knows how to put up a log building—why don’t you let your idle convicts build prisons for themselves?”

“We have n’t a strong enough convoy here to guard convicts in the woods,” said the warden; “they would escape.”

“That is no reason,” I replied. “It is easy enough for a government like yours to strengthen the convoy during the time that the timber is being cut; and suppose that a few of the prisoners do escape. From my point of view it would be better to let half of them escape than to keep them shut up in idleness in such a prison as this. Nobody yet has given me a satisfactory explanation of the fact that, although hundreds, if not thousands, of convicts lie idle for months or years in overcrowded and decaying log prisons, no attempt is made to utilize their labor in the erection of larger and better buildings.”

The warden shrugged his shoulders in the significant Russian way, but did not pursue the subject. I have never seen any reason to

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1 I do not pretend to quote Lieutenant-Colonel Saltshtein’s exact words, but I give accurately, I think, the substance of his statements.
IN EAST-SIBERIAN SILVER MINES.

change the opinion that I formed at Algachi with regard to this prison. As a place of confinement, even for the worst class of offenders, it was a disgrace to a civilized state, and the negligence, indifference, and incompetence shown by the Government in dealing with its admitted evils were absolutely inexcusable.

After having thanked Lieutenant-Colonel Saltstein for his hospitality and for his courtesy in showing us the prison, Mr. Frost and I set out, with Mr. Nesterof, for the Algachi mine, which is situated about a mile from the village, on the northern slope of one of the great mountain waves that form the valley. The day was clear and pleasant, but very cold; the ground was everywhere covered with snow, and a most dreary arctic landscape was presented to us as we rode from the prison down into the valley. A few hundred yards from the village our attention was attracted to half a dozen dark objects — apparently animals of some kind — on the white slope of the adjacent hill.

"I verily believe," said Mr. Frost, after a prolonged stare at them, "that they 're camels!"

"Camels!" I exclaimed incredulously. "Who ever heard of camels at the mines of Nerchinsk? and how could they live in such a climate as this?"

As we drew nearer to them, however, it became evident that camels they were. To whom they belonged, whence they had come, and whither they were going I do not know; but it seemed strange enough to see a herd of great double-humped Bactrian camels nibbling the tufts of frost-bitten grass that appeared here and there above the snow in the foreground of that bleak, desolate, arctic landscape.

If we had expected to find at the mine of Algachi the buildings, the steam-engines, the hoisting machinery, and the stamp-mills that would have marked the location of an American mine, we should have been greatly disappointed. The mining-plant consisted of a powder-magazine, a roofed-over cellar used for the storage of dynamite, a shanty or two, and a small log tool-house which served also as a smithy, a repair shop, a crushing and sorting room, and a guard-house. In the building last mentioned half a dozen convicts, including two or three women, were breaking up ore with short hammers and sorting it into piles, an overseer was sharpening a drill on an old worn grindstone, and three or four soldiers were lounging on a low bench, over which, in a rack against the wall, hung their Berdan rifles. It was, without exception, the most feeble exhibition of mining activity that I had ever witnessed.

Mr. Nesterof did not seem inclined to go down into the mine with us, but turned us over to one of the convicts, who, he said, would show us all that there was to be seen. Meanwhile he himself would attend to some matters of business and await our reappearance. Our guide gave to each of us an unsheltered tallow candle, with a piece of paper wrapped around it, provided himself with a similar light, thrust half a dozen dynamite cartridges about as big as cannon firecrackers into the breast of his sheepskin coat in such a manner as to leave the long white fuses hanging out, and said that he was ready. We followed him out of the tool-house, ascended the mountain-side about a hundred yards, and entered through a narrow wooden door a low horizontal gallery the sides of which were timbered and upon whose inclined floor had been laid a rude wooden tramway. Stopping for a moment just inside the door to light our candles, we groped our way in a half-crouching attitude along the low gallery, our convict guide stumbling now and then over the loose planks in such a way as to suggest to my mind the idea that he would eventually fall down, bring the flame of his light into contact with the dangling fuses of his dynamite cartridges, and blow us all out of the tunnel like wads from a Fourth-of-July cannon. About 150 feet from the entrance we came to the black, unguarded mouth of the main shaft, out of which projected the end of a worn, icy ladder. Down this our guide climbed with practiced ease, shouting back at us a warning to be careful where we stepped, since some of the rungs were missing and the ladders were set diagonally parallel with one another at such an angle as to necessitate a long stride across the shaft from the bottom of one to the top of the next. We were not half as much afraid, however, of losing our foothold as we were of being blown into fragments by an accidental explosion of his dynamite cartridges. I still had a vivid remembrance of the ghastly forms lying under the bloody sheets in the prison hospital, and every time I looked down and saw the guide's candle swaying back and forth in close proximity to the white fuses that hung out of the breast of his sheepskin coat I could not help imagining the appearance that I should present when laid out for surgical treatment, or perhaps for burial, on one of those dirty prison cots.

As we slowly descended into the depths of the mine, sometimes on ladders and sometimes on slippery notched logs, I became conscious of a peculiar, unpleasant odor, which I presumed to be due to a recent explosion of dynamite in one of the adjacent galleries. Our candles began to burn blue and finally went out altogether, matches could hardly be made to light, and we found ourselves clinging to a
worn ladder, in total darkness, over a bottomless abyss, wondering how long air that would not support combustion would support life. We did not feel any sensation of oppression, nor did we seem to be in any immediate danger of asphyxiation; but there was evidently very little of oxygen in the air, and we were not a little relieved when, by dint of striking innumerable matches, we succeeded in grooping our way down two or three more ladders to the mouth of a gallery where our candles would again burn. Along this gallery we proceeded for a hundred yards or more, clambering here and there over piles of glittering ore which convicts were carrying on small hand-barrow to one of the hoisting shafts. The temperature of the mine seemed to be everywhere below the freezing point, and in many places the walls and roof were thickly incrusted with frost-crystals, which sparkled in the candlelight as if the gallery were lined with gems. After wandering about hither and thither in a maze of low, narrow passages, we came to another shaft, and descended another series of worn, icy ladders to the deepest part of the mine. Here six or eight men were at work getting out ore and drilling holes in the rock for the insertion of blasting cartridges. Their tools and appliances were of the rudest, most primitive description, and the way in which the work was being carried on would have brought a contemptuous smile to the face of a Nevada miner. The air almost everywhere on the lower level had been exhausted of its oxygen and vitiated by explosives to such an extent that our candles went out almost as fast as we could relight them; but no adequate provision had been made for renewing the air supply. The only ventilating apparatus in use was a circular iron fan, or blower, which a single convict turned by means of a clumsy wooden crank. It made a loud rumbling noise that could be heard all over the lower part of the mine, but, as there were no pipes to it or from it, it was absolutely useless. It merely agitated the impure air a little in the immediate vicinity, and so far as desirable results were concerned the convict who operated it might as well have turned a grindstone.
After wandering about the mine for half an hour, examining at various points the silver-bearing veins, collecting specimens of the ore, and watching the work of the sheepskin-coated convicts, we retraced our steps to the bottom of the main shaft, laboriously climbed up thirty or forty ladders and notched logs to the upper level, and returned to the tool-house.

A cold, piercing wind was blowing across the desolate mountain-side, and ten or fifteen shivering convicts who had finished their day's task and were standing in a group near the tool-house asked permission of Mr. Nesterof to return to their prison, where they might at least keep warm. He told them rather roughly that the day's output of ore had not all been "sorted," and that they must wait. There was no place where they could go for shelter; they had had nothing to eat since morning; and for an hour and a half or more they were compelled to stand out-of-doors on the snow, exposed to a piercing wind, in a temperature below zero, while the "sorters" in the tool-house were finishing their work. It was, perhaps, a trivial thing, but it showed a hardness and indifference to suffering on the part of the mining officials that went far to confirm the statements made to us by the young technologist from St. Petersburg. Mr. Nesterof seemed to be irritated by the very reasonable request of the half-frozen convicts as if it was an evidence of impudence and insubordination.

After watching for a few moments the breaking up and sorting of the ore in the tool-house we drove to the Pokroński (Po-krof'skee) mine, which was situated on the side of another bare mountain ridge about four miles farther to the north-westward. The country between the two mines was as dreary and desolate as any we had yet traversed. Not a tree nor a bush
was to be seen in any direction, and the rolling, snow-clad mountains suggested in general contour the immense surges and mounds of water raised by a hurricane at sea. The buildings at the entrance to the mine consisted of a tool-house like that at the mine of Alga-

chi, a magazine or storehouse, a few A-shaped shanties, in which lived the convicts of the free command, and two small prisons, one of which all and the shaft and galleries were dripping with moisture. The air in the Pokrofski mine seemed to be pure and our candles everywhere burned freely. Only a few men were at work, and they seemed to be engaged in hauling up ore in small buckets by means of a cable and a primitive hand-windlass.

After climbing up and down slippery ladders until I was covered with mud, and walking in

was apparently new. On the summit of a rocky ridge just over these buildings were two sentry-boxes, in each of which stood an armed soldier on guard. Mr. Frost, who was very tired, did not care to inspect any more mines, and taking a position on the snow near the tool-house he proceeded, with hands encased in thick gloves, to make a sketch of the scene, while Mr. Nesterof and I, under the guidance of a convict, descended the main shaft. The Pokrofski mine did not differ essentially from that of Algachi, except that it was not so extensive nor so deep. The air in it was damp and comparatively warm, water dripped from the roofs of the galleries into little pools here and there on the floors, and the ladders in the main shaft were slippery with mud. Why it should thaw in this mine and freeze in the mine of Algachi, only four miles away, I could not understand, nor did Mr. Nesterof seem to be able to give me a satisfactory explanation. In the mine of Algachi there was no water and the galleries for seventy-five or a hundred feet together were lined with frost-crystals and ice. In the mine of Pokrofski there was no ice at a bent posture through low galleries until my back ached, I told Mr. Nesterof that I was satisfied, and we returned, tired and bathed in perspiration, to the tool-house. The convict who had accompanied us through the mine blew out his tallow candle, and without taking the trouble completely to extinguish the wick, laid it, still all aglow, in a small wooden box, which contained among other things a dynamite cartridge big enough to blow the whole tool-house into the air. I did not regard myself as naturally timorous or nervous, but when the convict shut down the lid of that box over the long glowing wick of a tallow candle and a dynamite cartridge with fuse attached, I had business out-of-doors. When I thought time enough had elapsed for the wick to go out, I reentered the house, washed my muddy hands in the grindstone trough, inspected Mr. Frost's.
sketches, and asked Mr. Nesterof a long series of questions about the mines.

The silver-bearing veins or lodes in the mines of Algachi and Pokrofski vary in thickness from 12 or 14 inches to 5 or 6 feet. The ore, which has a bright glittering appearance, consists of silver and lead in the proportion of about 1 to 100, with a greater or less admixture of what the Russian miners call “zinkov ob-manka” (zink-o’ee ob-man’kah) or “zinc deceit.” As the metal last named is much less fusible than lead, it becomes very troublesome in the reducing furnaces, and, so far as possible, the miners get rid of it by breaking up the ore into small pieces and discarding that part of it in which the zinc predominates. The work of crushing and sorting is performed by the weaker male convicts and the women, and is regarded as the lightest form of hard labor. It is about equivalent to breaking stones on the road with a heavy, short-handled hammer. Out of the mines of Algachi and Pokrofski, which are the most productive in the district, there are taken every year nearly 400 short tons of ore, which, when reduced, yields about 1440 pounds of silver, valued at $20,000, and 144,000 pounds of lead. The lead, owing to the expense of transportation to a market, is virtually worthless, and at the time of our visit nearly 2000 tons of it were lying at the Kutomarski (Kooto-mar’skee) Zavod, where the ore from these mines for many years has been reduced. The average number of convicts employed in the two mines is 220, and each of them gets out 3600 pounds of ore a year, or about 10 pounds a day. These figures alone are enough to show how feebly and inefficiently the mines are worked. Until the early part of 1885 the convicts were sent down the shafts every day in the year with the exception of a few great church holy days, but since that time they have been allowed two days’ rest a month, viz., the 1st and the 15th. They work by stents, or “tasks,” which can be completed by able-bodied men in from eight to ten hours. They receive, in quantity and kind, substantially the same food and clothing that are given to the hard-labor convicts at the mines of Kara, and their maintenance costs the Government about $30 a year, or a little less than 11 cents a day per capita.

Regarded as places of punishment the Nerchinsk mines did not seem to me so terrible as they are often represented to be. It is not very pleasant, of course, to work eight or ten hours every day in a damp or icy gallery 300 feet underground; but even such employment is, I think, less prejudicial to health than unbroken confinement in a dirty, overcrowded, and foul-smelling convict prison. The mines are badly ventilated and the gases liberated in them by the explosives used are doubtless injurious; but there are no deadly fumes or exhalations from poisonous ores like cinnabar to affect the health of the laborers, and experience seems to show that the death rate is no higher among the convicts who go regularly every day into the mines than among those who lie idle day after day in the vitiated air of the prison kitchens. If I were permitted to make choice between complete idleness in such a place as that of Algachi or Ust Kara and regular daily labor in the mines, I should, without hesitation, choose the latter. So far as I could ascertain by careful inquiry among the convicts themselves, no one has ever been compelled to live and sleep in these mines day and night, and I believe that all the stories to that effect published from time to time are wholly imaginary and fictitious. The working force may occasionally have been divided into day and night gangs, or shifts, sent into the mines alternately, but the same men have never been required to remain there continuously for twenty-four hours. At the present time there is no night work and all of the convicts return to their prisons before dark, or in the short days of mid-winter very soon after dark. I do not wish to be understood as saying that the life of Russian convicts at the Nerchinsk silver mines is an easy one, or that they do not suffer. I can hardly imagine a more terrible and hopeless existence than that of a man who works all day in one of the damp, muddy galleries of the Pokrofski mine, and goes back at night to a close, foul, vermin-infested prison like that of Algachi. It is worse than the life of any parish dog, but at the same time it is not the sensationally terrible life of the fictitious convict described by Mr. Grenville Murray—the convict who lives night and day underground, sleeps in a rocky niche, toils in hopeless misery under the lash of a pitiless overseer, and is slowly poisoned to death by the fumes of quicksilver. Such things may be effective in a sensational drama, but they are not true. The worst feature of penal servitude in Siberia is not hard labor in the mines; it is the condition of the prisons.

When Mr. Frost, Mr. Nesterof, and I returned from the Pokrofski mine to the village of Algachi it was beginning to grow dark, and the village girls were watering their cows and filling their icy buckets at a curbed spring or well near the zemski kvartir. We drove to the house of Mr. Nesterof for dinner, spent an hour or two in conversation, and devoted the remainder of the evening to writing up note-books and completing sketches.

Friday morning, November 20, we bade Mr. Nesterof and Lieutenant-Colonel Saltstein good-bye, and set out with two horses, a small uncomfortable telegra, and a fresh supply of
provisions for the village and mine of Kadaïya (Kah-dya'ya), distant from Algachi about ninety miles. The weather was still very cold, the road ran through the same dreary, desolate sea of snow-covered mountains that surrounds this mine of Algachi, and for two days we neither saw nor heard anything of particular interest. At half-past eleven o'clock Friday night, tired, hungry, and half-frozen, we reached the village of Dono (Doh-noh'), forty-six miles from Algachi; Saturday afternoon we passed the Kutomarski Zavod, where we stopped for two or three hours to examine the smelting works; and early Sunday morning, after having traveled nearly all night at the expense of not a little suffering from cold and hunger, we finally reached the miserable, forlorn mining village of Kadaïya, found the zemski kwartir, and as soon as we could warm and refresh ourselves a little with tea went promptly to bed—Mr. Frost on top of the large brick oven, and I on the floor.

About ten o'clock Sunday forenoon we got up, somewhat rested and refreshed, and after a hasty and rather unsatisfactory breakfast of bread and tea went out into the broad, snowy, and deserted street of the village—Mr. Frost to make a sketch, and I to find the ustavshchik (oo-stav'shchik), or officer in charge of the mine.

The Kadaïnski mine, which is one of the oldest and most extensive silver mines in the Nerchinsk district, is situated on the side of a bold, steep, round-topped mountain about 300 yards from the village and 200 or 300 feet above it. It has been worked for more than a century and was at one time very productive; but the richest veins of ore in it have been exhausted, and it does not now yield nearly as much silver as the Pokrofo'ski mine or the mine of Algachi.

The ustavshchik, whom I found at work in a log-house near the mine, and who seemed to be an intelligent and well-educated Siberian peasant, received me pleasantly but with some surprise, read my letters of introduction, expressed his willingness to show me everything that I desired to see, and in ten minutes we were on our way to the mine. In the tool-house, which stood over the mouth of the main shaft, I put on the outer dress of one of the convicts,—which I soon found to be full of vermin,—the ustavshchik donned a long, mud-stained khalat, a battered uniform cap, and a pair of heavy leather mittens, and providing ourselves with tallow candles we lowered ourselves into the black mouth of the Voskresenski (Voss-kre-sen'skee) or Ascension shaft. After descending ten or twelve ladders, we reached, at a depth of about 120 feet, a spacious chamber from which radiated three or four horizontal galleries much wider and higher than any that I had seen in the mines of Pokrofo'ski and Algachi. The floor of the chamber was covered with water to a depth of three or four inches and moisture was
dripping everywhere from the walls. At a depth of 200 feet we reached another landing and entered the mouth of a very wide and high gallery leading away into the heart of the mountain. There had just been a blast somewhere in this part of the mine, and as we proceeded through the gallery filled with powder smoke I could see absolutely nothing except the faint glimmer of the ustavshchik’s candle in the mist ahead. Guided by that, I stumbled along the uneven floor of the gallery, stepping—some upward, some horizontally, and some downward at a steep angle into an abyss of darkness. It was evident that the ore had been followed wherever it went and scooped out in the cheapest and most expeditious manner possible, without regard to safety, and with little attention to timbering. It was the most dangerous-looking place I had ever seen.

From these great caverns, of the time of Catherine II., we proceeded to the deepest part of the mine by descending a shaft cut through now and then into a hole or splashing into a pool of water, and imagining for an instant that I had tumbled into an abandoned shaft. In one place we passed a very extensive excavation, out of which the ustavshchik said an immense body of ore had been taken as long ago as the middle of the last century. An immense area of roof had been left supported by quadrangular piles of crossed logs, which were so black from lapse of time that they were hardly recognizable as wood, and in many cases so soft that I could take pinches of rotten fiber out of them with my fingers. This part of the mine the ustavshchik said was regarded as very dangerous, and he did not think it prudent to go any farther. From the point where we turned to retrace our steps back, irregular caverns could still be seen stretching away in every direction the solid rock at an angle of about forty-five degrees and not provided with ladders. A heavy and rusty chain had been festooned against one side by means of staples driven into holes drilled in the rock, and clinging to this chain we cautiously descended the shaft with a stream of water running ankle-deep around our legs and tumbling in cascades into the depths of the mine. On the lowest level that we reached a party of convicts was at work blasting out a new gallery with dynamite. A perpendicular climb of 300 or 400 feet up slippery ladders in another shaft brought us once more to the surface, and when, wet, muddy, and breathless, I stepped from the end of the last ladder upon the floor of the toolhouse I was so exhausted that I could hardly stand on my feet.

George Kennan.