

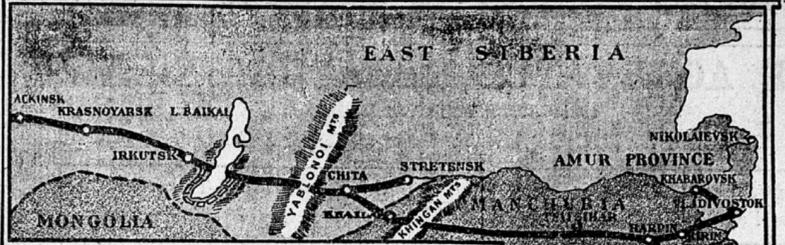
From St. Petersburg to Port Arthur---The Great 5,000-Mile Artery Across the Russian Empire



The railway runs 1,100 miles across the Siberian plateau before entering the Altai region and ascending to the level of Lake Baikal (1,570 feet). East of the lake the line winds thru the Yablonoi hills, reaching an altitude of 3,511 feet. The branch line to the Manchurian frontier runs across rolling prairie. The Chinese Eastern railway, after passing Khabarovsk, crosses the Khabugan range



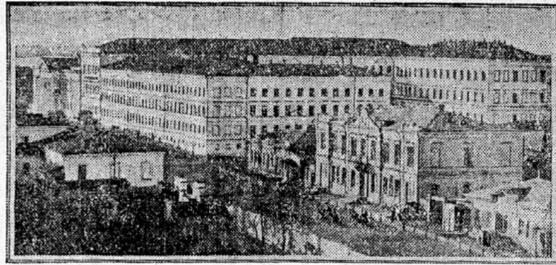
A VITAL LINK IN THE RUSSIAN CHAIN ACROSS ASIA. The ice-breaker ferry across Lake Baikal, which unites the two lake-shore termini of the railway.



By a zigzag railway pending the completion of the tunnel, and descending to the upper plateau follows the Valley of the Yal and crosses the Nonni fifteen miles south of the New Tishlar, then passes along the frontiers of Manchuria and Mongolia until the Saugari is crossed near Hainin or Khabarovsk. Here the line bifurcates. The southern branch runs 407 miles by Mukden to Port Arthur, with a branch to Niu-Chuang, whence Peking will be reached via Tientsin.



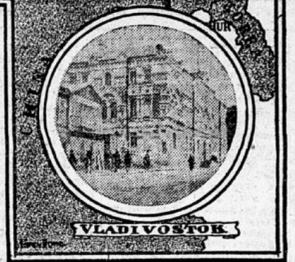
GATSCHINA STATION
THE HEART OF THE RUSSIAN EMPIRE. The Russian railway joins the Siberian at the Ural Mountain "divide," the highest point on the line. The little view given here shows Gatschina station, just outside St. Petersburg. This station is a well-known point of departure, after leaving St. Petersburg the railway crosses the Baltic steppe, which is so flat that there is no tunnel before reaching the Ural. Here the line runs thru a tunnel 840 yards in length.



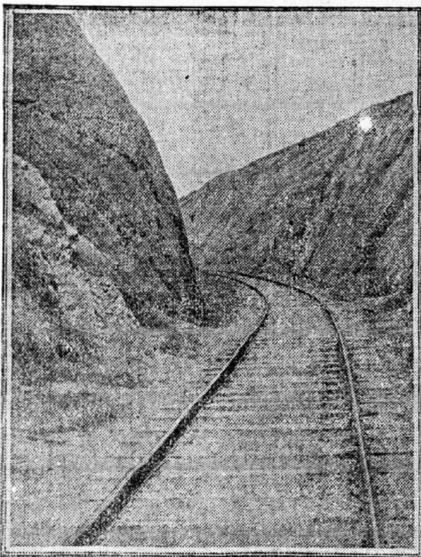
THE RUSSIAN MILITARY BARRACKS AT OMSK, WESTERN SIBERIA.



THE ICE ON THE RIVER AT KRASNOYARSK, EASTERN SIBERIA.



VLADIVOSTOK
EXTREMITIES OF THE RAILROAD ARTERY. The ends of the railway touch the sea at Vladivostok (Dominator of the East) and at Port Arthur. The view given here shows the post and telegraph offices at Vladivostok. The Chinese railway directors wish to connect Vladivostok with the Manchurian railway. The Chinese Eastern railway, after crossing the Liao river and join the Russian line near Mukden. The main line continues to Vladivostok, 480 miles, passing thru a tunnel 400 yards long on the Siberian frontier.



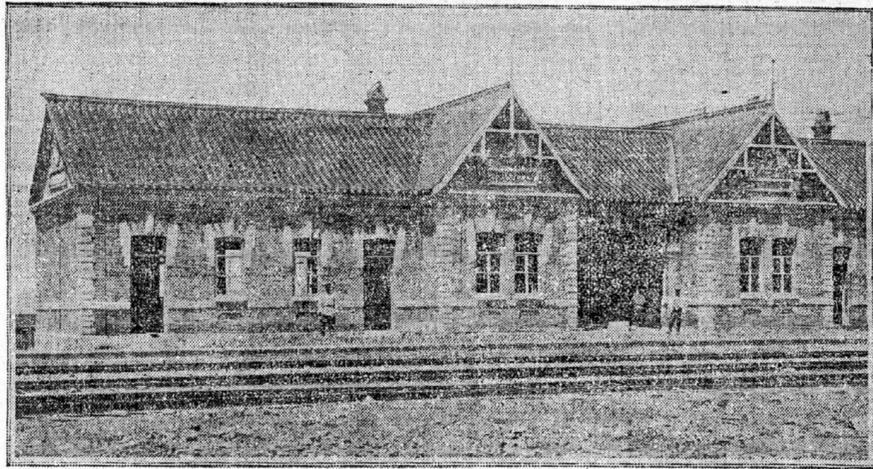
A CUTTING ON THE MANCHURIAN RAILWAY. 48-lbs a yard, and they are very good, but the rails are too light (42 to 48 lbs) on many sections. It is simply called to light sleepers, which, when the material of the rail is embedded in dry sand. "Wirt Gerrard, in 'Greater Russia'."

POINTS ABOUT THE GREAT RUSSIAN RAILWAY.

Number of stations on complete line	390
Staff on railway	14,728
Number of locomotives	751
Number of passenger cars	548
Number of freight cars	7,743
Number of mail cars	85
Miles of line in Siberia	8,559
Miles of line in Manchuria	1,444

POINTS ABOUT THE GREAT RUSSIAN RAILWAY.

Freight traffic in 1899, stated in tons	639,000
Moscow to Irkutsk	8 days
Irkutsk to Manchuria, (771 miles rail and fifty miles ferry)	74 hours
Across Manchuria (940 miles) to Port Arthur	77 hours
Former east terminus for Vladivostok	Stretensk
West terminus of Vladivostok railway	Khabarovsk
River steamer route, Khabarovsk to Stretensk	3,240 miles
Vladivostok to London by rail (7,002 miles)	17 1/2 days



THE SOLIDLY BUILT RAILWAY STATIONS ON THE MANCHURIAN RAILWAY. THE STATION AT KINCHOW.



THE HEAVY LOCOMOTIVES ON THE MANCHURIAN SECTION. The gage is five feet and consequently the locomotives and rolling stock are heavier than in western Europe. There are frequent subsidence due to the nature of the ground and lack of sufficient margin in designing.

IS SIBERIAN ROAD EQUAL TO THE TASK?

Railroad Men Believe It Cannot Land 200,000 Troops at the Seat of War in Less Than Six Months—Some of the Conditions Which Prevail Along the Line of the Trans-Siberian Road—A Canadian Railroad Man's Statement.

Russia faces a tremendous problem in the need of getting her forces from home to the seat of war and of getting them there quickly. Railroad men in Minneapolis and the northwest believe she will not be able to solve it for six months. That is, they believe that it will be six months instead of a few weeks before the car can get an army of 200,000 men into Manchuria. In the solving of the problem, too, there will be terrible hardships to be undergone by the soldiers and animals. The Trans-Siberian railway is poorly equipped for such a long line. It is laid for thousands of miles with rails weighing from forty-two to forty-eight pounds only to the yard; the roadbed is poor; there is a long break at Lake Baikal, which in summer has to be crossed by slow boats and in winter on the ice; the problem of providing fuel so far from bases of supplies as large portions of the line are is a serious one; the weather at that extreme winter; trains at best cannot run more than fifteen miles an hour; the line is single track.

The Siberian road has on its staff 14,728 persons, 1,000 locomotives, 548 passenger cars, 7,743 freight cars and 23 mail cars. It is in part a light railway, the rails weighing from forty-two to forty-eight pounds a yard west of Lake Baikal and from seventy to eighty-pound steel east of that lake. Some rails are of soft steel and are barely able to stand the weight of a slow-moving train. Short trains with a light load like the Siberian express may be able to average twenty miles an hour, while heavy trains rattle along like traction engines at not over twelve miles an hour. All these conditions being considered, one is compelled to place a good deal of confidence in the judgment of the railroad men.

The views held by the Minneapolis railroad men are the same as those of a leading Canadian railroad man. The latter, however, has an excellent basis of comparison of conditions in the Canadian Pacific as it was some years ago. He states his views in part thus:

"As things stand at present, with Japan in command of the sea, the most interesting problem is, what Russia will be able to do with the Trans-Siberian railway. There do not seem to be more than 15,000 or 100,000 Russians in Manchuria at present. Japan can put several hundred thousand fully equipped fighting men in the field at almost any time. Can Russia supplement her existing army, by means of the Trans-Siberian, with sufficient dispatch to be in a position to meet Japan upon anything like an equal numerical footing?"

Single Track and Light Rails.

"Now, the Trans-Siberian is a single-track road, which means constant delays in the passing of trains east and west, and the light rail means that trains on the Trans-Siberian must not only travel slowly, but must be lightly constructed and carry fewer men a car than our Canadian trains. Canadian railways, with their heavier equipment, were able to carry only

forty-five men to a car of the South African contingent. If the Trans-Siberian carries forty men to a car the road will do remarkably well. I should call that an outside figure.

"Then it must be remembered that Russia is not a railway country, and the government may have difficulty in securing an ample supply of cars. While the authorities will undoubtedly commandeer everything in sight in the way of rolling stock, so many cars will be in use for army purposes from one point in Russia to another, carrying troops and supplies to the shipping point, which will probably be Moscow, that it will be hard to get sufficient cars for rapid transport across Siberia. Between 2,000 to 3,500 cars would be required for continuous transport.

2,000 Men a Day the Limit.

"I do not believe that Russia, despite her feverish haste, can send more than five trains per day from the European end. Say she dispatches 400 men per train, which is about the utmost she could do, she would be sending to the front about 2,000 men a day. This would be remarkably fine work, and makes no allowance for the inevitable delays, breakdowns, etc., incident to such an exceptional strain upon the road.

"Taking, however, the figure at 2,000 men a day, it will be fully a month before the number can begin to be laid down in Manchuria. Of course Russia may have been, and doubtless has been, rushing men to the front for many weeks past. But in any event their progress would be slow, as they would have to march some fifty miles over the ice of Lake Baikal. In summer this lake is crossed by a railway ferry. The Russians are now laying rails over the ice, but it will be twenty-five or thirty days before the work can be completed. A railroad over ice has to be reinforced with heavy timbers, etc., making a bed fifteen to twenty feet wide, and not more than two miles a day of rails can be laid under the best of circumstances, and Russia out on the wastes of Siberia will be working under anything but favorable circumstances.

Trains Must Run Slow.

"It should be included to estimate the average rate of speed of troop trains over the Trans-Siberian as not more than fifteen miles an hour, and that would be to a large extent temporary. Allowance must be made also for the many delays caused by sidetracking, the occupation of the track by ammunition and supply trains, and perhaps occasional wrecks. It will take from eighteen to twenty days for a train to travel from Moscow to the base of operations in Manchuria—a distance of about 5,500 miles. It is still winter in Siberia, and spring comes later there than in Canada, so that for several months yet the Russian troops must labor under all the disadvantages of a winter campaign, and the difficulties and delays of winter travel.

The Fuel Problem.

"Another serious difficulty is the fuel

problem. A railway which sends one train per day over a line of over 5,000 miles, has no small trouble in keeping its divisional points supplied with coal. I am not certain whether the Russian roads use coal or wood, but in either case the Siberian railway will have trouble in keeping a sufficient supply of fuel to feed the many engines. If the engines burn coal, the problem will be a most serious one, and will make the running of troop trains very slow indeed. If coal has to be hauled to supply the divisional points, it will absorb from 100 to 150 locomotives for that service alone, and the troop trains will be further delayed, as coal trains will necessarily take precedence. It is possible, though altogether likely, that Russia may already have large supplies of coal already stored at divisional points, but even so, the immense traffic incidental to the war will soon eat up the biggest sort of a supply. It would take at least 250 tons of coal to carry an engine from Europe to Manchuria and back.

Menace of Spring Floods.

"Russia will also have to face serious spring floods, in a few months winter will be breaking up, and there will be spring floods all over Siberia, which will seriously affect the many temporary bridges and trestles incidental to a new road.

"Taking the outside figures for the capacity of the trains, the quantity of rolling stock available, the speed attainable, etc., and deducting only the minimum for delays and accidents of every kind, I cannot see how Russia can materially increase her forces in Manchuria in the next few months, or be in any position to meet the armies that Japan is throwing into Korea in a continuous stream. One other point must not be lost sight of, in comparing the opposing armies, and that is that while the Japanese soldiers land in Korea after a few hours' sail, fresh and fit in every way, the Russian troops will land in Manchuria after three weeks' hard traveling by train, under exceptionally uncomfortable conditions, and will be soft and unfit for immediate service."

PERCIVAL LOWELL ON THE FAR EASTERN SITUATION

Japan in Arms Merely to Make Russia Keep Her Promises—Scenes and Incidents of Life in Korea.

Percival Lowell in the Churchman.

Korea is put into the position she now occupies by the lust for land. Partly from necessity and partly from imitativeness, the various nations are now seeking to enlarge what they call their spheres of influence. Modern man finds diplomacy less costly than war and establishes what is euphemistically known as a protectorate, a term definable as an ardent desire to protect what needs protection only against the protector. It seems incredible that this can take in anybody and yet it does.

Russia is the foremost exponent of this pleasing duplicity. She is past master in the art of promising and then of keeping not her promises but others' land, because she is less hampered than any other power with an inconvenient sense of honesty. To more civilized nations there is a crippling regard for one's word, but Russia has no such conscientious scruples, which I take to be merely a result of her semi-civilized condition.

Japan, on the other hand, has for so long played the protagonist in the far eastern drama of which Korea furnished the stage setting, that she has come to look upon it as her right to take this part. So far as it lies between Japan and Russia, Japan is clearly in the right. She is only oblig-

ing Russia to keep her word. And it is rather pitiable than otherwise that the rest of the world has not the astuteness to foresee that to back her up



SEOUL—MAIN GATE TO THE PALACE. "Thru Korea the Arts of China Passed on to Japan."

not woman, was the important figure in social life; and they worshipped their ancestors, not American-wise, their descendants. They wrote backwards; they read backwards; their thoughts sped backwards. The past was their paragon, not the future. Confucius was the guiding star of their lives, and the Confucian ethics their only law. What they had learned had been an heirloom from the far past, and they had never deemed anything worth the acquiring since. The Chinese classics were to them the road alike to pleasure, poise and fame. To become a bachelor of arts was the goal to which all the higher classes should, and any of the lower might aspire. The present accurate knowledge of printed past inaccuracies known there as learning was to them the only good and led directly to the goods of others. For a bachelor's degree was the stepping stone to a magistracy, and a magistracy meant any amount of material acquisitions. Once seated in that chair, a man could squeeze the people at his pleasure. Which is the reason the people are so poor.

To be a bachelor of anything but arts, however, is a thing a Korean hastens to avoid. It is not that he is by nature amorally inclined; on the contrary. He enters matrimony at the earliest possible moment, but this is not because he falls in love, or even to make an ambitious match, but simply and solely to be married. One might imagine from this that marriages in Korea were invariably happy, and that in yet another manner Seoul were indeed the happy valley of Rasselas. Unfortunately, it is only

their kingdom the Land of the Morning Calm. And the country and its people fit both adjective and noun. Change has passed them by, and time itself stood still. Twenty years ago, when I was in Korea as counselor and foreign secretary to the Korean special mission to the United States, the Koreans shook their own hands, not yours, on making your acquaintance; they took off their boots, not their hats, on entering your house; man,

for his own social position that he takes the step. Hitherto he has worn his hair in a braid down his back, and to put it up man-fashion he must take to himself a spouse. In short, he becomes a man only by marriage, and can only thus enter upon civil rights. Ambition found its place in political intrigue. At the slightest pretext one party rose against the other, and, if successful, massacred its opponents to a man. The rumors reaching us now of things in Seoul are that they at any moment be expected of the land which values peace and seclusion above any country on earth.

REAL HERO

Was This Miner, Who Gave His Arm to Save His Friends, New York Tribune.

William S. Cronch, who registers from Tacoma, Wash., is staying at the Grand hotel, the subject of heroic action in the presence of disaster being under discussion in the hotel lobby a few days ago. Mr. Cronch contributed the details of an incident that came under his observation. "It was about three years ago," said he, "that three men were engaged in sinking a shaft on a mining claim in a district north of Spokane. Two men were at the bottom of the shaft, while the third was at a windlass used to hoist the ore. The windlass man had turned the crank until the bucket, weighing, with its contents, 250 pounds, had come to above the opening, and while he was about to swing it out to the surface the windlass crank handle broke and in an instant the bucket was started downward with seeming promise of certain death to his two trustful 'partners' at the bottom of the shaft. 'But the man at the windlass threw the bucket a crude device intended to arrest the progress of the whirling shaft and unwinding rope. It snapped and broke—it had failed, and at the crucial instant when the men at the bottom of the shaft must have felt the specter of approaching death near enough to whisper their mortal sentence, the man at the windlass thrust his fist into the whirling cogs, that mined it into pulp and continued their revolutions. He was willing to give his arm if the sacrifice would save his comrades, and he fed it to the heartless teeth inch by inch until he had thrust his shoulder against the biting iron and stopped the windlass. The mining boss saw the closing scene of the heroic drama, and in tones of earnest sympathy he said, as he pointed to the bleeding wreckage of an arm and a shortened shoulder blade: 'Jack, that's too bad.' And then, stung by his words to the self-forgetfulness of his heroism in action, the miner answered: 'Oh, that is all right if only I saved the boys.' He had saved them, and such is a sample of some of the men to be met now and then in the humble walks of western life. Some have achieved less whose praises have been sounded long and loud."

SEEING THINGS.

Philadelphia Press.

"I don't see the sense in speaking of a man as 'blind drunk.'"

"Why not?"

"It simply means he's so very, very drunk that he can't see."

"But no man is ever so drunk that he can't see. If he's very, very drunk, he can see snakes."

HEARTLESS.

Washington Star.

"Johnny is a very imaginative child," said the fond mother. "But Willie is more practical. When Willie decides that he wants anything, he sets out to get it."

"I have noticed that difference," answered the unfeeling bachelor. "Johnny snags I want to be an angel, but Willie smokes cigarettes and states on this ice."

Elbow Fort, on Han River, Guarding the Approach to Seoul.