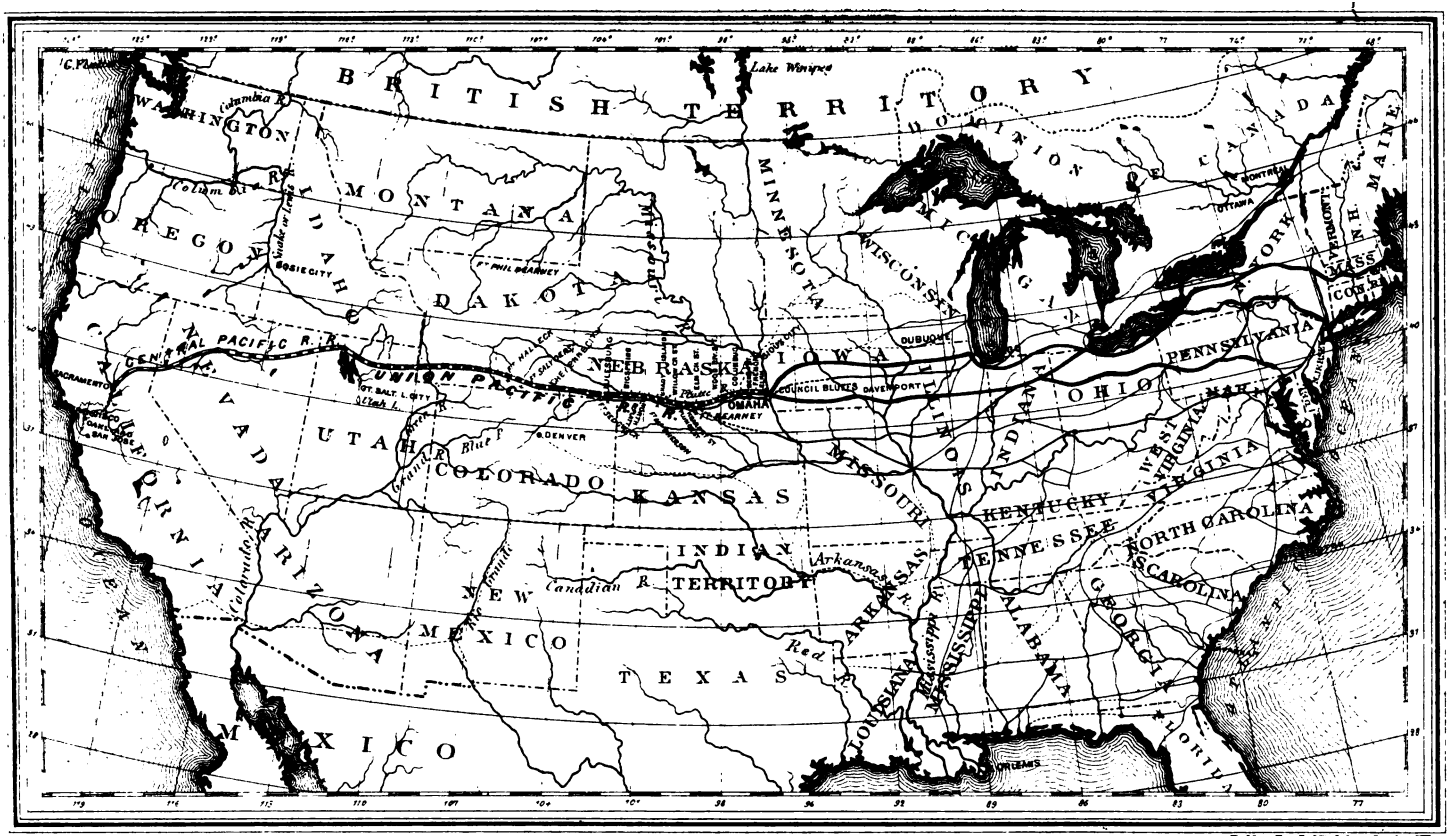

MAP OF THE UNION PACIFIC RAIL ROAD AND ITS CONNECTIONS.

THE

UNION PACIFIC RAILROAD

COMPANY,

CHARTERED BY THE UNITED STATES.

Progress of their Road

WEST FROM OMAHA, NEBRASKA,

ACROSS THE CONTINENT.

MAKING, WITH ITS CONNECTIONS, AN UNBROKEN LINE FROM
THE ATLANTIC TO THE PACIFIC OCEAN.

FIVE HUNDRED MILES COMPLETED OCTOBER 25, 1867.

OFFICES,

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1867.

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The Union Pacific Railroad.

Introduction.

The absolute necessity for a railroad connecting the Atlantic and Pacific States was one of the great facts the late war demonstrated. We had States on the Pacific that were practically more remote than the capital of Russia, and that could take no part in the common defense. Ambitious spirits were not wanting who advocated the establishment of an independent Pacific empire, and it was evident that the continued and prosperous unity of the country required that the two extremes should be brought more closely together. The new states and territories on the Pacific and among the Rocky Mountain valleys, needed only ready means of ingress and egress to command a great population. The Pacific soil was fertile, and its climate delightful; but immigration was unwilling to incur the risk or defray the cost of navigating two oceans to secure these advantages. The gold mines were rich, but comparatively few even of our adventurous people would brave the perils in the way of reaching them, or the difficulties of existence among them. Notwithstanding all these obstacles, the population of the Pacific coast had reached half a million in 1860, and the country could no longer *afford* to do without a Pacific Railroad. The great western half of the continent, which had remained almost unknown for two hundred and fifty years after the eastern settlements had begun, must be opened for occupation. The vast mining regions must be brought within reach, that the way to the resumption of specie payments might be made shorter and easier; and the greatest possible inducements must be offered to immigrants, that in return for our public lands, they might bear a proper share of the public burdens. Instead of five hundred thousand inhabitants in the

entire western half of the country, it was important that we have ten millions to develop its vast resources, and also to assist in paying the national debt. Indian wars were threatening, and the immense cost of transporting troops and supplies to the frontier posts, and the greater cost of continued hostilities in regions that nothing but railroads could civilize, and nothing but civilization could pacify, made it wise statesmanship on the part of the Government to determine that a Pacific Railroad should be built.

The freight and passengers which had been crowding the California steamers, or toiling wearily over the great plains, offered a tempting price for more rapid communication, but even the most sanguine capitalists declined to invest over a hundred million dollars in a single enterprise. The Government, however, did not wish to take all the responsibility. It therefore resolved to give its aid in the most careful manner to a corporation of such responsible individuals of suitable character and energy as were willing to invest a portion of their own private means in the construction of the road. Various routes were proposed, but the one finally selected begins at OMAHA, NEBRASKA, on the east, and ends at SAN FRANCISCO on the west, a distance of about 1830 miles.

Under the various Acts of Congress the eastern portion of this line is being built by the UNION PACIFIC RAILROAD COMPANY, with its offices in New York, and the western portion by the Central Pacific Railroad Company of California; and *these two companies are now building the only through line to connect the Atlantic and Pacific States.*

There are several other lines of railway projected, and on which more or less work has been done, which are also called "Pacific Railroads," but which are not integral parts of the great road across the continent. Among these may be named the Union Pacific Railway, *Eastern Division,* or Kansas Branch, beginning at Wyandotte or Kansas City, now completed to Fort Hays, 240 miles; the Atchison & Pike's Peak Railroad, sometimes called the Central Branch of the Union Pacific, beginning at Atchison; and the Sioux City and Pacific Railroad, from Sioux City to its junction with the Union Pacific Railroad at Fremont.

The Union Pacific Railroad Company proper is in no way connected with these organizations.

Formation of the Company.

The Union Pacific Railroad and Telegraph Company was duly organized under the several Acts of Congress, approved by Abraham Lincoln, President of the United States, July 1 and July 12, 1862, and July 2, 1864, all of whose conditions have been complied with. There are fifteen Directors on the part of the Company, and five Directors appointed by the President of the United States to represent the Government. The authorized capital is One Hundred Million Dollars, of which $5,399,750 have been paid in by the stockholders upon the work already done. Additional amounts will be paid whenever the wants of the Company require it; but it is not supposed that more than twenty-five millions in all will be necessary, and perhaps a considerably smaller sum will be sufficient.

The Union Pacific Company, beginning at Omaha, is authorized to build west; and the Central Pacific Company, beginning at San Francisco, is authorized to build east, until these roads shall meet. A friendly rivalry may therefore exist between these companies, as to which shall construct the longest portion of the road; but this rivalry can only result in the public benefit. The Union Pacific has now 500 miles in operation, and in a few days will have finished the 17 miles remaining before reaching Cheyenne, the eastern base of the Rocky Mountains; and the Central Pacific has crossed the Sierra Nevadas, a distance of about 100 miles from Sacramento, where it has surmounted the greatest difficulties that will be found on that portion of the route. It may give some idea of the strength and energy of these two powerful companies, to state that more than forty million dollars in cash have already been expended on the line; that more than one-third of the whole work has already been done; that more than one-third of the whole line is in running order; and that so many laborers were never before employed upon it as now.

The eastern connection of the Union Pacific, by the way of the Chicago & Northwestern Railroad, is complete, and several other eastern railroads are now being extended to Omaha, which will soon be the center of a very large traffic. Indeed, the business of all the great eastern lines will necessarily converge to this point, and pass over the Union Pacific Railroad.

Progress of the Work.

Numerous surveys for the purpose of determining the feasibility of a railroad to the Pacific, were made subsequent to the discovery of gold in California. In 1855, Gen. Greenville M. Dodge, now Chief Engineer of the road, thoroughly explored the several lines of approach to the Rocky Mountains from the Missouri, and obtained information which has been of great service in the final location of the line. The route now occupied by the road—up the valley of the Platte—was the one over which the overland stages and much other overland travel passed, and was found to have special advantages of wood and water, and moderate grades.

The popular impression that the construction of the Pacific Railroad, though physically practicable, required enormous expenditures of time and money, has been proved erroneous. The initial point of the Union Pacific, at Omaha, is 967 feet above tide-water; and Cheyenne, at the eastern base of the Black Hills, 517 miles west from Omaha, is 6,062 feet. The difference in elevation between Omaha and Cheyenne is therefore 5,095 feet, or an average of about ten feet to the mile. The remaining distance to the summit of the Black Hills, the highest point on the line, is 31½ miles, and the elevation is 8,262 feet, which leaves 2,200 feet to be overcome. This will be at the average rate of only 71 feet to the mile, and is much less formidable than the grades of many eastern roads. It is not claimed that there are no difficulties in the way, but it is certain that there are none which cannot be surmounted or removed by scientific skill, at a reasonable cost.

That the idea of connecting the Atlantic and Pacific oceans by over three thousand miles of railroad, at any time a bold and magnificent conception, should have been adopted and its practical execution commenced and vigorously prosecuted during the period when a great civil war was absorbing our thoughts, taxing our physical energies and our financial resources, must be regarded as one of the very remarkable events of that very remarkable period, evincing an ability, energy, and spirit in the people, which has excited the astonish-

ment and admiration of the older nations of the eastern hemisphere. While our interest is stimulated by the magnitude of the material benefit to be derived from the completion of this work, a proper emotion of patriotic pride inspires the hope and the wish that its completion may be a fitting sequel to the inception which has added so much to our national honor and national glory.

OVER FIVE HUNDRED MILES NOW COMPLETED.

The preliminary organization of the Union Pacific Railroad Company was made in October, 1863. The first contract for construction was made in August, 1864; but various conflicting interests, connected with the location of the line, delayed its progress, and the first forty miles were not laid until January, 1866. At that time all obstacles were removed, and the road has been built more rapidly than any other similar work in the world. There were 305 miles completed on the 1st of January, 1867, and now 500 miles are in running order, and forty-seven miles more track will be laid the present season, if the weather permits. Contracts have been made for rock cuttings beyond, to be done during the winter, and the grading has already commenced west of the Black Hills in the Laramie Plains. The work on the California end of the route is being pushed forward with great energy towards the east, and it is expected that the whole grand line to the Pacific will be open for business in 1870. The present outfit of the Company comprises ample depots, stations, car and repair shops, and all the equipments of a first-class road. It has now in use fifty-three locomotives, twenty passenger and mail cars, and seven hundred and ninety-three freight cars.

How the Union Pacific Railroad is Built.

An intelligent correspondent of the *Cincinnati Gazette*, who traveled over the portion of road that was completed in June, has written a very interesting letter, showing the manner in which the work is done. He says:

"There is nothing connected with the Union Pacific Railroad that is not wonderful. The possibility of constructing such a road at some future day has long loomed up as one of the events of a grander future which all believed was to come for the land. To look upon so much of it accomplished, to watch the marvelous progress of each day, and feel sure that the great enterprise which we had consigned to the future of our dreams, is to be a reality for us, makes one prouder of the noble days in which we live. In one sense the road is as great an achievement as the war, and as grand a triumph; to those who have seen much of the former and looked from this point upon the unfoldings of the latter, they appear equally impressive. What the country has dreamed about for many years is becoming a reality much faster than the people know. One year ago, but forty miles were finished; this morning, we look back from our train over a day's rapid run, and forward sixty miles. To-night, three additional miles of rail will mark the track of the day's advance.

"Our party left the depot at Omaha at 9 o'clock on the morning of the 3d inst. The station-house, and the common passenger cars, were better than those on the road from Washington to New York; those who have been so unfortunate as to make the latter trip will all hope they are very much better, if the love of country be in their hearts.

"The train, which was made up for the excursionists, consisted of cars as elegant as any that can be found east of the Missouri. It was very difficult to look at them and realize that before night they would be roaring along over plains from which hostile Indians, deer and antelope have not yet been driven.

VALLEY OF THE PLATTE.

"Long before the valley is reached, it spreads before the eye like a vast bay opening out into an ocean, whither the track appears to lead. It is forty miles from the low, rolling hills on the north, to the opposite and similar range on the south. Between, the surface is almost perfectly flat, though its regular ascent toward the west, of about ten feet to the mile, gives ample drainage. The soil is very rich, and the mind falters in its attempt to estimate the future of such a valley, or its immense capabilities. The grain fields of Europe are mere garden patches beside the green oceans which roll from Colorado to Indiana. The valley widens with the advance. The hills behind sink into the plain until the horizon there is perfect. Those on either side grow fainter, till through the heated air they take on the appearance of low islands seen across many miles of water.

"Much of the land at the mouth of the valley is under cultivation, and the deep black of the freshly turned loam, the dark green of the wheat, the lighter grass, the deeper shades, and the brown of that which the fires of the autumn spared, make up the wide expanse a mosaic which nature alone could color, and the prairies only find room to display. Further on, huge plows, drawn by eight oxen, labored slowly along, each furrow being an added ripple to the tide which is sweeping up over all these rich regions—a tide whose ebb the youngest will never know.

A CONTINENTAL MILESTONE.

"The common mile-posts seem to measure insignificant distances upon the wide plains. Only each five miles are noted on this road, and when one has passed between two of these, the step taken hardly appears like an advance. But there is one point marked in a manner to suggest the distance which has been overcome, and the gigantic character of the work. At a point in the plain which otherwise seems as indeterminate as the position of a floating log at sea, a wide, arched sign between two strong set posts, bears this inscription: '100th meridian—247 miles from Omaha.' Here was the terminus of the road only last September.

A FRONTIER CITY.

"Crossing the North Platte, on a bridge about three thousand feet long, the train soon stopped at North Platte Station. Last

fall there was no building here. Now the railroad company have fine brick car houses, there is a good hotel, where excellent fare is provided, and on the main street fronting the track are thirty-six buildings. The depot and warehouses are overflowing with stores of all kinds.

"Within twenty miles of the end of the track a few of the party rode on the cow-catcher. It seemed marvelous to drive on at twenty miles an hour over rails that had only been down for ten days. But the perfection with which the work is done allows it, and makes it safe.

"Three hundred and twenty-five miles out, a construction train of eighty cars stood on a side track. It was loaded with iron, ties, spikes, and chains, in exactly such proportions as were needed. It looked the very embodiment of system, and was one key to the rapidity with which the work progresses. A little farther on stood a similar train, and next we stopped in rear of the one where the tracklayers resided.

"The road had been a constant wonder from the start. Its depots, its car-shops, its equipment, its remarkable smoothness, its high rate of speed, its long bridges, and its well ordered eating-houses, had attracted constant attention to it as a railroad alone.

"Every step trod revealed new wonders. The great achievement grew upward toward its real proportions with every throb of the engine. But all we saw was commonplace and natural beside the scene that awaited us where the track was being laid. If the rest had excited amazement, this new wonder took all the attributes of magic. Fictions of the East must be re-written to match the realities of this West.

HOW THE ROAD IS BUILT.

"The plain fact will reveal the magnitude of the work. There is really little known by the people of the character of the enterprise. Most think that a company of capitalists are hastily putting down a rude track, over which cars can be moved with care, for the purpose of securing lands and money from the Government. The fact is that one of the most complete roads of which the country can boast, with equipments that surpass many, is being laid with a speed that fails to impress the nation simply because it is not believed. But let the facts tell their plain yet wonderful story.

"General J. S. and D. C. CASEMENT, of Ohio, grade the road, lay the track, and put up the telegraph. The graders go first. There are 2,000 of them. Their advance is near the Beach Hills, and their work is done to Julesburgh.

"Of tie-getters and wood-choppers there are 1,500. Their axes are resounding in the Black Hills, over Laramie Plains, and in the passes of the Rocky Mountains. They have 100,000 ties in these hills awaiting safeguards for trains to haul them. Then follow the tie-layers carefully performing their share of the work.

"Now go back twenty miles on the road, and look at the immense construction trains, loaded with ties and rails, and all things needed for the work. It is like the grand reserve of an army. Six miles back are other trains of like character. These are the second line. Next, near the terminus, and following it hour by hour, are the boarding cars and a construction train, which answer to the actual battle line. The one is the camp; the other is the ammunition used in the fight. The boarding cars are each eighty feet long. Some are fitted with berths; two are dining halls; one is a kitchen, store room and office.

"The boarding cars go in advance. They are pushed to the extremity of the track; a construction train then runs up, unloads its material and starts back to bring another from the second line. The boarding train is then run back till it has cleared the unloaded material.

"The trucks, each drawn by two horses, ply between the track-layers and their supplies. One of these trucks takes on a load of rails, about forty, with the proper proportion of spikes and chairs, making a load, when the horses are started off on a full gallop for the track-layers. On each side of these trucks are rollers to facilitate running off the iron.

"The rails within reach, parties of five men stand on either side. One in the rear throws a rail upon the rollers, three in advance seize it, and run out with it to the proper distance. The chairs have, meantime, been set under the last rails placed. The two men in the rear, with a single swing, force the end of the rail into the chair, and the chief of the squad calls out 'Down,' in a tone that equals the 'Forward' to an army. Every thirty seconds there came that brave 'Down,' 'Down,' on either side the track. They were the pendulum beats of a mighty era; they marked the time of the march and its regulation beat.

"If it is asked, 'How does the work get on?' again let the facts

answer. On the 9th of May, 1866, but forty miles of road were completed. In a hundred and eighty-two working days thereafter, two hundred and forty-five additional miles were laid, and put in prime condition, every rail and tie and spike having been brought up from the rear. Seven saw mills furnish the ties and lumber. All bridges are framed, the pieces numbered and set up where wanted without the least delay. The bridge at Loup Fork is 1,500 feet long, and as fine a Howe truss as can be found in the land. While our train was running the sixty miles from North Platte, over a mile of track had been put down, and our train passed over it. From one o'clock till four in the afternoon, a mile and two hundred feet were added to this while the party was looking on.

WESTERN CAR SHOPS.

"After the return of the party to Omaha, it visited the extensive shops of the railroad company at that point.

"The depot grounds, upon which they are situated, contain forty acres, specially devoted to these buildings, and to passenger and freight traffic. Within five years it is estimated that the whole of this space will be needed for the business of the road.

"The engine house will hold twenty-one locomotives. There are two others further west. Thirty-two engines are already in use on this road, whose terminus is in the 'desert,' and twenty-three more are on the way, and already wanted. Those last constructed are coal burners. The fuel to move them is to come from the Black Hills. In a few years it is confidently expected that the iron to supply these very works will be obtained from the same point. Think of importing iron for Omaha from the West!

"Passenger cars are in process of construction equal to the best. Emigrant cars were being built, and the frames of an hundred freight cars were ready to be put together. Several traveling post-office cars are already finished. For stations on the route, the distributing boxes will be marked 'North Platte,' 'Fort Laramie,' 'Salt Lake,' 'Sacramento,' and 'San Francisco;' while the closed pouches, at no distant day, will be labeled 'China, Through,' 'India, Official,' Sandwich Islands,' 'Russian America,' and 'Japan.' And the cars are built as if the service were already secure. Every particle of work, in all the multifarious kinds demanded, shows implicit faith in a future of grand proportions for the road."

Resources for Construction.

When Congress determined that the Pacific Railroad should be built with the aid of the Government, it also determined that that aid should be ample to accomplish the purpose. No half-way measures would answer. The most feasible route across the continent was selected, which should be the Grand Trunk Line—the western artery of the whole railroad system of the United States. The grants in aid of construction are as follows:

1st. The Rights of Way and Material, which include all necessary public lands for track, stations, depots, timber, stone, &c.

2d. The Grant of Money.—The Government grants its six per cent. currency interest thirty-year bonds to the Union Pacific Railroad, to the following amounts:

On *the plain portion* of the road, extending from Omaha to the base of the Rocky Mountains, 517 miles, at the rate of $16,000 per mile, is	$8,272,000
On the most difficult portion of the road, extending from the eastern base of the Rocky Mountains westwardly, 150 miles, at the rate of $48,000 per mile, is	7,200,000
On the remaining distance westwardly towards the California State line, at the rate of $32,000 per mile. Estimating the distance to be built by the Union Pacific Company, before meeting with the Central Pacific, at 1,100 miles, this would leave a remainder of 433 miles, at $32,000 per mile, which is	13,856,000
Or a total, for 1,100 miles, of	$29,328,000

These bonds are issued only on the completion of each section of twenty miles of road, and upon the certificate of commissioners appointed by the United States Government that the road is thoroughly built and adequately supplied with all the machinery, equipment and fixtures necessary to complete a first-class railroad. The interest on these bonds is paid by the U. S. Treasury, but is a charge against the Company, which is much more than paid by services rendered the Government in transporting its troops, freight, mails, &c. This service since April of the present year has amounted to over four and one-half times the amount of interest. By its charter,

the Company receives one-half the amount of its charges against the Government in money, and the remaining half is placed to its credit as a sinking fund, which may amount to a sum sufficient to retire the whole amount of Government bonds at maturity.

It should be remembered *that both ends of the great Pacific line stand upon precisely the same footing in this and in all other particulars respecting the Government grants.* (See Acts of Congress.)

3d. THE GRANT OF LANDS.—The Government grants to the Company every alternate section of land for twenty miles on each side of the road, making in all *twenty sections*, equal to 12,800 acres for each mile of the railroad. For a distance of 1,100 miles, this grant, which is an absolute donation, amounts to fourteen million and eighty thousand (14,080,000) acres. As the railroad follows the rich valley of the Great Platte for nearly 300 miles, a large portion of these lands may be classed among the most productive in the world, and, indeed, there can hardly be any lands along the line of such an important road that will not command a reasonable price for tillage, grazing or timber. It will certainly be quite within bounds to estimate them at an average price of $1.50 per acre.

4th. THE LOAN GRANT.—The Government grants the Company a right to issue its own First Mortgage Bonds on its railroad and telegraph lines to an amount equal to the bonds of the United States. These bonds are to be of even tenor, date, and maturity with the bonds issued by the United States Government to the Company. This grant gives the Company power to issue its First Mortgage Bonds, *as a lien prior to all claims of the Government, or of any claims whatsoever,* to an aggregate amount equal to all the money grant of the United States to the Company. This gives the Union Pacific Railroad Company the following resources, exclusive of its capital stock, for the construction of 1,100 miles of road:

U. S. Bonds on 517 miles at $16,000 per mile,	$8,272,000
" " 150 " " 48,000 " "	7,200,000
" " 433 " " 32,000 " "	13,856,000
	$29,328,000
The Company's own First Mortgage Bonds to same amount,	29,328,000
Land Grant of 12,800 acres per mile, at $1.50 per acre,	21,120,000
Total,	$79,776,000

The Means Sufficient to Build the Road.

The supposed great difficulties in the way of building the Pacific Railroad have been diminished as they have been encountered. Ten thousand Chinese coolies, under the direction of American engineers, have already cut their way over and through the Sierra Nevadas at an elevation of 7,000 feet, and successfully overcome the most formidable barrier between the two oceans. The surveys across the Rocky Mountain ranges, running westward for four hundred miles from the summit of the Black Hills, show that no grades of over 90 feet to the mile will be encountered, and that no extraordinary cost need be expected. The grade of the Baltimore and Ohio Railroad for nineteen miles is 116 feet to the mile, and other roads have overcome much steeper inclines.

Contracts for the entire work of building 914 miles of first-class railroad west from Omaha, comprising much of the most difficult mountain work, and embracing every expense except surveying, have been made with responsible parties (who have already finished over 500 miles,) at the average rate of sixty-eight thousand and fifty-eight dollars ($68,058) per mile. This price includes all necessary shops for construction and repairs of cars, depots, stations, and all other incidental buildings, and also locomotives, passenger, baggage and freight cars, and other requisite rolling-stock, to an amount that shall not be less than $5,000 per mile. Allowing the cost of the remaining one hundred and eighty-six of the eleven hundred miles assumed to be built by the Pacific Company to be $90,000 per mile,

THE TOTAL COST OF ELEVEN HUNDRED MILES WILL BE AS FOLLOWS:

914 miles, at $68,058,	$62,205,012
186 " 90,000,	16,740,000
Add discounts on bonds, surveys, &c.,	4,500,000
Amount,	$83,445,012

As the U. S. Bonds are equal to money, and the Company's own First Mortgage Bonds have a ready market, we have as the

AVAILABLE CASH RESOURCES FOR BUILDING ELEVEN HUNDRED MILES.

U. S. Bonds,	$29,328,000
First Mortgage Bonds,	29,328,000
Capital stock paid in on the work now done,	5,369,750
Land Grant, 14,080,000 acres, at $1.50 per acre,	21,120,000
Total,	$85,145,750

The Company have ample facilities for supplying any deficiency that may arise in means for construction. This may be done wholly or in part by additional subscriptions to capital stock.

Active enquiry has already been made for a portion of these lands, and arrangements are now proposed to offer a part of them for sale. While their whole value will not be available for some years to come, they will remain a very important source of revenue to the Company. The lands of the Illinois Central Railroad Company are selling at from $6 to $12 per acre, and other land-grant companies in the west are receiving equal prices for similar properties. As the Union Pacific Company's lands are all upon the line of the road, they will offer peculiar advantages to actual settlers, and tenders have already been received from Germany to bring out colonies of immigrants on advantageous terms.

The various institutions of civilization not only follow, but, it may be said, actually accompany the laying of the rail-track. The several religious denominations are active in establishing churches and schools, and we have every reason to believe that the moral and religious culture of this vast region will not be behind its physical development. The Episcopal bishop of Nebraska remarked, in a recent discourse, that "fourteen new churches had already been built in as many towns in that State, on the line of that most magnificent work of modern times, the Union Pacific Railroad, and that means would be furnished for the erection of others at every point where they could be supported."

What is anticipated of Business and Profits of the Company.

Hon. E. D. Mansfield, Commissioner of Statistics for the State of Ohio, and a gentleman believed to be more familiar with railroad enterprises in their relation to the development of the country than any other, makes the following estimates in relation to the prospects of this Company. He says:

"We have some authentic facts on which to base a fair estimate of the business of the Pacific Railroad, when it is completed. In a general view, we find the fact of an intermediate unsettled country counterbalanced by the millions of persons and tonnage of products on either side seeking mutual intercourse. On this point we have the following facts, derived from Shipping Lists, Insurance Companies, Railroads, and general information:

Ships going from the Atlantic round Cape Horn—100,	80,000 Tons.
Steamships connecting at Panama with California and China—55,	120,000 "
Overland Trains, Stages, Horses, &c.,	30,000 "

"Thus we have two hundred and thirty thousand tons carried westward; and experience has shown, that in the last few years, the returned passengers from California have been nearly as numerous as those going. So also the great mass of gold and silver flows eastward; latterly there is an importation of wheat from California and goods from China by the Pacific route. We may fairly assume, therefore, that the trade each way will be about equal; we have then 460,000 tons as *the actual freight across the continent.*

"How many passengers have we? We make the following estimate from the average of people:

110 (both ways) steamships,	50,000
200 " " vessels,	4,000
Overland (both ways),	100,000
Number per annum,	154,000

"At present prices (averaging half the cost of the steamships), for both passengers and tonnage, we have this result:

154,000 passengers at $100,	$15,400,000
460,000 tons rated at $1 per cubic foot,	15,640,000
Present Cost of Transportation,	$31,040,000

"There can be no doubt that the number of passengers will be more than doubled by the completion of the road; so also, the road would take all the very light and valuable goods, which would be greatly increased *by the China trade.* Taking these things into view—estimating passengers at 7½ cents per mile, and goods at $1 per cubic foot—we have

300,000 passengers at $150 each,	$45,000,000
300,000 tons at $34	10,200,000
Gross receipts,	$55,200,000

"Suppose that the portion accruing to the Union Pacific is $30,000,000, estimate the running expenses at one half, and this would leave a net profit of $15,000,000.

"This may seem very large to those who have not examined the subject, but it must be remembered—1st, that the longest lines of road are the most profitable; 2d, that this road connects two oceans, and the vast populations of Western Europe and Eastern Asia; 3d, that the immense mining regions of Idaho, Montana, Nevada, California, just developing, will produce a transit of persons and freight, at present beyond belief. We leave this estimate on record as a moderate (not an exaggerated) view of the business and profits which may be fairly expected from the Grand Pacific Railroad."

Estimates of *future* business are doubtless valuable and important, and it does not follow that they are always too large. When the New York & Erie Railroad was first projected, its future business was estimated by its friends at *three* millions per annum, while it is now *over fifteen* millions, and will steadily increase. It must be remembered that for many years to come this Union Pacific and its western connections will be the *only* Pacific Railroad, and, as it will be without competition, it can always charge remunerative prices. While the present rates are four times the tariff of eastern roads, they are not one-fourth of the former cost by teams, of which twenty-seven thousand left two points on the Missouri River on their westward journey, within a single year.

The anticipation of the early completion of the Pacific Railroad has recently stimulated all kinds of productive industry in California to prepare for that means of rapid communication which is so soon to multiply her numbers and wealth in a greater ratio than ever. Factories are being erected, large flouring mills established, vineyards planted, and farms extended, that the state may be ready to receive the great tide of population that must soon flow into it over the

track of the Pacific Railroad. The East is also preparing to accommodate itself to the forthcoming changes in the current of business. The Pacific Mail Steamship Company of New York is now running a regular line of its splendid steamers between San Francisco and China and Japan, which is doubtless the pioneer of other lines, that will traverse the Pacific Ocean laden with the teas, spices, and other products of Eastern Asia. Excepting some very heavy or bulky articles, of comparatively low values, shortness of time decides the direction of freights, and most of these cargoes will find their natural transit over the Union Pacific Railroad.

While the Company has had great confidence in its prospective earnings, it has carefully abstained from expressing any opinions that might be thought exaggerated or unwarranted. It requires no argument to show that the through traffic on the completed line of the Pacific Railroad must be immense. In 1870 the population of the Pacific States and Territories can hardly be less than one million, and the road itself will be the means of more than doubling this population every ten years. This region will contain an unusual proportion of miners and traders, whose commercial pursuits will make them the most active travelers and freighters, and consequently the best customers of a railroad. The editor of *Harper's Weekly*, who has given this subject careful attention, says:

"When the Pacific Railroad is completed to San Francisco, a new era will be inaugurated. The road will then be the grand artery of the country. All other lines of railway will become, to a certain extent, its feeders. Along its entire route over the great plains lateral branches will be constructed to tap it, which will pour into it their wayside contributions to an extent that can not to-day be approximately estimated. The road will not supersede the California ships in carrying bulky freight to New York, but the 'way' traffic will undoubtedly be something marvelous. Already, with less than one-third of its length complete, it is earning four times its operating expenses, as officially stated. Such success is without precedent. When it reaches the already populous gold regions of Montana, Idaho, and Nevada, the freight to and from those points alone is likely to be something almost fabulous. And population follows the road as it extends. A town or village marks each stage of its progress. Who can calculate the quantity of way freight that the road is destined to carry for these growing communities—who, indeed, can estimate the passenger traffic alone? When hundreds of thousands of persons, with their faces toward the west, have tramped over the

plains at the risk of their scalps, how many peradventure will ride when they can make the journey with safety in a few days? Then comes the natural inquiry whether a single track, with its infrequent sidings and turnouts, will be able to accommodate more than the mere passenger traffic of the road, or whether travelers to the Pacific will be content to abide a time-schedule adapted to slow-moving freight-trains as well as passenger express cars. Certainly but a short time will elapse before the demands of trade will call for a second track, to be used exclusively as a freight road, over which an endless line of slowly-moving vans shall continuously pass, leaving the other track for the use of impatient passengers only."

The Way Business — Actual Earnings.

As no one has ever expressed a doubt that as soon as the road is completed its through business will be abundantly profitable, it becomes interesting to know not only what may be expected, but what has actually been earned by the way or local business, so far as the road has been opened. For the quarter ending July 31st, 1867, this information is officially given in the following extracts from

THE TREASURER'S REPORT.

"Treasurer's Office, No. 20 Nassau Street,
"*New York, August 31st*, 1867.

"The accompanying statement of the earnings and expenses of this Company for the quarter ending July 31st, on an average of three hundred and twenty-five miles of road, is respectfully submitted. From the beginning the Company have determined to make no statement to the public that was not fully warranted by the facts, and it will be seen that their net earnings are largely in excess of their published calculations. Although the charge for the transportation of men and materials for contractors is believed to be always returned by railroad companies as a part of their legitimate earnings, without distinction, yet, to give the clearest understanding of their affairs, they have separated the amount, and rendered it as a distinct item. These charges to contractors will of course increase as the road progresses, and when completed, their place will be vastly more than supplied by the through traffic, to say nothing of the rapidly increasing general business as the track approaches the great mining regions.

"From the relative high charges, the operating expenses of the road are but 32⅞ per cent. of the earnings, and the ratio would be much less if the contractor's business were not done at half rates. Throwing out charges to contractors for transportation of materials and men ($479,283.41), and deducting from the aggregate of all operating expenses ($395,530.92) 32⅞ per cent. ($157,564.42) as the proportion chargeable on the work done for contractors, and we have the net operating expenses on the commercial business for the quarter, $237,966.50. The account for the *commercial business* stands as follows:

Earnings for May, June, and July,	$723,755.54
Expenses, " " "	237,966.50
Net profit of operating 325 miles of road three months,	$485,789.04

"The amount of Bonds the Company can issue on 325 miles, at $16,000 per mile, is $5,200,000. Interest in gold, three months, at 6 per cent., on this sum, is $78,000; add 40 per cent. premium, to correspond with currency earnings, is $109,200,—showing that the net earnings for this quarter were *more than four times the interest* on the First Mortgage Bonds on this length of road.

"*Earnings and Expenses of the Union Pacific Railroad Company for the Quarter ending July 31st, 1867, on an average length of 325 miles of road, running West from Omaha.*

EARNINGS.

Passengers,	$160,526.92
Freight,	549,672.39
Telegraph,	1,416.23
Mails,	12,140.00
Transportation, Contractor's Materials,	453,205.44
" " Men,	26,077.97
	$1,203,038.95

EXPENSES.

Fuel,	$131,089.58
Repair of Track,	109,767.64
" Engines, Cars, Shops, &c.,	50,984.44
Offices and Stations,	54,907.60
Conductors, Engineers, &c.,	33,294.73
Trains,	15,486.93
	$395,530.92
NET EARNINGS to Balance,	807,508.03
	$1,203,038.95

JOHN J. CISCO, *Treasurer.*"

The Union Pacific Railroad Company's First Mortgage Bonds.

As we have before stated, the Union Pacific Railroad Company is authorized by Congress to issue its First Mortgage Bonds in the same amounts as are issued by the Government on the various sections of the road *as they are completed*, viz.:

On the first 517 miles at $16,000 per mile, ...	$8,272,000
On Rocky Mountain region, 150 miles, at $48,000 per mile, . .	7,200,000
On 433 additional miles at $32,000 per mile, ...	13,856,000
Total for 1,100 miles, ...	$29,328,000

These bonds have thirty years to run from July, and bear interest at the rate of six per cent. per annum *in gold*, payable on the first days of January and July in the city of New York. As they are coupon bonds, the semi-annual coupons will be cashed by any bank or banker throughout the country. Congress has taken an especial care that the interests of the bondholders of this road shall be secured that has never before been shown towards a similar enterprise. The Mortgage is made to Hon. E. D. Morgan, U. S. Senator from New York, and Hon. Oakes Ames, Member of U. S. House of Representatives from Massachusetts, who alone can deliver the bonds to the Company, and who are responsible for their delivery in strict accordance with the terms of the law.

The President of the United States appoints Five Government Directors who cannot be stockholders, who take part in the direction of all its affairs, and one of whom is to be on every Committee of the Company. It is the duty of these directors to see that all the business of the Company is properly managed, and to report the same to the Secretary of the Interior, who reports, through the President, to Congress.

The President of the United States also appoints three Commissioners to inspect the work as it progresses, in sections of twenty miles, to see that it is in all respects a first-class road, and that it is suitably provided with depots, stations, &c., and all the rolling stock necessary for its business. The U. S. Bonds are issued to the

Company only as each section of twenty miles is accepted by the U. S. Commissioners, and the trustees of the First Mortgage bondholders deliver the Company's own first mortgage bonds to the Company only on the same conditions, except that the Company is permitted to issue its bonds for one hundred miles in advance of its completed line, to cover the cost of grading, &c.

To give every facility for the negotiation of the Company's First Mortgage Bonds, the Government makes its own bonds issued to the Company a *second lien* upon the road, with the understanding that the interest and a part if not all the principal may be paid by services rendered at a future day. Gen. SHERMAN says that "the Government could well afford to build the entire line if necessary, rather than it should remain unbuilt." It will be noticed that the Union Pacific Railroad is, in fact, a Government work, built under the supervision of Government officers, and to a large extent with Government money. *We may say without danger of contradiction that no bonds issued by any other Company in this country, or, so far as we know, in the world, are made so secure by a responsible Government as the First Mortgage Bonds of the Union Pacific Railroad Company.* They are a first mortgage upon what is to be the longest railroad in the world, five hundred miles of which are now completed, secured upon a productive property that costs three times their amount. The road is certain to be finished at an early day. The stockholders comprise men of great wealth and railroad experience, who have individually invested large amounts in the enterprise, and who are abundantly able to insure its success. Yet if the present Company *could* fail in the completion of the road, (which no one acquainted with its affairs can suppose possible,) the operation of the part now finished would more than pay the interest on the bonds, and the United States would be compelled to provide for the construction of the remainder for its own protection. It is universally admitted that when the road is finished it will be one of the most productive properties in the country. As the shortest line connecting Western Europe and Eastern Asia, and as the only line connecting the two grand divisions of a continent, the amount of its business will only be limited by its capacity. The future of such a road need not be *predicted*, for it can be *demonstrated*. It will not only be the most useful and the grandest, but we hazard nothing in asserting that it will be most profitable work of modern times. But the Company are not compelled to wait until its completion to derive a large revenue from its traffic, as it has been previously shown that

the net earnings of the various sections, as completed, have been more than sufficient to pay the interest on all its liabilities. First Mortgage Bonds, whose principal is so thoroughly secured, and whose interest is so liberal and so amply provided for, must be classed among the very safest and best securities.

The Company desire only to present a candid statement of its affairs, and make no appeal to the public to invest in its securities, as the daily subscriptions at the present low rates would absorb more than they can issue, and are fully equal to their wants. Between four and five millions have been taken by investors in as many months, and it is expected that the price will be increased before a much larger number are sold. They are offered for the present at ninety cents on the dollar, and accrued interest in currency from July 1st, 1867. At the current rate of premium on gold they pay over nine per cent. interest. Although it is not claimed that there can be any better securities than Governments, there are parties of sound judgment who consider a first mortgage upon such a property as this the very best security in the world, and who sell their Governments to re-invest in these bonds—thus securing an advantage of about 15 per cent. upon the investment.

Full particulars in relation to terms, agents, and means of subscribing may be found in the advertisement on the last page of the cover. Copies of the various Acts of Congress which constitute the Company's charter will be sent free on application.

NEW YORK, OCT. 25, 1867.

JOHN J. CISCO, TREASURER,

Union Pacific Railroad Company.