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RAILROAD ACROSS THE CONTINENT,

WITH AN ACCOUNT OF THE

Central Pacific Railroad,

OF

CALIFORNIA:

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A DESCRIPTION OF THE ROUTE, THE PROGRESS AND CHARACTER
OF THE WORK, THE ORGANIZATION, RESOURCES, AND
PROSPECTS OF THE COMPANY, WITH THE FOUND-
ATION AND ADVANTAGES OF THE

FIRST MORTGAGE BONDS.

NEW YORK, SEPTEMBER, 1868.

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Railroad Across the Continent,

WITH AN ACCOUNT OF THE

CENTRAL PACIFIC RAILROAD

OF

CALIFORNIA:

Fisk, firm, bankers

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SACRAMENTO.

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54 William Street, New York City.

RAILROAD COMMUNICATION ACROSS THE CONTINENT.

CENTRAL PACIFIC RAILROAD.

Growth of the Pacific Slope.

THE Pacific Slope of the North American Continent has been steadily and rapidly growing in commercial, political, and moral importance for the past quarter of a century. Since the discoveries of the vast deposits of the precious metals, from which it is estimated no less than a thousand millions of bullion have been already drawn, the attractions of a genial climate, fertile soil, and valuable markets have contributed to draw thither, and to hold as permanent settlers, nearly a million of active population. The foreign and domestic trade has already assumed respectable proportions. The annual yield of the precious metals is undiminished, while the pastoral and agricultural productions are largely increasing—even under the existing conditions of a scarcity of labor, and inadequate transportation facilities. Some idea of the present value and possibilities of this vast extent of country (half as large as Europe,) may be gathered from the following statistics taken from reliable sources:

The United States Commissioner of Mining Statistics gives the following estimate of the yield of precious metals from the Pacific States and Territories:

1861,	\$43,391,000	1865,	70,000,000
1862,	49,370,000	1866,	75,000,000
1863,	52,500,000	1867,	80,000,000
1864,	\$63,450,000		

Estimated to be distributed thus:

California,	\$22,000,000	Idaho,	\$15,000,000
Oregon and Washington, ..	8,000,000	Nevada,	15,500,000
Montana,	10,000,000	Colorado, Utah, &c.	10,000,000

The total amount of bullion coined at and shipped from San Francisco, for 1866, is given at \$55,322,000, and for 1867, at

\$57,674,000; no less than \$9,464,000, in silver, having been shipped to China direct in the two years, independently of large amounts of grain and merchandise.

The crop of cereals in California and Oregon already exceeds value the annual gold product, and now form the chief items of export of these two young States, which, a few years since, imported their breadstuffs. No less than 160 first-class vessels have been freighted from the port of San Francisco during the last year with wheat and flour, destined mainly for European consumption, valued at \$10,000,000. The wheat crop of California alone, in 1865, was 8,000,000 bushels; 12,000,000 bushels in 1866; and in 1867 the crop was estimated at 15,000,000 bushels. The wool crop of 1865 was 5,250,000 pounds, and that of 1866, 8,000,000 pounds. California leather and hides have a high rank in eastern markets. The wine culture, although still in its infancy, promises to be a large source of revenue. The coast abounds with excellent timber, and besides gold and silver, has valuable mines of quicksilver, lead, iron, copper, borax and cobalt. Hardly any natural gift is wanting to the vast territory to enable it to sustain a dense population.

A first-class line of steamships, now plying between San Francisco and Yokohama and Shanghai, has opened a new avenue to American enterprise, in the rich trade of China, Japan, and the East Indies; a trade which has hitherto been shared only by the Western European nations. The vessels arriving at the single port of San Francisco, in 1866, had an aggregate tonnage of 765,940, and in 1867, of 901,425 tons; the total number of passengers from foreign or distant ports being 33,871 in 1867, and upwards of 32,000 for the first six months of 1868. The carrying trade of the North Pacific Ocean promises a rapid development, and the manufacturing interests are also rapidly extending their operations.

The Pacific Railroad a Necessity.

These results have been reached under great disadvantages. California has been practically more remote than any part of Europe. So long as a three weeks ocean voyage through the tropics must be endured, at great cost, the tide of immigration was necessarily diverted elsewhere. The national troops and mails, together with all the conveniences and accessories of civilized life, had to be carried across a foreign isthmus, or, by a voyage of 16,000 miles, round

e Horn. The high price of labor, of subsistence and of transportation all tended to check the otherwise exuberant growth. Only the richest deposits of gold and silver could be worked with profit. One element lacking to give a new impetus to the Western coast was a cheap and easy means of communication with the Eastern States.

The intermediate Territories, also rich in precious ores, were neglected, insecure, and unavailable for general settlement, by reason of enormous cost of transportation. The maintenance of order and tranquillity among the roving Indian tribes had become a serious item of national expenditure. The political, commercial, and general interests called for Railroad Communication across the Continent at the earliest practicable day. The subject, after being abundantly canvassed by various conventions, was finally pressed upon the attention of the Government. Up to 1860 the railroad system of the country had been extending its iron arms westward until it had reached the Missouri River at two points, and was rapidly being approached at others on the Iowa boundary. At the outbreak of the Rebellion, the Pacific Railroad became, more than ever, a necessity, from a military point of view. In order to bind the young and powerful Pacific States and Territories to the Union, and to encourage their efforts in the common defence, as well as for the purposes of preserving order in the public domain and developing the great industrial resources of the Far West, the aid of the Government was generously granted to the project.

THE NATIONAL PACIFIC RAILROAD LINE.

The Act of Congress approved July 2, 1862, and its subsequent Amendments, provide for the construction of one Main Through Line of Railroad, from San Francisco to Omaha, with three minor tributary Branches, to other points on the Missouri River. The CENTRAL PACIFIC RAILROAD COMPANY, of California, was authorized and entitled to construct the Western and principal portion of the Stem Line across California, Nevada and Utah, until it is met by the Eastern portion. A new corporation—the UNION PACIFIC RAILROAD COMPANY—was chartered to build the Eastern portion; and these *two companies are now building the only Through Line to connect the Mississippi Valley and the Pacific Ocean* and are carrying it forward with greater energy than was ever shown in any similar enterprise in ancient or modern times.

These roads, therefore, constitute the NATIONAL PACIFIC RAILROAD LINE, adopted and selected by Congress to receive the grant of the public credit, as well as the public lands; and which are being constructed with the support, and under the supervision, of the Government. All other proposed or projected "Pacific Railroads," so-called, are merely local organizations, and should not be confounded with the CENTRAL NATIONAL TRUNK RAILROAD ROUTE to the Pacific.

The Companies embraced in the Pacific Railroad Act, and entitled to participate in the grants of Government credit for the construction of the National Trunk Line and branches, are enumerated by the Secretary of the Treasury in a tabular Exhibit of the different roads, an estimate of the distances to be built under Government patronage, and the amount of bonds to be issued to each, as follows:

*Estimate of the length of the Pacific Railroads, and amount of
Bonds to be issued.*

NAME OF R. R. CO.	Distance in Miles.	Amount per Mile.	Total Amount of Bonds to be Issued.
CENTRAL PACIFIC RAILROAD—[STEM LINE.]			
From Sacramento to the western base of the Sierra Nevada Mountains.....	7.18	\$16,000	\$114,880
Thence, 150 m. across the Sierra Nevada Mt. Thence to the probable junction with the Union Pacific, or to a point 78 $\frac{22}{100}$ miles east of Salt Lake City.....	150	48,000	7,200,000
	544 $\frac{11}{100}$	32,000	17,411,680
Total.....	701 $\frac{22}{100}$	-----	24,726,560
UNION PACIFIC RAILROAD — [STEM LINE,]			
From Omaha to eastern base of Rocky Moun- tains, about.....	516	16,000	8,256,000
Thence, 150 miles across the Rocky Mountains, Thence, to the probable junction with the Cen- tral Pacific, or to a point 78 $\frac{22}{100}$ miles east of Salt Lake City, estimated.....	150	48,000	7,200,000
	289 $\frac{12}{100}$	32,000	9,270,560
Total.....	955 $\frac{12}{100}$	-----	24,726,560
UNION PACIFIC RAILWAY, EASTERN DIVISION [KANSAS BRANCH]—			
For a length equal to the distance from the mouth of Kansas River, <i>via</i> the Kansas and Republican Rivers, to 100th meridian—[is allowed to connect east of the Rocky Moun- tains, about 600 miles], entitled to bonds for	381	16,000	6,096,000
ATCHISON & PIKE'S PEAK RAILROAD [now called CENTRAL BRANCH OF UNION PACIFIC] 100 miles next to the Missouri River.....	100	16,000	1,600,000
SIOUX CITY & PACIFIC RAILROAD— From Sioux City to its junction with the Union Pacific Railroad at Fremont	100	16,000	1,600,000
WESTERN PACIFIC RAILROAD— From San José to Sacramento.....	120	16,000	1,920,000

The charter of the last-named Company contemplated a line from Sacramento toward San Francisco, making the circuit of the Bay of that name. Their franchise has recently been assigned to parties in the interest of the Central Pacific Railroad Company; and it is probable that this line will be formally incorporated with the Central Pacific Railroad, and the road extended from Sacramento to San Fran-

cisco by the "best, most direct and practicable route" so soon as the overland connection is completed. In the meantime the travel is abundantly accommodated by first-class steamers.

The United States Government Aid.

In order to facilitate the enterprise, and assist in the earliest completion of the work, the act of Congress confers upon the Companies the Right of Way through the Territories, an absolute grant of twenty alternate sections (12,800 acres) per mile of the public land through which the road runs, the right to use the coal, iron or timber thereon, and authorizes a *special issue of the 6 per cent. Bonds of the United States, proportioned to the length and difficulty of the line* to be delivered to the Companies as the work progresses. The length of the Main Line from Omaha to Sacramento is about 1,700 miles, and the estimated cost of construction was a hundred millions. Fifty millions were therefore appropriated by the Government, to be divided between the two powerful corporations—the CENTRAL PACIFIC AND UNION PACIFIC—while ten millions additional were devoted to the smaller Branches. The proportions in which the bonds are distributed, are as follows: Between the Missouri River and the east base of the Rocky Mountains, (525 miles,) \$16,000 per mile; across the Rocky Mountains (150 miles), \$48,000 per mile; thence across the Great Basin (900 miles), \$32,000 per mile; across the Sierra Nevada Mountains (150 miles), \$48,000 per mile, and thence to San Francisco (about 120 miles), \$16,000 per mile. The words of the Act are as follows (See Sec. 5 and Sec. 11, Act of 1862):

"That for three hundred miles of said road most mountainous and difficult of construction, to wit: one hundred and fifty miles westwardly from the eastern base of the Rocky Mountains, and one hundred and fifty miles eastwardly from the western base of the Sierra Nevada mountains, said point to be fixed by the President of the United States, the bonds to be issued to aid in the construction thereof shall be *triple* the number per mile hereinbefore provided, and the same shall be issued, and the lands herein granted be set apart, upon the construction of every twenty miles thereof, upon the certificate of the commissioners as aforesaid that twenty consecutive miles of the same are completed: and between the sections last named of one hundred and fifty miles each, the bonds to be issued to aid in the construction thereof shall be *double* the number per mile first mentioned, and the same shall be issued, and the lands herein granted be set apart, upon the construction of every twenty miles thereof, upon the certificate of the commissioners as aforesaid that twenty consecutive miles of the same are completed. * * * * *

Upon portions where, by reason of natural obstacles, the road cannot be continuously completed, but where the work is mostly

done, provision is made for an issue of two-thirds these amounts in advance. It is also provided that the several Companies shall transport the Government mails, messages, troops, supplies, etc., at their regular rates; half the compensation to be paid in cash, and the balance applied to canceling the Government advances.

The meeting-point of the two parts of the main line has not yet been officially determined, though it is understood by the Government officials, and by the officers of the respective Companies, that it will be somewhere in the vicinity of Salt Lake. The Secretary of the Interior, by whom these roads are finally located and accepted on the part of the United States, in his Response to the Resolution of Inquiry of the House of Representatives, requesting information of the amount of bonds issued to the several companies before quoted, dated Feb. 14th, 1867, says:

"Since the locations of the different roads have not been definitely determined throughout their whole extent, the above estimate must be regarded only as near an approximation as it is possible at the present date to furnish. The point of junction of the Union Pacific and Central Pacific has been assumed to be 78,255 miles east of Salt Lake City, or at a point which will entitle each of these companies to the same amount of bonds."

Surveys by the Central Pacific Company, since completed, establish the shortest and most favorable line between Sacramento and the meridian of Salt Lake at 726 miles, which would give as the amount of Bonds to be issued to that Company on the completion of that length, \$25,517,000. Assuming the junction to be made at or near Salt Lake City, as now seems probable, this would give an equal amount of bonds to the two companies, and would place under the control of the former about 1,000 miles, and of the latter 850 miles of the through line, including the extension to San Francisco.

The progress of the several converging Eastern Branches toward the Rocky Mountains, owing to the very favorable nature of the topography, has been encouraging.

The UNION PACIFIC RAILROAD COMPANY (Omaha line) have evinced remarkable energy, having commenced operations only at the close of the war, and had completed their track to the summit of the Black Hill range (540 miles, and 8,262 feet above sea level,) on the first of January, 1868, and it was believed would reach the Main Divide of the Rocky Mountains at Bridger's Pass, (740 miles west of Omaha, and 7,108 feet altitude,) in August, and Green River by the close of the year. The Company express their intention to complete the remaining 300 miles of road, mainly over a barren and mountainous country, before the middle of 1869.

The **EASTERN DIVISION COMPANY (Kansas Branch)**, have completed their road by the valley of the Smoky Hill Fork of the **Kansas River**, as far west as the Colorado boundary, (400 miles west from Leavenworth.) and are carrying their line to **Denver**, where they will unite with a branch of the Omaha line now building for **Cheyenne**.

The **ATCHISON AND PIKE'S PEAK COMPANY (Central Branch)** will unite their road with the main line near **Fort Kearney**, 2 miles from the **Missouri River**. About 60 miles are completed.

The **SIOUX CITY BRANCH** is now completed, and connects with the main line, near **Omaha**.

About twenty miles of the **WESTERN PACIFIC RAILROAD** have been built, and the link between **Sacramento** and **Stockton** is graded, and the whole line will be finished in 1869.

CENTRAL PACIFIC RAILROAD.

Upon the discovery of rich gold and silver mines in the celebrated Washoe Region, on the eastern side of the Sierra Nevada Range, in 1859 and 1860, by which population and capital were rapidly drawn from California, certain enterprising merchants on the Pacific Coast, foreseeing that an extensive trade must spring up between San Francisco and the interior, which must eventually be extended across the continent, combined to ascertain if it were feasible to build a railroad across this formidable barrier of snow-crowned mountains. After two years of exploration, in which several of the most promising points along the range were examined and compared, the Donner Lake Pass was selected as the most favorable and direct route to be found; and in July, 1861, THE CENTRAL PACIFIC RAILROAD COMPANY OF CALIFORNIA was organized, under the laws of that State, with authority to construct a railroad to its eastern boundary, so as to form part of the projected line to the Atlantic States.

These surveys formed the main data upon which the action of Congress was based; and the rights and privileges of the Company, under the State charter *were confirmed and extended by the National charter.*

The law provides that each of these two principal corporations shall have the right to continue onward on the same line till met by the other; so that in case of failure or inefficiency of either company, the other should have the privilege of completing the work, on the same terms and conditions, in all respects. One of the provisions of the Act is as follows; after authorizing the Union Pacific to build to the California boundary in case it was not sooner met by the Central Pacific Railroad (Section 10, Act of 1862):

“And the Central Pacific Railroad Company of California, after completing the road across said State, is authorized to continue the construction of said railroad and telegraph through the Territories of the United States to the Missouri River, including the branch roads specified in this act, upon the routes hereinbefore and hereinafter indicated, on the terms and conditions provided in this Act in relation to the said Union Pacific Railroad Company, until said road shall meet and connect, and the whole line of said railroad and branches and telegraph is completed.”

And again, in the Amendment (July 3, 1866), it is further enacted :

"That the Union Pacific Railroad Company, with the consent and approval of the Secretary of the Interior, are hereby authorized to locate, construct, and continue their road from Omaha, in Nebraska Territory, westward, according to the best and most practicable route, and without reference to the initial points on the one hundredth meridian of west longitude, as now provided by law, in a continuous completed line, until they shall meet and connect with the Central Pacific Railroad Company, of California; and the Central Pacific Railroad Company, of California, with the consent and approval of the Secretary of the Interior, are hereby authorized to locate, construct, and continue their road eastward, in a continuous completed line, until they shall meet and connect with the Union Pacific Railroad, *Provided* That each of the above-named companies shall have the right, when the nature of the work to be done, by reason of deep cuts and tunnels, shall for the expeditious construction of the Pacific Railroad require it, to work for an extent of not to exceed three hundred miles in advance of their continuous completed lines."

Central Pacific Railroad Co.—Organization, Franchises, &c.

The Central Pacific Railroad Company of California, was organized in July, 1861, under the general railroad law of that State, with authority to build a railroad from the navigable waters of the Pacific, at Sacramento, to the eastern boundary of the State, with such branches and extensions as may be necessary.

By the 9th section of the Act of Congress, the Company was required to file its acceptance of its provisions, and assume the obligations therein imposed, within six months after its passage, which acceptance was filed on the third day of December, 1862.

The Company enjoys the fullest authority and sanction of the State of California, in addition to the grants and franchises of Congress, as may be seen from the subjoined extract from "An Act to aid in carrying out the provisions of the Pacific Railroad and Telegraph Act of Congress," approved April 4th, 1864 (Chap. ccccxvii Statutes, 1863-4):

"SECTION 1st. Whereas, by the provisions of an Act of Congress, entitled an Act to aid in the construction of a railroad and telegraph line from the Missouri River to the Pacific Ocean, and to secure to the Government the use of the same for postal, military, and other purposes, approved July first, eighteen hundred and sixty-two, the Central Pacific Railroad Company, of California, is authorized to construct a railroad and telegraph line in the State of California, and in the Territories lying east of said State, towards the Missouri River; therefore, to enable the said Company more fully and completely to comply with and perform the provisions and conditions of said Act of Congress, the said Company, their successors and assigns, are hereby authorized and empowered, and the right, power, and privilege is hereby granted to, conferred upon and vested in them to construct, maintain, and operate the said railroad and telegraph line, not only in the State of California, but also in the said Territories lying east of and between said Missouri River, with such

branches and extensions of said railroad and telegraph line, or either of them, as said Company may deem necessary or proper; and also the right of way for said railroad and telegraph line over any lands belonging to this State, and on, over, and along any streets, roads, highways, rivers, streams, water, and water-courses, but the same to be so constructed as not to obstruct or destroy the passage or navigation of the same; and also the right to condemn and appropriate to the use of said Company such private property, rights, privileges, and franchises, as may be proper, necessary, or convenient for the purposes of said railroad and telegraph, the compensation therefor to be ascertained and paid under and by special proceedings, as prescribed in the Act providing for the incorporation of railroad companies, approved May twentieth, eighteen hundred and sixty-one, and the Acts supplementary and amendatory thereof; said Company to be subject to all the laws of this State concerning railroad and telegraph lines, except that messages and property of the United States, of this State, and of the said Company, shall have priority of transportation and transmission over the said line of railroad and telegraph; hereby confirming to and vesting in said Company all the rights, privileges, franchises, power, and authority conferred upon, granted to, or vested in said Company by said Act of Congress; hereby repealing all laws and parts of laws inconsistent or in conflict with the provision of this Act, or the rights and privileges herein granted.

"SEC. 2. This Act shall take effect and be in force on and after its passage."

A similar Act was passed by the Legislature of Nevada. [See Statutes, Chap. CXII. pp. 254.]

The Central Pacific Railroad proper, commences at the City of Sacramento, in the State of California, and extends in an easterly direction across the State to the eastern boundary thereof, thence across the richest portions of Nevada and Utah, to the vicinity of Salt Lake City, where it will connect with the roads building from the Missouri.

The Mountain Section.

The Company commenced the work of constructing the road in February, 1863, and in July, 1864, had 31 miles in operation before it had received any Bonds of the United States. The undertaking has been carried over all obstacles with steady persistence, sixty-six miles of the hardest portion being built in three years. In November of 1866, 94 miles had been opened for business, to within eleven miles of the summit of the Sierra Nevadas, overcoming a rise of nearly 6,000 feet; and a portion of the grading had been done upon the fifty miles next following. The portion of road between Colfax and Alta was quite as expensive as any part of the line between Sacramento and the eastern boundary of the State. During the whole of 1867 the road was operated as far as Cisco, only ninety-four miles from Sacramento, a point where the Company controls the entire business crossing the Sierra Nevadas. The track was extended, toward the close of the year, up

And again, in the Amendment (July 3, 1866), it is further enacted :

"That the Union Pacific Railroad Company, with the consent and approval of the Secretary of the Interior, are hereby authorized to locate, construct, and continue their road from Omaha, in Nebraska Territory, westward, according to the best and most practicable route, and without reference to the initial points on the one hundredth meridian of west longitude, as now provided by law, in a continuous completed line, until they shall meet and connect with the Central Pacific Railroad Company, of California; and the Central Pacific Railroad Company, of California, with the consent and approval of the Secretary of the Interior, are hereby authorized to locate, construct, and continue their road eastward, in a continuous completed line, until they shall meet and connect with the Union Pacific Railroad, from Omaha. That each of the above-named companies shall have the right, when the nature of the work to be done, by reason of deep cuts and tunnels, shall for the expeditious construction of the Pacific Railroad require it, to work for an extent of not to exceed three hundred miles in advance of their continuous completed lines."

~~Central Pacific Railroad Co.—Organization, Franchises, & Accomplished.~~ The principal difficulty in the construction of the line over the Semmering Alps, ~~in the State of California~~, was overcoming the famous line crossing the Alps via Mount Cenis. The former of these attains an elevation of less than half the highest point of the Central Pacific; and the latter, of nearly 1,000 feet less, and requires also the application of special mechanical contrivances to render it practicable.

The difficulty, in the case of the Central Pacific, was in having to surmount the greatest elevation (7,042 feet) within 100 miles of the tidal waters of the Pacific. To distribute the ascent within so short a distance, so as to be available for locomotives of ordinary construction, required scientific skill of the highest order, and involved the most expensive kinds of railroad construction.* The valleys formed by the streams on the west slope of the Sierra Nevada range, are too broken, tortuous and precipitous for railroad purposes, and recourse to the ridges was necessary. By taking advantage of a bold spur of the mountain at Auburn, and following it up to the sources of the South Yuba, an excellent natural grade is obtained, broken by but few ravines, and made, by means of unsparing labor, of continuous and nearly uniform ascent. The grades for the mountain division are necessarily high, ranging from 75 to 116 feet.†

* The Union Pacific Railroad, in crossing the Rocky Mountain chain, attains a greater altitude above sea-level, but the greater part of the ascent is made by light grades spread over long distances before the mountains are reached.

† The Baltimore and Ohio Railroad has 17 miles, in two stretches, of 116 feet grade, with curves of 400 feet radius; and grades of upwards of 200 feet per mile, with curves of less than 300, are not uncommon in this country and in Europe.

Once only is the maximum grade resorted to, for three and a half miles below Cisco, the bulk of the heavy grade being about 95. The alignment is remarkable for its directness in such a broken, mountainous country. Thirty per cent. only of the line is occupied by curves, none of which have a less radius than 573 feet. A more practicable path across the mountains is not to be found for hundreds of miles up and down the range; as in all the passes in use by wagons, the mountain side is too precipitous to be available for railroad gradients.

The Road, so far as completed, has been examined and accepted as entirely satisfactory by the United States Commissioners, and the Bonds of the United States have been issued thereon. According to the testimony of disinterested persons it will compare favorably with any new railroad in the United States. The law requires that the road shall be substantially built of the best American materials, and in such a way as befits its semi-national character. The rails are of the best quality of American iron, and laid with wrought-iron splice plates, except a few miles first built, where wrought-iron chairs are used. The cross-ties, numbering 2,400 per mile, are 6 x 8 and 10 inches, and 8 feet long, of red-wood and tamarack, which is quite equal to red cedar or locust for durability. It is estimated by good judges that the ties will be serviceable without renewal for fifteen years.

The culverts are all of granite, or other hard rock, except a few of hard-burnt brick in the Sacramento Valley, where stone could not be procured. The bridges are made of the best quality of Puget's Sound timber, with foundations of masonry. The drainage is ample and complete, and the road-bed is well ballasted with gravel or broken stone. Between the 77th and 137th mile-posts there are fifteen tunnels, with an aggregate length of 6,262 feet.

The Annual Report of the Secretary of the Interior, made to the President in November, 1867, says of this road:

"There is on hand iron sufficient to lay one hundred and ten miles of track, and enough more *in transitu* to lay fifty additional miles. In the snow belt the rails used weigh sixty-three pounds to the linear yard, and are put together with fish-joints instead of chairs.

"At Sacramento, the company have erected, along the river front, wharves and derricks capable of moving an immense freight from vessels to the cars. There are twenty-seven locomotives in use, and twenty more, with material for two hundred and fifty cars, are on the way from Atlantic ports. There is on hand material for seventy-five cars. Eight locomotives recently purchased are being sent up.* The

* Since the date of this Report, the company has increased the number of locomotives to 105, the number of cars to 600, and the iron on hand is sufficient to lay 150 miles in addition to what is laid. The equipment of the road is liberal, and of excellent quality.

company report to the commissioners that thirty-seven thousand seven hundred and thirty-eight acres of land, granted to aid in the construction of the road, had been sold for seventy-seven thousand five hundred and seventy dollars (\$77,570), the greater part upon a credit of five years. * * * *

"The net profit, therefore, over operating expenses in thirty-two months, is the large sum of one million five hundred and fifty thousand six hundred and ninety-four dollars and twenty-nine cents (\$1,550,696.29).

"Since the commencement of business operations, the company represent that they have paid to the United States Government for taxes, stamps, &c., the sum of two hundred and eighty-eight thousand dollars (\$288,000)."

Progress of Construction.

The chief difficulties apprehended in the construction of the Great Railroad to the Pacific—high grades and winter snow obstructions—prove, upon practical test, to be not at all formidable. The mountain ranges have to be crossed at elevations of over 7,000 feet for the Sierra Nevada, and 8,000 feet for the Rocky Mountains, or more than twice the height of any railroad lines built on this continent. Experience shows that it is entirely practicable, and that the deep snows are not likely to prove a very serious obstacle. During two unusually severe winters the road has been operated to Cisco, within 1,100 feet of the total elevation, with no more difficulty than is common on eastern lines; and it is the opinion of the officers that it can be regularly worked during all seasons.

Although the total ascent on the western slope of the mountain is upward of 7,000 feet within the first one hundred miles, the descent on the eastern slope is less than 1,500 feet within the first thirty miles; after which there is a gradual slope toward the center of the Salt Lake Plateau, which is elevated above the sea level 5,000 feet, average. Along this portion of the route the road is being extended with the utmost rapidity consistent with the stability and future value of the property. The Company have at this time a very large force grading and track-laying in the Humboldt Valley, and if the season should prove favorable more than 300 miles will be built in 1868. The road had reached the Humboldt river at a point 230 miles east of Sacramento, at the close of July; and it was believed the North Bend of the Humboldt would be reached in August,* and Humboldt Wells by December next.

The general route of the road after leaving the Big Bend of the Truckee River is northeastwardly to Humboldt River, the lowest point in the Salt Lake Basin, (4,047 feet above sea level,) which

* On the 20th of August, 268 miles were completed, six miles of iron having been laid in a single day. The grading was completed 100 miles in advance of the track.

stream it follows, by light and uniform grades, for 300 miles, through a fertile valley, abounding in wood and water, to Humboldt Wells, 509 miles distant from Sacramento. From Humboldt Wells the country has been thoroughly explored to Salt Lake City, in all directions. Two practicable lines were found, one running round the south end of Salt Lake, and the other skirting the north end. The former, however, passes through a rough and desert country, destitute of wood and water, and involves, besides, a longer distance and higher grades, the necessity of crossing the famous Mud Flats of the Great Salt Lake Desert, which would require piling for 25 miles. The more northerly route proved to be very favorable in alignment and grades, and with plenty of wood and water, both for fuel and construction, and the Secretary of the Interior has approved the line to the north of Salt Lake. More than half the distance can be built with grades varying from 0 to 25 feet per mile, while none of them exceed 75 feet per mile, for short distances.

The following table will show the distances between prominent points of the line, according to recent surveys, the elevations above sea-level, and the parts completed by the respective Companies:

<i>Distance.</i>	<i>STATIONS.</i>	<i>Elevation.</i>
—	San Francisco, W. P. R. R.	tide.
27	Vallejo's Mills.....	121
79	Stockton.....	22
124	Sacramento..... C. P. R. R.	56
155	Newcastle.....	930
178	Colfax.....	2,448
193	Alta.....	3,625
216	Cisco.....	5,711
229	Summit Sierra Nevada.....	7,042
243	Truckee.....	5,860
262	Camp 24 (State line).....	5,150
278	Reno (Virginia Station).....	4,530
311	Wadsworth (Big Bend Truckee).....	4,217
352	Humboldt Lake.....	4,047
382	Oreana.....	4,160
418	Mill City.....	4,250
454	Winnemucca (North Bend Humboldt).....	4,392
508	Reese River Valley.....	4,550
636	Humboldt Wells.....	5,650
775	North Point Salt Lake.....	4,290
850	Weber Canon (Salt Lake City)..... U. P. R. R.	4,654
1,000	Fort Bridger.....	7,009
1,025	Green River.....	6,092
1,155	Bridger's Pass (Rocky Mountains).....	7,534
1,260	Laramie.....	7,175
1,297	Sherman (Summit Black Hills).....	8,242
1,320	Cheyenne.....	6,062
1,477	Julesburg.....	3,513
1,655	Fort Kearney.....	2,128
1,845	Omaha.....	968

Construction Resources.

The CENTRAL PACIFIC COMPANY encountered the difficulties of construction in their worst form at the very outset. Some idea of the nature and cost of the work may be gathered from the single fact that the blasting-powder alone, for the first 140 miles, cost \$900,000 in gold. Portions of the completed line have cost to grade upwards of \$300,000 per mile, and the average for the mountain section is about \$100,000 per mile. It is noteworthy, however, that the road-bed already prepared exceeds in cost and delay, the aggregate of the remaining 500 miles; so that, practically, half the work is now done, and half of the total outlay already made. The expenditures of the Company on the property up to the 1st January 1868, were nearly \$30,000,000.

The resources of the Company have been, and are, abundant for the most vigorous prosecution of the work.

For the first seven miles the Central Pacific receives the same Government subsidy as the roads east of the Rocky Mountains, \$16,000 per mile; for the next 150 miles of more rugged country, receives \$48,000 per mile, and for the remaining distance (say, 57 miles) \$32,000 per mile. The people of California have shown themselves so profoundly interested in the success of the road that the State and Municipal corporations have added to the resources of the Company. The State of California has assumed the payment of the interest for twenty years upon one million and a half of the Company's bonds; a concession worth about \$3,000,000 in gold. In addition to the subsidy granted this Company by the General Government, the City of San Francisco has donated, to aid in the construction of the road, four hundred thousand dollars, in City seven per cent. thirty-year gold-paying bonds; and the City of Sacramento has donated some thirty acres of land in that city, embracing about 1,300 feet of valuable water front on the Sacramento River, which, with the privileges connected therewith, is considered worth three hundred thousand dollars.

The following Schedule of Donations, Subsidies, Loans, etc. shows the Company's Resources for the prosecution of the work from Sacramento to the vicinity of Salt Lake City (726 miles):

1. DONATIONS, &c., (without lien.)			
U. S. PUBLIC LANDS, much valuable timber, 12,800 acres			
per mile, minimum valuation	\$10,000,000		
SAN FRANCISCO 30-year Gold Bonds	400,000		
SACRAMENTO CITY, 30 acres, valuable water front	300,000		
STATE OF CALIFORNIA, int. on \$1,500,000 of "State Aid Bonds," 7 p. ct. gold, for 5 years during construction	525,000	\$11,225,000	
2. CAPITAL STOCK, NET EARNINGS, &c., (no lien.)			
CAPITAL STOCK SUBSCRIPTIONS,	8,000,000		
NET EARNINGS, after interest payments, 1865-6, gold,	708,664		
NET EARNINGS, after interest payments, 1867, gold,	811,571	9,520,235	
3. SUBSIDIES, (subordinate lien.)			
U. S. GOVERNMENT BONDS—cancelled mainly by transportation services		25,517,000	
4. LOANS.			
CENTRAL PACIFIC RAILROAD 7 per cent. "State Aid Bonds," int. paid by California, (subordinate lien,)	1,500,000		
CENTRAL PACIFIC RAILROAD 7 per cent. Bonds, convertible into U. S. 6 per cent. "Pacific Railroad Issue,"* (subordinate lien)	1,500,000		
CENTRAL PACIFIC RAILROAD First Mortgage 6 per cent. Bonds, principal and interest in gold, (ABSOLUTE FIRST LIEN,) to the same amount as U. S. Subsidy,	25,517,000	28,517,000	
RESOURCES on first 726 miles,		\$74,779,235	

To the above may be added the probable net earnings from the 1st of January, 1868, up to the period when the whole line is completed—estimated at more than \$5,000,000 in gold.

The aggregate amount of First Mortgage Bonds which can be issued is, therefore, less than one-third of the Resources at the Company's command; or, in other words, for every dollar borrowed upon First Mortgage Bonds, two have been invested in the property without lien, or upon a subordinate and contingent lien.

It will be seen that only the last two items bear interest, for the payment of which the Company is annually chargeable. The whole interest liability upon the Mountain Section of 157.18 miles, now completed, is but \$543,890, in gold, while the net earnings on the same portion for the current year, by the most moderate estimate, will amount to three or four times that sum. It is proper to add, also, that every extension of the road is accompanied by an increase of business on the portion first built, as well as a diminution of the ratio of expenses.

The total amount of public lands appropriated for the construction of the Through Line is 25,000,000 acres, or at the rate of twenty alternate sections per mile (12,800 acres), the minimum value of which is estimated at \$1.50 per acre; while much of it must be of far greater value (on the western portion) from its forests and timber, and superior attractions for settlement.

The Company are now selling quantities of their alternate sec-

* A present resource, which, should the holders prefer to exchange, will lessen the total.

tions of land at the minimum rate of \$2.50 in gold per acre ; except to pre-emptors who may deem it advisable to purchase from the Company, in order to obtain a clear title at once, where the price is \$1.25 per acre.* There is evidence that an active settlement will follow the progress of the Road, all of which will augment the value of the unsold lands and add to its business and resources.

Earnings and Profits from Local Business.

It was an important question for the friends and projectors of this enterprise to know whether the business would be sufficient to make it a paying investment; and this question has already been answered to their satisfaction. It is difficult for persons residing at the East to form an adequate idea of the extent of the existing and prospective traffic between the ports and cities of California and the thriving people of the Great Interior Basin. San Francisco is the great natural centre of business and intelligence for the North Pacific Slope. The manufactures and wares consumed in Oregon, Washington, Columbia, Idaho, Utah and Nevada, are all drawn thence, and the three last mentioned draw subsistence and supplies also. Such were the imperative demands of the local transportation between California and the mining regions east of the Sierras, that a steam road, even at this cost, was an economy. It has been estimated that the wagon freights across the mountains, in a single year, before the commencement of the railroad, amounted to fully \$13,000,000. Such a business would, without any increase, warrant the construction of the most expensive railroad. The actual experience of the road justifies the conclusion that the local traffic alone would be sufficient to make it one of the most profitable lines of railroad in the world, independently of the through connection across the continent, of which it must receive the exclusive benefit west of Salt Lake.

The following tables, from official sources, will show the Earnings and Expenses of the road as it progressed toward the summit of the mountains, with an average of 43 miles open for business in 1865, 75 miles in 1866, and 94 miles operated in 1867.

* The Company's Land Department Pamphlet will be forwarded on application.

<i>Year.</i>	<i>Average Miles Running.</i>	<i>Gross Earnings.</i>	<i>Net Earnings (gold).</i>	<i>Annual Interest Liabilities.</i>	<i>Surplus Carried to Construction.</i>
1865....	40	\$401,941 92	\$280 272 43	\$102,111 14	\$178,161 33
1866....	75	864,917 57	664,206 96	125,330 00	530,503 09
1867....	94	1,421,525 27	1,037,901 35	276,330 00	811,571 35
To'al..		\$2,688,384 76	\$2,032,380 74	\$503,821 14	\$1,520,235 77

It will be observed that while its earnings are heavy, the interest engagements of the Company upon the portion of the road completed are very light, less than one and a half per cent. of the total cost of construction and equipment.

This result was upon the actual, legitimate, local business alone (exclusive of men and materials carried for the construction), with far less than the ordinary proportion of Government transportation, and under the disadvantage that passengers and freight had to be forwarded at high rates by wagons, from the temporary terminus, at the summit of the mountains; and is also independent of the transportation of men and materials for extending the road.

The estimates for 1868 have been lessened by an unexpected delay in opening the road for business across the mountains; and also by the unusual visitation of severe rains and snow storms, which have increased the cost of maintaining a new road, as well as interfered with its transportation facilities. They were as follows up to 1st July, 1868, in gold:

GROSS EARNINGS.	OPERATING EXPENSES.	NET EARNINGS.
\$607,634.29	\$217,983.63	\$389,650.66

As the line was not opened for continuous transport to Virginia Station until about the 1st July, the earnings for the first six months of the current year afford no basis for estimating the future business between these points.* The earnings show, however, an absolute increase of thirty per cent. upon the same period of the previous year, with about the same number of miles in operation. The Truckee Valley is already becoming the seat of a very active business; timber and water-power being abundant. There are numerous mining settlements along the Humboldt, for 200 miles of the railroad route, and at the point now reached, the line commands the traffic to the settlements of Central Nevada and Idaho.

The Company is justified in charging the maximum rates—10 cents per mile for passengers, and 15 cents per ton per mile for freight—and these are cheerfully paid, being less than one-third

* The earnings for July, 1868, the first month of continuous traffic to Washoe, were \$230,000.

what was formerly paid for far less expedition, comfort and security. It is also well understood by the customers that not a dollar has been taken out of the revenues for dividends or profit, and that the surplus earnings are devoted to pushing onward the work.

Branch and Connecting Roads.

At Sacramento the CENTRAL PACIFIC RAILROAD connects with the Bay Line of steamers for San Francisco, and will connect with the WESTERN PACIFIC RAILROAD, now being constructed to San Francisco via Stockton; with the SACRAMENTO VALLEY RAILROAD, for Placerville; with the CALIFORNIA CENTRAL and NORTHERN RAILROADS, for Oregon; and with the SAN JOAQUIN VALLEY and SOUTHERN PACIFIC RAILROADS, projected to the southern boundary of California.

At Reno, 154 miles east of Sacramento, the VIRGINIA and TRUCKEE RAILROAD (17 miles) will connect the important Washoe Mining Regions, which have already an active population of 25,000, and whose forty-six mining companies produce an annual yield of \$15,000,000 in bullion, and which require timber and lumber valued at \$2,000,000 per annum. Very large amounts of ore for shipment to Europe, for more perfect reduction, will hereafter pass over the CENTRAL ROAD as return freight, and form an important addition to its revenues.

The OREGON BRANCH of the PACIFIC RAILROAD, for which a Bill has already been introduced in Congress, and which contemplates a line of 350 miles, from Eugene City, near Portland, via the Willamette Valley, to connect with the CENTRAL PACIFIC Main Trunk Line at the North Bend of the Humboldt, and will thus afford a short and easy branch to Oregon and Washington without the interposition of broken and hazardous river navigation.

The HUMBOLDT & IDAHO RAILROAD (125 miles) connecting with the CENTRAL PACIFIC, at the same point, is designed to connect, by a direct line, Boise City and the rich mining regions of Central Idaho with San Francisco. It is probable that this road will ultimately be extended so as to intersect the proposed NORTHERN PACIFIC RAILROAD, and thus establish the shortest line of communication between Montana and the metropolis of the western coast.

At Salt Lake the CENTRAL PACIFIC will meet and connect with the UNION PACIFIC RAILROAD, and through it with the various Eastern branches and extensions in the Atlantic States.

Increase of Through Traffic.

There can be no doubt that the completion of the Pacific Railroad will not only open the way to many persons now wishing to visit that coast for purposes of business, pleasure, or settlement, but also afford the opportunity to thousands at the Far West to revisit their eastern homes.

The express time between San Francisco and New York was reduced to fifteen days at the close of 1867, and by the close of this year it is expected the time will be further reduced to ten days, by the further extension of the Pacific Railroad from both directions. By the beginning of 1870, if not sooner, we may look for the all-rail connection, and a schedule of about six days from ocean to ocean; and thereafter we may look for a prodigious stream of travel and traffic over the Main Stem Line.

That a remarkable stimulus will be given to migration and to the trade, commerce, mining, and manufactures of the Pacific Slope, by the completion of this road, will not be doubted. It will be noted that the bulk of the actual settlement, the richest lands and mines, and the most important trade lie along the portion of the road controlled by this Company. Beside a mileage upon the through traffic, it will have the exclusive benefit of a valuable local business, and for many years will afford the most direct and available access to the western coast.

The great CENTRAL PACIFIC RAILROAD is, therefore, in an important sense, a national work, aided and commended by the people, the legislative power, and the executive officers, though its management is *administered with all the care and forethought of the most eminent private corporations*. Forming with its existing eastern connections a continuous line across the continent, it is destined to become one of the most important channels of trade and communication in the world. With its western terminus at San Francisco, the most commodious harbor on the North Pacific Coast, and its branches reaching the railroad systems of the Atlantic States by way of Chicago and Saint Louis, it constitutes, as it were, the Grand Trunk Line of this hemisphere. It lies directly in the path of the great westward movement of population and trade, along the temperate belt across this country, and becomes an essential link in the mighty inter-continental traffic between Western Europe and Eastern Asia. It presents the shortest and most practicable route to the Pacific, and must serve four-fifths of all the population west of the

Missouri River. It has a dense and productive group of States at one end of the line, and an energetic coast population at the other with a rich mining country intermediate. Already a large and busy population is settled along the western portion, and it seems certain that between San Francisco and Omaha a chain of great cities must grow up in its path, swelling the volume of trade and travel to dimensions which baffle all present estimate.

The Central Pacific Railroad Company, who have shown so much forethought and judgment in originating and developing this great enterprise, and who have carried it forward with such energy and persistence—pledging their own solid wealth for its success, even in times of grave and general national depression—may be justly regarded as possessing the richest franchise ever granted on this continent.

CENTRAL PACIFIC RAILROAD COMPANY'S FIRST MORTGAGE BONDS.

According to the original Pacific Railroad Act, the advances of the Government to the several companies upon the completed sections of their lines, were made a first lien upon the respective roads, equipment, &c. Under this provision none of the companies, except the Central Pacific were able to carry forward the work of construction as contemplated. It became evident, however, that the best interests of the country and of the government required the earliest practicable completion of the great enterprise. The General Government was already secured in the priority of accommodation in the use of the road for the transportation of mails, troops, supplies, &c.; and it was certain that the road would be largely devoted to the public service. Congress, in July, 1864, amended the general law, so as to waive the prior lien of the Government upon the roads, in favor of such claims as private capitalists and investors might assume.

The companies building the National Pacific Railroad were authorised "to issue their First Mortgage Bonds on their respective railroads and telegraph lines to an amount not exceeding the amount of the Bonds of the United States" granted for the same purpose; and it was provided that "*the lien of the United States Bonds shall be subordinate to that of the Bonds of the said Companies.*" [See Amendment of 1864, Sec. 10.] The Government, by this amendment, surrendered its own prior lien, and substituted in its place that of the First Mortgage Bondholders; being satisfied to look for the re-payment of its own advances mainly to the services of the road, and a small percentage of the future traffic extending over a series of years. It is estimated that in twenty-five years after the completion of the line the debt of the Company to the Government will have been cancelled by the proportion of the transportation of public mails, troops and supplies, reserved for that purpose, together with the five per cent. of the net earnings after completion, as prescribed by the original Pacific Railroad Act.

In accordance with the provisions of this amendment and the Statutes of California, the Central Pacific Railroad Company are now issuing their FIRST MORTGAGE BONDS, having THIRTY YEARS to run from their date, and BEARING INTEREST AT THE RATE OF SIX PER CENT., INTEREST AND PRINCIPAL PAYABLE IN COIN, in the City of New York, upon their railroad, the principal portion of

the Main Stem Line, and *the most valuable link in the great National Pacific Railroad*. They are issued only in amount equal to the Government Bonds issued to aid the construction of the same section, viz \$16,000 per mile upon the first seven miles, and \$48,000 per mile upon the next 150 miles of mountain section to the Salt Lake Basin and thence across the Salt Lake Plains at the rate of \$32,000 per mile, or *less than one half the actual cost of construction, and a third the cost and value of the road and equipments, pledged for the redemption*. They are in Bonds of \$1,000 each, with semi-annual gold coupons attached.

Hon. D. O. Mills, President of the Bank of California, and William E. Barron, formerly agent for the Messrs. De Rothschild in San Francisco, have been made Trustees under the Mortgage Deeds executed and recorded by the Company, with all the requisite and customary forms of law in such cases.

Advantages of the Bonds.

These First Mortgage Bonds of the Central Pacific Railroad Company therefore possess characteristics and advantages peculiar to them as a class, and which render them far superior to the Bonds of other railroad or private corporations. Being under the constant supervision of the Government—which, being the principal creditor, accepts a subordinate and contingent lien—with so large an amount of additional capital also invested in the property pledged, it is believed that no securities now offered in the market possess the same claims to confidence and market value except those of the Government. They are commended to the attention of investors by the following important facts:

- First.* The First Mortgage Bondholders are joint investors with the National Government, to the same amount only, which places the enterprise beyond the contingencies and risks attending railroads in general.
- Second.* They are issued only as the work progresses, and always represent a first claim upon an exceedingly valuable property which is astonishingly productive in its beginnings, and promises to become more and more so.
- Third.* The lien of the Government being specially made subordinate to that of the First Mortgage Bonds, there can hardly arise a contingency in which the Company or the Government can fail to secure the First Mortgage Bondholders.

Fourth. As the National Pacific Railroad route is destined to become the great Trunk Line of the Continent, its business must continue to increase, giving assurance of the uninterrupted payment of the interest, and the fullest security for the principal of the First Mortgage Bonds.

Fifth. Published statistics show that the First Mortgage Bonds of leading railroads have, for many years past, maintained a *constant and high average selling price at the New York Stock Exchange*, and are favorably regarded by capitalists for permanent investments.

Special Assurances of the Central Pacific Railroad Bonds.

The Central Pacific Railroad Company enjoys all the privileges, grants and subsidies conferred by the Acts of Congress upon the several Companies authorized to construct the National Railroad to the Pacific, and its Eastern forks; and has beside the following *noticeable, exclusive, and important local advantages, peculiar to the Western end of the route*,—considerations which give special security and value to its First Mortgage Bonds:

- I. The Central Pacific Railroad forms the sole Western link of the only railroad route to the Pacific selected and adopted by Congress to receive the Bonds of the Government, as well as the Public Lands, in aid of its construction. *It is exempt from competition*, either of navigable waters or parallel lines, as it commands the natural, accessible gateway between San Francisco and the East. *It must receive undivided the through traffic* which is distributed among the various branch roads building and projected east of the Rocky Mountains.
- II. The most difficult and costly portion of its road is now built, and *the only formidable mountain range in its course is successfully overcome*. The remainder of the construction will be easy, inexpensive and rapid toward Salt Lake.
- III. The Company has received from the State and principal cities of California, *assistance in money, credit, and valuable property, worth over \$3,000,000 in gold*; and it will have received, upon the completion of the 726 miles between Sacramento and Salt Lake City, more than \$25,000,000 in the Bonds of the United States; or at the average rate of over \$35,000 per mile.
- IV. The road enjoys already an immense, exclusive, local trade between Sacramento and the richest portions of Eastern Cali-

foria, Nevada, Idaho, and Utah; sufficient to make it *one of the most profitable railroads in the world, independently of the through traffic*, which cannot be diverted or withheld from it. With every extension of the track the business and profits of the completed part are increased; so that when the overland through traffic shall be poured over the Central Road, the general prosperity of the Company will be without parallel, and its securities appreciated correspondingly.

- V. The road lies wholly in territory yielding the precious metals, its revenues are collected in coin, *and its business is conducted on a specie basis*. Its rates for transportation are very advantageous, being more than double those of roads lying east of it; and the *ratio of operating expenses is less than 25 per cent. of the gross earnings*.
- VI. In consequence of the aid it receives from the General Government, from the State of California, and from municipal corporations, the annual interest obligations which the Company are called upon to assume are very light. The net earnings upon 94 miles, in 1867, were *four times the amount of annual interest liabilities, and were \$500,000 more than the annual interest to be assumed in building that distance*.
- VII. By the terms of an Amendment of the Act of Congress, (see Act of 1865, Sec. 1) inserted at the request of this Company, the Pacific Railroad Companies are authorized to make the interest upon their First Mortgage Bonds payable in *any* lawful money of the United States. The Central Pacific Company have bound themselves to pay both the *principal and interest* of their Bonds in "GOLD COIN OF THE UNITED STATES," and have expressly so stated in the body of their Bonds; and this agreement is made in California, under the provisions of Mortgages executed and recorded by them in California and Nevada—States wherein specie payments have not been suspended.
- VIII. The grant of land is destined, at an early day, to prove of great value, and may realize to the Company an amount equal to the aggregate of First Mortgage Bonds issued on the Road and equipment.
- IX. The management of this Company has been in the highest degree prudent and frugal; and the whole surplus, after payment of expenses and interest, is devoted to construction purposes.


In these important particulars the securities of the Central Pacific Company possess advantages not possessed by other railroad bonds; and they *offer a greater degree of safety, stability and profit combined, than any others now offered to investors.*

The First Mortgage Bonds of this Company are already taken in large amounts for foreign account, and are destined to occupy a prominent place among non-speculative securities in the money-markets of this country and Europe, and will, without doubt, be eagerly sought for, and actively dealt in hereafter, at rates materially in advance of the price at which they are offered by the Company.

Having been familiar with the operations of the Central Pacific Railroad Company from its commencement, we are satisfied that they are conducted with rare ability and prudence, and that the energetic and economical management of the Company's affairs entitle them to the confidence of capitalists and of the public. We have carefully investigated the progress, resources, and prospects of the Road, and have the fullest confidence in its success, and in the value and stability of the Company's securities. The attention of Trustees of Estates, Institutions, and individuals desiring a long, safe and remunerative investment, is especially invited to these First Mortgage Bonds.

Orders may be forwarded to us direct, or through the principal Banks and Bankers in all parts of the country.

Remittances may be made in drafts on New York or Legal Tender Notes, National Bank Notes, or other funds current in this city, and the Bonds will be forwarded to any address by Express free of charge. Inquiries for further particulars, by mail or otherwise, will receive punctual attention.

 For the terms and agencies where the Bonds may be obtained, see the back of cover.

All kinds of Government Securities received at the full market price in exchange for the above Bonds.

FISK & HATCH,
BANKERS AND DEALERS IN GOVERNMENT SECURITIES,
and Financial Agents of the C. P. R. Co.,
No. 5 Nassau Street, N. Y.

NEW YORK, 1868.

THE GREAT
PACIFIC RAILROAD,

With the fostering care of the Government, is rapidly building, and will be completed in 1869. The bulk of the actual settlement, the richest lands and mines, as well as the most important trade, are along the Western Half of the Route.

THE CENTRAL PACIFIC RAILROAD COMPANY,

Who control this favored portion of the line, have already built, equipped, and paid for their Road across the Sierra Nevada, and are extending it toward Salt Lake with a rapidity and thoroughness unparalleled. More than FORTY MILLION DOLLARS have been expended in the work, and the CONSTRUCTION RESOURCES are ample for the remainder. They consist of

I. **UNITED STATES BONDS** to the extent of \$35,000 per mile, average, delivered as the work progresses. II. **FIRST MORTGAGE BONDS** to the same amount, issued also according to the progress of the road, and having the preferred claim—superior to that of the Government. III. **GRANT OF PUBLIC LANDS** along the route, 12,800 acres per mile, or nearly ten million acres in all, which are now selling at the minimum rate of \$3.50 per acre. IV. **CAPITAL STOCK**, of which \$5,000,000 is subscribed and paid on the work done. V. **CASH RESOURCES**, comprising Donations from California sources, amounting to \$1,250,000. Net Earnings, etc., 1865 to 1870, \$6,500,000, making a total of more than

Seventy Millions upon the First 726 Miles.

Beside a mileage upon all through traffic, they have the exclusive benefit of a heavy and lucrative local business between San Francisco, Eastern California, Nevada, Idaho, and Utah. The net earnings upon the two hundred miles now operated are already three times more than the interest liabilities assumed thereupon.

We invite the attention of Capitalists, Trustees, and others to the merits and advantages of the CENTRAL PACIFIC RAILROAD FIRST MORTGAGE BONDS. These bonds are the obligations of a responsible company, whose vast property is administered with all the economy and forethought of individual enterprises. They have as final security the first claim upon the whole property, which has cost three times the amount of the bonds issued thereupon, and which, in its beginnings, is one of the most profitable railroads in existence. The certainty and regularity of the interest payments is established by the current revenues of the company—already largely in excess of their requirements—and a Sinking Fund is provided for the repayment of the principal.

The Company now offer for sale through us, at

103 PER CENT. AND ACCRUED INTEREST, IN CURRENCY,

A LIMITED AMOUNT OF THE

FIRST MORTGAGE BONDS,

Bearing Six Per Cent. Interest—both INTEREST AND PRINCIPAL being explicitly made "PAYABLE IN GOLD COIN," conformably with the specie laws of the Pacific States.

The Bonds are of \$1,000 each, with semi-annual gold coupons attached, payable in July and January.

The Company reserve the right to advance the price at any time; but all orders actually in transitu at the time of any such advance will be filled at present price. At this time they pay more than 8 per cent. upon the investment, and have, from National and State laws, guarantees superior to any other corporate securities now offered.

We receive all classes of Government Bonds, at their full market rates, in exchange for the Central Pacific Railroad Bonds, thus enabling the holders to realize from 5 to 10 per cent. profit and keep the principal of their investments equally secure.

Orders and inquiries will receive prompt attention. Information, Descriptive Pamphlets, etc., giving a full account of the Organization, Progress, Business and Prospects of the Enterprise furnished on application. Bonds sent by return Express at our cost.

FISK & HATCH,

BANKERS AND DEALERS IN GOVERNMENT SECURITIES,

AND

Financial Agents of the Central Pacific Railroad Company,

No. 5 NASSAU STREET, NEW YORK.

SUBSCRIPTIONS RECEIVED BY BANKS AND BANKERS, AGENTS FOR THE LOAN.

C 3917412



RAILROAD COMMUNICATION ACROSS THE CONTINENT,

WITH AN ACCOUNT OF THE

Central Pacific Railroad,

OF

CALIFORNIA:

A DESCRIPTION OF THE ROUTE, THE PROGRESS AND CHARACTER
OF THE WORK, ITS RESOURCES, BUSINESS AND PROSPECTS,
WITH THE FOUNDATION AND ADVANTAGES OF ITS

FIRST MORTGAGE BONDS.

NEW YORK, FEBRUARY, 1868.

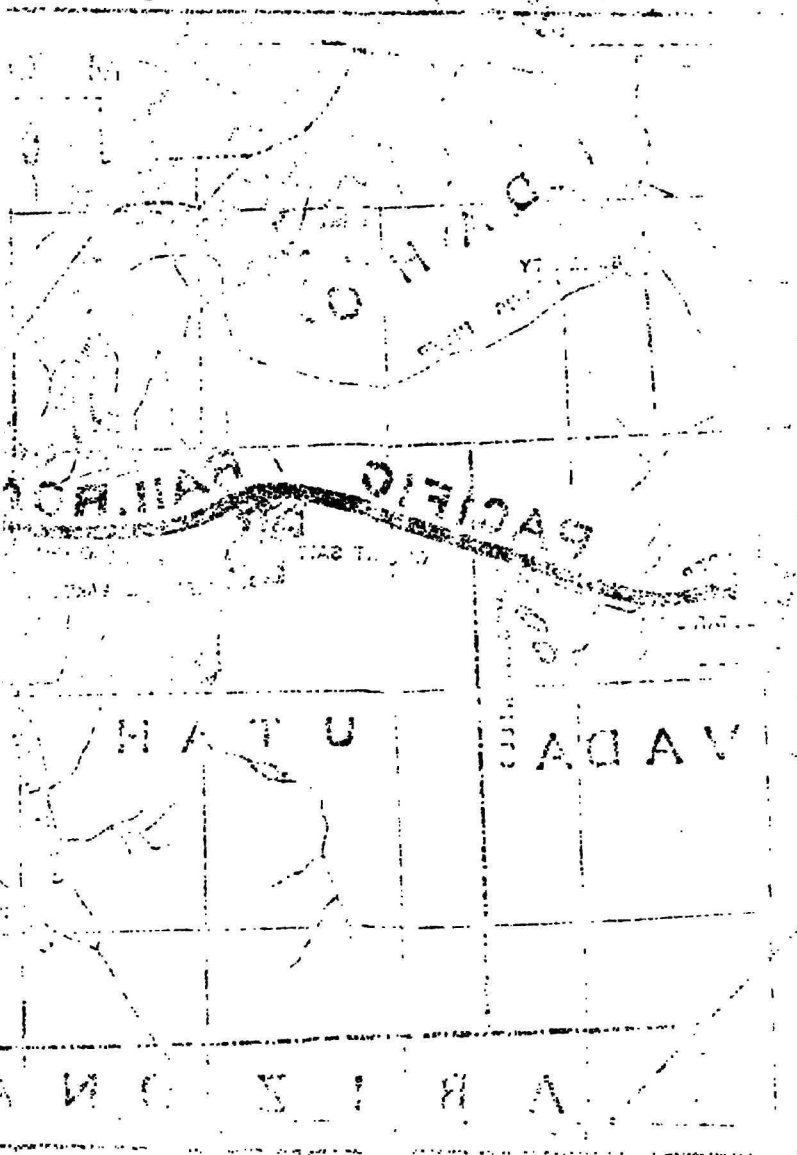
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1868.

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1. A. F. D. M.



Principal location of

Railroad Communication across the Continent,

WITH AN ACCOUNT OF THE

CENTRAL PACIFIC RAILROAD

OF
Fisk, firm, bankers, N.Y.
CALIFORNIA:

A DESCRIPTION OF THE ROUTE, THE PROGRESS AND CHARACTER OF THE WORK, ITS RESOURCES AND BUSINESS. PROSPECTS, WITH THE FOUNDATION AND ADVANTAGES OF ITS

L.C.
FIRST MORTGAGE BONDS.

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C



Central Pacific Railroad Co.

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SACRAMENTO.

Vice-President.

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FISK & HATCH, New York.

CALIFORNIA OFFICE,

56 and 58 K Street, Sacramento City, Cal.

NEW YORK OFFICE,

54 William Street, New York City.

RAILROAD COMMUNICATION ACROSS THE CONTINENT.

CENTRAL PACIFIC RAILROAD.

Growth of the Pacific Slope.

THE Pacific Slope of the North American Continent has been steadily and rapidly growing in commercial, political, and moral importance for the past quarter of a century. Since the discoveries of the vast deposits of the precious metals, from which it is estimated no less than a thousand millions of bullion have been already drawn, the attractions of a genial climate, fertile soil, and valuable markets have contributed to draw thither, and to hold as permanent settlers, nearly a million of active population. The foreign and domestic trade has already assumed respectable proportions. The annual yield of the precious metals is undiminished, while the pastoral and agricultural productions are largely increasing—even under the existing conditions of a scarcity of labor, and inadequate transportation facilities. Some idea of the present value and possibilities of this vast extent of country (half as large as Europe,) may be gathered from the following statistics taken from reliable sources:

The United States Commissioner of Mining Statistics gives the following estimate of the yield of precious metals from the Pacific States and Territories:

1861,.....	\$43,391,000	1865,.....	70,000,000
1862,.....	49,370,000	1866,.....	75,000,000
1863,.....	52,500,000	1867,.....	80,000,000
1864,.....	\$63,450,000		

Estimated to be distributed thus:

California,	\$22,000,000	Idaho,	\$15,000,000
Oregon and Washington, ..	8,000,000	Nevada,.....	15,500,000
Montana,.....	10,000,000	Colorado, Utah, &c.....	10,000,000

The total amount of bullion coined at and shipped from San Francisco, for 1866, is given at \$55,322,000, and for 1867, at

\$57,674,000; no less than \$9,464,000, in silver, having been shipped to China direct in the two years, independently of large amounts of grain and merchandise.

The crop of cereals in California and Oregon already exceeds in value the annual gold product, and now form the chief items of export of these two young States, which, a few years since, imported their breadstuffs. No less than 160 first-class vessels have been freighted from the port of San Francisco during the last year with wheat and flour, destined mainly for European consumption, valued at \$10,000,000. The wheat crop of California alone, in 1865, was 8,000,000 bushels; 12,000,000 bushels in 1866; and in 1867 the crop was estimated at 15,000,000 bushels. The wool crop of 1865 was 5,250,000 pounds, and that of 1866, 8,000,000 pounds. California leather and hides have a high rank in eastern markets. The wine-culture, although still in its infancy, promises to be a large source of revenue. The coast abounds with excellent timber, and besides gold and silver, has valuable mines of quicksilver, lead, iron, coal, borax and cobalt. Hardly any natural gift is wanting to the vast territory to enable it to sustain a dense population.

A first-class line of steamships, now plying between San Francisco and Yokohama and Shanghai, has opened a new avenue to American enterprise, in the rich trade of China, Japan, and the East Indies; a trade which has hitherto been shared only by the Western European nations, and which has been estimated to be worth, in the aggregate, \$135,000,000 per annum. The vessels arriving at the single port of San Francisco, in 1866, had an aggregate tonnage of 765,940, and in 1867, of 901,425 tons, the departures being nearly the same; the total number of passengers from foreign or distant ports being 25,618 in 1866, and 33,871 in 1867. The carrying trade of the North Pacific Ocean promises a rapid development, and the manufacturing interests are also rapidly extending their operations.

The Pacific Railroad a Necessity.

These results have been reached under great disadvantages. California has been practically more remote than any part of Europe. So long as a three weeks ocean voyage through the tropics must be endured, at great cost, the tide of immigration was necessarily diverted elsewhere. The national troops and mails, together with all the conveniences and accessories of civilized life, had to be carried across a foreign isthmus, or, by a voyage of 16,000 miles, round

Cape Horn. The high price of labor, of subsistence and of transportation all tended to check the otherwise exuberant growth. Only the very richest deposits of gold and silver could be worked with profit. The one element lacking to give a new impetus to the Western coast was a cheap and easy means of communication with the Eastern States.

The intermediate Territories, also rich in precious ores, were neglected, insecure, and unavailable for general settlement, by reason of the enormous cost of transportation. The maintenance of order and tranquility among the roving Indian tribes had become a serious item of national expenditure. The political, commercial, and mineral interests called for Railroad Communication across the Continent at the earliest practicable day. The subject, after being abundantly canvassed by various conventions, was finally pressed upon the attention of the Government. Up to 1860 the railroad system of the East had been extending its iron arms westward until it had reached the Missouri River at two points, and was rapidly being approached at two others on the Iowa boundary. At the outbreak of the Rebellion, the Pacific Railroad became, more than ever, a necessity, from a military point of view. In order to bind the young and powerful Pacific States and Territories to the Union, and to encourage their efforts in the common defence, as well as for the purposes of preserving order in the public domain and developing the great industrial pursuits of the Far West, the aid of the Government was generously extended to the project.

THE NATIONAL PACIFIC RAILROAD LINE.

The Act of Congress approved July 2, 1862, and its subsequent Amendments, provide for the construction of one Main Through Line of Railroad, from San Francisco to Omaha, with three minor, tributary Branches, to other points on the Missouri River. The CENTRAL PACIFIC RAILROAD COMPANY, of California, was authorized and entitled to construct the Western and principal portion of the Stem Line across California, Nevada and Utah, until it is met by the Eastern portion. A new corporation—the UNION PACIFIC RAILROAD COMPANY—was chartered to build the Eastern portion; and these *two companies are now building the only Through Line to connect the Mississippi Valley and the Pacific Ocean*, and are carrying it forward with greater energy than was ever shown in any similar enterprise in ancient or modern times.

These roads, therefore, constitute the NATIONAL PACIFIC RAILROAD LINE, adopted and selected by Congress to receive the grants of the public credit, as well as the public lands; and which are being constructed with the support, and under the supervision, of the Government. All other proposed or projected "Pacific Railroads," so-called, are merely local organizations, and should not be confounded with the CENTRAL NATIONAL TRUNK RAILROAD ROUTE to the Pacific.

The Companies embraced in the Pacific Railroad Act, and entitled to participate in the grants of Government credit for the construction of the National Trunk Line and branches, are enumerated by the Secretary of the Treasury in a tabular Exhibit of the different roads, an estimate of the distances to be built under Government patronage, and the amount of bonds to be issued to each, as follows:

*Estimate of the length of the Pacific Railroads, and amount of
Bonds to be issued.*

<i>NAME OF R. R. CO.</i>	<i>Distance in Miles.</i>	<i>Amount per Mile.</i>	<i>Total Amount of Bonds to be Issued.</i>
CENTRAL PACIFIC RAILROAD—[STEM LINE.]			
From Sacramento to the western base of the Sierra Nevada Mountains.....	7.18	\$16,000	\$114,880
Thence, 150 m. across the Sierra Nevada Mt. Thence to the probable junction with the Union Pacific, or to a point 78 $\frac{3}{4}$ miles east of Salt Lake City.....	150	48,000	7,200,000
	544 $\frac{11}{1000}$	32,000	17,411,680
Total.....	701 $\frac{295}{1000}$	-----	24,726,560
UNION PACIFIC RAILROAD — [STEM LINE,]			
From Omaha to eastern base of Rocky Moun- tains, about.....	516	16,000	8,256,000
Thence, 150 miles across the Rocky Mountains, Thence, to the probable junction with the Cen- tral Pacific, or to a point 78 $\frac{3}{4}$ miles east of Salt Lake City, estimated.....	150	48,000	7,200,000
	289 $\frac{795}{1000}$	32,000	9,270,560
Total.....	955 $\frac{795}{1000}$	-----	24,726,560
UNION PACIFIC RAILWAY, EASTERN DIVISION [KANSAS BRANCH]—			
For a length equal to the distance from the mouth of Kansas River, <i>via</i> the Kansas and Republican Rivers, to 100th meridian—[is allowed to connect east of the Rocky Moun- tains, about 600 miles], entitled to bonds for	381	16,000	6,096,000
ATCHISON & PIKE'S PEAK RAILROAD [now called CENTRAL BRANCH OF UNION PACIFIC] 100 miles next to the Missouri River.....	100	16,000	1,600,000
SIOUX CITY & PACIFIC RAILROAD— From Sioux City to its junction with the Union Pacific Railroad at Fremont.....	100	16,000	1,600,000
WESTERN PACIFIC RAILROAD— From San José to Sacramento.....	120	16,000	1,920,000

The charter of the last-named Company contemplated a line from Sacramento toward San Francisco, making the circuit of the Bay of that name. Their franchise has recently been assigned to parties in the interest of the Central Pacific Railroad Company; and it is probable that this line will be formally incorporated with the Central Pacific Railroad, and the road extended from Sacramento to San Fran-

cisco by the "best, most direct and practicable route" so soon as the overland connection is completed. In the meantime the travel is abundantly accommodated by first-class steamers.

The United States Government Aid.

In order to facilitate the enterprise, and assist in the earliest completion of the work, the act of Congress confers upon the Companies the Right of Way through the Territories, an absolute grant of twenty alternate sections (12,800 acres) per mile of the public lands, through which the road runs, the right to use the coal, iron or timber thereon, and authorizes a *special issue of the 6 per cent. Bonds of the United States, proportioned to the length and difficulty of the line*, to be delivered to the Companies as the work progresses. The length of the Main Line from Omaha to Sacramento is about 1,700 miles, and the estimated cost of construction was a hundred millions. Fifty millions were therefore appropriated by the Government, to be divided between the two powerful corporations—the CENTRAL PACIFIC AND UNION PACIFIC—while ten millions additional were devoted to the smaller Branches. The proportions in which the bonds are distributed, are as follows: Between the Missouri River and the east base of the Rocky Mountains, (525 miles,) \$16,000 per mile; across the Rocky Mountains (150 miles), \$48,000 per mile; thence across the Great Basin (900 miles), \$32,000 per mile; across the Sierra Nevada Mountains (150 miles), \$48,000 per mile, and thence to San Francisco (about 120 miles), \$16,000 per mile. The words of the Act are as follows (See Sec. 5 and Sec. 11, Act of 1862):

"That for three hundred miles of said road most mountainous and difficult of construction, to wit: one hundred and fifty miles westwardly from the eastern base of the Rocky Mountains, and one hundred and fifty miles eastwardly from the western base of the Sierra Nevada mountains, said point to be fixed by the President of the United States, the bonds to be issued to aid in the construction thereof shall be *treble* the number per mile hereinbefore provided, and the same shall be issued, and the lands herein granted be set apart, upon the construction of every twenty miles thereof, upon the certificate of the commissioners as aforesaid that twenty consecutive miles of the same are completed: and between the sections last named of one hundred and fifty miles each, the bonds to be issued to aid in the construction thereof shall be *double* the number per mile first mentioned, and the same shall be issued, and the lands herein granted be set apart, upon the construction of every twenty miles thereof, upon the certificate of the commissioners as aforesaid that twenty consecutive miles of the same are completed. * * * * *

Upon portions where, by reason of natural obstacles, the road cannot be continuously completed, but where the work is mostly

done, provision is made for an issue of two-thirds these amounts in advance. It is also provided that the several Companies shall transport the Government mails, messages, troops, supplies, etc., at their regular rates; half the compensation to be paid in cash, and the balance applied to canceling the Government advances.

The meeting-point of the two parts of the main line has not yet been officially determined, though it is understood by the Government officials, and by the officers of the respective Companies, that it will be somewhere in the vicinity of Salt Lake. The Secretary of the Interior, by whom these roads are finally located and accepted on the part of the United States, in his Response to the Resolution of Inquiry of the House of Representatives, requesting information of the amount of bonds issued to the several companies before quoted, dated Feb. 14th, 1867, says:

"Since the locations of the different roads have not been definitely determined throughout their whole extent, the above estimate must be regarded only as near an approximation as it is possible at the present date to furnish. The point of junction of the Union Pacific and Central Pacific has been assumed to be 78 $\frac{2}{3}$ miles east of Salt Lake City, or at a point which will entitle each of these companies to the same amount of bonds."

Surveys by the Central Pacific Company, since completed, establish the shortest and most favorable line between Sacramento and the meridian of Salt Lake at 726 miles, which would give as the amount of Bonds to be issued to that Company on the completion of that length, \$25,517,000. Assuming the junction to be made at or near Salt Lake City, as now seems probable, this would give an equal amount of bonds to the two companies, and would place under the control of the former about 950 miles; and of the latter 850 miles of the through line, including the extension to San Francisco.

The following table shows approximately the total length of the several routes, the length completed in 1866 and 1867, respectively, and the distance remaining to be built at the beginning of the year 1868:

<i>Lines.</i>	<i>Total Route aided by Governm't.</i>	<i>Completed.</i>		<i>Miles to be Built.</i>	<i>Amount of U. S. Bonds delivered.</i>
		1866.	1867.		
Central Pacific Railroad..... }	726	93	138	588	\$6,074,000
Western Pacific "..... }	120	20	20	100	320,000
Union Pacific "..... }	955	305	525	430	8,160,000
" " " (E. D.)..... }	381	155	330	51	4,880,000
" " (Central Branch,)..... }	100	40	60	40	640,000
Total.....	2,282	613	1,073	1,209	\$20,074,000

The progress of the several converging Eastern Branches across the level plains of Nebraska has been rapid.

The UNION PACIFIC RAILROAD COMPANY (Omaha line) have evinced remarkable energy, having commenced operations only at the close of the war, and had completed their track to the eastern base of the Rocky Mountains (officially designated at the 525th mile-post) by the close of December, 1867, and it was believed would reach the summit of the Black Hill Range, 8,000 feet above sea-level, early in the Spring. The Company express their intention to complete the remaining 400 miles of road, mainly over a mountainous country, early in 1870.

The EASTERN DIVISION COMPANY (Kansas Branch,) had completed 330 miles of their road in 1867, and have expressed their intention of carrying their line to Denver, though it is at present uncertain where they will unite with the Main Stem line.

The ATCHISON AND PIKE'S PEAK COMPANY (Central Branch,) will unite their road with the main line near Fort Kearney, 250 miles from the Missouri River.

CENTRAL PACIFIC RAILROAD.

Upon the discovery of rich gold and silver mines in the celebrated Washoe Region, on the eastern side of the Sierra Nevada Range, in 1859 and 1860; by which population and capital were rapidly drawn from California, certain enterprising merchants on the Pacific Coast, foreseeing that an extensive trade must spring up between San Francisco and the interior, which must eventually be extended across the continent, combined to ascertain if it were feasible to build a railroad across this formidable barrier of snow-crowned mountains. After two years of exploration, in which several of the most promising points along the range were examined and compared, the Donner Lake Pass was selected as the most favorable and direct route to be found; and in July, 1861, THE CENTRAL PACIFIC RAILROAD COMPANY OF CALIFORNIA was organized, under the laws of that State, with authority to construct a railroad to its eastern boundary, so as to form part of the projected line to the Atlantic States.

These surveys formed the main data upon which the action of Congress was based; and the rights and privileges of the Company, under the State charter *were confirmed and extended by the National charter.*

The law provides that each of these two principal corporations shall have the right to continue onward on the same line till met by the other; so that in case of failure or inefficiency of either company, the other should have the privilege of completing the work, on the same terms and conditions, in all respects. One of the provisions of the Act is as follows; after authorizing the Union Pacific to build to the California boundary in case it was not sooner met by the Central Pacific Railroad (Section 10, Act of 1862):

“And the Central Pacific Railroad Company of California, after completing the road across said State, is authorized to continue the construction of said railroad and telegraph through the Territories of the United States to the Missouri River, including the branch roads specified in this act, upon the routes hereinbefore and herein-after indicated, on the terms and conditions provided in this Act in relation to the said Union Pacific Railroad Company, until said road shall meet and connect, and the whole line of said railroad and branches and telegraph is completed.”

And again, in the Amendment (July 3, 1866), it is further enacted :

"That the Union Pacific Railroad Company, with the consent and approval of the Secretary of the Interior, are hereby authorized to locate, construct, and continue their road from Omaha, in Nebraska Territory, westward, according to the best and most practicable route, and without reference to the initial points on the one hundredth meridian of west longitude, as now provided by law, in a continuous completed line, until they shall meet and connect with the Central Pacific Railroad Company, of California; and the Central Pacific Railroad Company, of California, with the consent and approval of the Secretary of the Interior, are hereby authorized to locate, construct, and continue their road eastward, in a continuous completed line, until they shall meet and connect with the Union Pacific Railroad, *Provided*, That each of the above-named companies shall have the right, when the nature of the work to be done, by reason of deep cuts and tunnels, shall for the expeditious construction of the Pacific Railroad require it, to work for an extent of not to exceed three hundred miles in advance of their continuous completed lines."

Central Pacific Railroad Co.—Organization, Franchises, &c.

The Central Pacific Railroad Company of California, was organized in July, 1861, under the general railroad law of that State, with authority to build a railroad from the navigable waters of the Pacific, at Sacramento, to the eastern boundary of the State.

By the 9th section of the Act of Congress, the Company was required to file its acceptance of its provisions, and assume the obligations therein imposed, within six months after its passage, which acceptance was filed on the third day of December, 1862.

The Company enjoys the fullest authority and sanction of the State of California, in addition to the grants and franchises of Congress, as may be seen from the subjoined extract from "An Act to aid in carrying out the provisions of the Pacific Railroad and Telegraph Act of Congress," approved April 4th, 1864 (Chap. ccccxvi., Statutes, 1863-4):

"SECTION 1st. Whereas, by the provisions of an Act of Congress, entitled an Act to aid in the construction of a railroad and telegraph line from the Missouri River to the Pacific Ocean, and to secure to the Government the use of the same for postal, military, and other purposes, approved July first, eighteen hundred and sixty-two, the Central Pacific Railroad Company, of California, is authorized to construct a railroad and telegraph line in the State of California, and in the Territories lying east of said State, towards the Missouri River; therefore, to enable the said Company more fully and completely to comply with and perform the provisions and conditions of said Act of Congress, the said Company, their successors and assigns, are hereby authorized and empowered, and the right, power, and privilege is hereby granted to, conferred upon and vested in them to construct, maintain, and operate the said railroad and telegraph line, not only in the State of California, but also in the said Territories lying east of and between said State and the Missouri River, with such

branches and extensions of said railroad and telegraph line, or either of them, as said Company may deem necessary or proper; and also the right of way for said railroad and telegraph line over any lands belonging to this State, and on, over, and along any streets, roads, highways, rivers, streams, water, and water-courses, but the same to be so constructed as not to obstruct or destroy the passage or navigation of the same; and also the right to condemn and appropriate to the use of said Company such private property, rights, privileges, and franchises, as may be proper, necessary, or convenient for the purposes of said railroad and telegraph, the compensation therefor to be ascertained and paid under and by special proceedings, as prescribed in the Act providing for the incorporation of railroad companies, approved May twentieth, eighteen hundred and sixty-one, and the Acts supplementary and amendatory thereof; said Company to be subject to all the laws of this State concerning railroad and telegraph lines, except that messages and property of the United States, of this State, and of the said Company, shall have priority of transportation and transmission over the said line of railroad and telegraph; hereby confirming to and vesting in said Company all the rights, privileges, franchises, power, and authority conferred upon, granted to, or vested in said Company by said Act of Congress; hereby repealing all laws and parts of laws inconsistent or in conflict with the provision of this Act, or the rights and privileges herein granted.

"SEC. 2. This Act shall take effect and be in force on and after its passage."

A similar Act was passed by the Legislature of Nevada. [See Statutes, Chap. CXII. pp. 254.]

The Central Pacific Railroad proper, commences at the City of Sacramento, in the State of California, and extends in an easterly direction across the State to the eastern boundary thereof, thence across the richest portions of Nevada and Utah, to the vicinity of Salt Lake City, where it will connect with the roads building from the Missouri.

The Mountain Section.

The Company commenced the work of constructing the road in February, 1863, and in July, 1864, had 31 miles in operation before it had received any Bonds of the United States. The undertaking has been carried over all obstacles with steady persistence, sixty-six miles of the hardest portion being built in three years. In November of 1866, 94 miles had been opened for business, to within eleven miles of the summit of the Sierra Nevadas, overcoming a rise of nearly 6,000 feet; and a portion of the grading had been done upon the fifty miles next following. The portion of road between Colfax and Alta was quite as expensive as any part of the line between Sacramento and the eastern boundary of the State. During the whole of 1867 the road was operated as far as Cisco, only ninety-four miles from Sacramento, a point where the Company controls the entire business crossing the Sierra Nevadas. The track was extended, toward the close of the year, up

to and beyond the summit (106 miles). During the Autumn a section of twenty-five miles, extending from near the summit, following the valley of the Truckee down the eastern slope, was completed, construction trains running thereon, and approved by the commissioners. At the close of the year a gap of only five miles remained between these two sections, across which the rails could not be laid, by reason of the early fall of snow. The track is graded, and a few days labor, at the opening of Spring, will suffice to connect them, and thus carry the track fairly into the Salt Lake Basin, whence the grades are easy and the work comparatively light. The mountain portion (140 miles) may be said, therefore, to be practically completed.

The Road, so far as completed, has been examined and accepted as entirely satisfactory by the United States Commissioners, and the Bonds of the United States have been issued thereon. According to the testimony of disinterested persons it will compare favorably with any new railroad in the United States. The law requires that the road shall be substantially built of the best American materials, and in such a way as befits its semi-national character. The rails are of the best quality of American iron, and laid with wrought-iron splice plates, except a few miles, where wrought-iron chairs are used. The cross-ties, numbering 2,400 per mile, are 6x8 and 10 inches, and 8 feet long, of red wood and tamarack, which is quite equal to red cedar or locust for durability.

The culverts are all of granite, or other hard rock, except a few of hard-burnt brick in the Sacramento Valley, where stone could not be procured. The bridges are made of the best quality of Puget's Sound timber, with foundations of masonry. The drainage is ample and complete, and the road-bed is well ballasted with gravel or broken stone. The alignment is remarkable for its directness in such a broken, mountainous country.

The grades are necessarily high, to surmount the summit, 7,000 feet above the level of the sea, which elevation is attained without any undulating grades, the rise being constant from the foot-hills on the west side of the Sierras to the summit thereof, thence descending eastwardly to the Truckee river, without loss of elevation or depression.

The highest grade is 116 feet per mile, of which there are but three and a half miles on the whole line, the average rate being 75 feet to the mile for the Mountain Division. The bulk of the heavy grade is at 105 feet to the mile, with numerous level intervals inter-

spersed. Thirty per cent. only of the distance is occupied by curves, none of which have a radius of less than 573 feet, or 10 degrees. The Baltimore and Ohio Railroad has 17 miles, in two stretches, of 116 feet grade, with curves of 400 feet radius; and grades of upwards of 200 feet per mile, with curves of less than 360, are not uncommon in this country and in Europe.

A peculiarity of this route is the fact that the engineers have taken advantage of a bold spur or projecting ridge, an offshoot from the main chain of mountains, which extends nearly to Sacramento. By following this ridge all the way up to the sources of the South Yuba, an excellent natural grade is obtained, broken by but few ravines, and with uniform and continuous ascent. A more practicable path across the mountains is not to be found for hundreds of miles up and down the range; as in all the passes in use by wagons, the mountain side is too precipitous to be available for railroad purposes.

The Annual Report of the Secretary of the Interior, made to the President in November, 1867, says of this road:

"A report upon the road, dated October 7, 1867, has been received from the Government Commissioners. They state that it crosses the Sierra Nevada mountains one hundred and five miles from Sacramento, at an elevation of seven thousand and forty-two feet above the sea. From the point where it was then built, nine hundred and seventeen feet only must be overcome to reach the summit, a distance of eleven miles. Between the 77th and 137th mile-post there are fifteen tunnels of an aggregate length of five thousand one hundred and sixty-six feet. During the past year about fifty miles of road have been in progress of construction; the greater part lying on the eastern and western slopes of the Sierra Nevadas. Eighteen miles of the portion on the eastern slope are graded, and the tract is being laid at the rate of about one-half mile per day. By the time these eighteen miles are laid, six more will probably be graded and ready for the track-layers, making in all twenty-four miles east of the summit. On the western slope a larger force of laborers is at work, and it is believed that with a favorable season the grading will be completed and the track laid over the summit before the snow occasions a suspension of work. The company have not been able, during the past season, to procure the requisite number of laborers, but it is expected that next season this difficulty will be removed. There is on hand iron sufficient to lay one hundred and ten miles of track, and enough more *in transitu* to lay fifty additional miles. In the snow belt the rails used weigh sixty-three pounds to the linear yard, and are put together with fish-joints instead of chairs.

"At Sacramento, the company have erected, along the river front, wharves and derricks capable of moving an immense freight from vessels to the cars. There are twenty-seven locomotives in use, and twenty more, with material for two hundred and fifty cars, are on the way from Atlantic ports. There is on hand material for seventy-five cars. Eight locomotives recently purchased are being set up. The company report to the commissioners that thirty-seven thousand seven hundred and thirty-eight acres of land, granted to aid in the construction of the road, had been sold for seventy-seven thousand five hundred and seventy dollars, (\$77,570) the greater part upon a credit of five years. * * * * *

"The net profit, therefore, over operating expenses, in thirty-two months, is the large sum of one million five hundred and fifty thousand six hundred and ninety-six dollars and twenty-nine cents (\$1,550,696 29).

"Since the commencement of business operations, the company represent that they have paid to the United States Government for taxes, stamps, &c., the sum of two hundred and eighty-eight thousand dollars (\$288,000)."

Progress of Construction.

The chief difficulties apprehended in the construction of the Great Railroad to the Pacific—high grades and winter snow obstructions—prove, upon practical test, to be not at all formidable. The mountain ranges have to be crossed at elevations of over 7,000 feet for the Sierra Nevada, and 8,000 feet for the Rocky Mountains; or more than twice the height of any railroad lines built on this continent. Experience shows that it is entirely practicable, and that the deep snows are not likely to prove a very serious obstacle. During two unusually severe winters the road has been operated to Cisco, within 1,100 feet of the total elevation, with no more difficulty than is common on Eastern lines; and it is the opinion of the officers that it can be regularly worked during all seasons.

Although the total ascent on the western slope of the mountain is upward of 7,000 feet within the first one hundred miles, the descent on the eastern slope is less than 1,500 feet within the first thirty miles; after which there is a gradual slope toward the center of the Salt Lake Plateau, which is elevated above the sea level 5,000 feet, average. The line from the Sierra Nevadas has been surveyed, and grading commenced thereon. Nearly 10,000 men, mostly cheap and serviceable Chinese, are employed on the work, and it is thought Virginia Station will be passed by the 1st of May, and the North Bend of the Humboldt reached by August next. If the season proves favorable, 300 miles of track will be laid during 1868.

The general route of the road after leaving the Big Bend of the Truckee River is northeastwardly to the Sink of the Humboldt River, which stream it follows for 300 miles, through a fertile valley, abounding in wood and water, to Humboldt Wells, 507 miles distant from Sacramento; to this point the route has been officially designated by the Secretary of the Interior. From Humboldt Wells the country has been thoroughly explored to Salt Lake City, in all directions. Two practicable lines were found, one running round the south end of Salt Lake, and the other skirting the north end. The former, however, passes through a rough and desert country, destitute of wood and water, and involves, besides, a longer distance

and higher grades, the necessity of crossing the famous Mud Flats of the Great Salt Lake Desert, which would require piling for 25 miles. The more northerly route proved to be very favorable in alignment and grades, and with plenty of wood and water, both for fuel and construction. More than half the distance can be built with grades varying from 0 to 25 feet per mile, while none of them exceed 75 feet per mile, for short distances.

The following comparative table from the Report of the Chief Engineer will show the grades and distances of the two lines; the terminal points in both cases being Humboldt Wells and Weber Canyon, a rocky defile through the Wasatch Mountains on the border of Salt Lake, and the natural approach to that city from the eastward. It will be seen that the north line is 84 miles shorter, with a difference of 218 feet rise and fall in its favor.

ROUTE.	Distance in Miles.	Total Rise of Grades.	Total Fall of Grades.	Total Rise and Fall.
North Line, <i>via</i> Peguop Pass.....	219	1,969	3,024	4,993
South Line, <i>via</i> Great Salt Lake Desert.....	303	2,032	3,179	5,211

The following table will show the distances between prominent points of the line, according to recent surveys, the elevations above sea level, and the parts completed by the respective companies:

STATIONS.	Date.	Distance.	Elevation.
San Francisco,..... W. P. R. R.		—	tide.
Vallejo's Mills	June, 1866	27	121
Stockton.....		79	22
Sacramento, C. P. R. R.	Feb., 1863	124	56
Newcastle	Jan., 1865	155	930
Colfax	Sept., 1865	178	2,448
Alta	July, 1866	193	3,625
Cisco	Nov., 1867	216	5,711
Summit Sierras.....	Nov., 1867	229	7,042
Truckee River	Dec., 1867	243	5,866
Crystal Peak.....	Dec., 1867	265	5,000
Virginia Station.....	April, 1868 (est'd)	272	4,430
Big Bend Truckee.....	May, 1868	311	4,217
Humboldt Lake.....	July, 1868	352	4,047
North Bend Humboldt	Sept., 1868	454	4,392
Humboldt Wells.....	July, 1869	631	5,650
Weber Canyon, Salt Lake.....	July, 1870	850	4,654
Fort Bridger, U. P. R. R.	May, 1870	1,000	7,009
Green River	July, 1869	1,025	6,092
Bridger's Pass (Rocky Mt's.)..	Dec., 1868	1,155	7,534
Evans Pass (Summit Black Hills)	July, 1868	1,297	8,242
Cheyenne	Dec., 1867	1,320	6,662
Julesburg	Oct., 1867	1,477	3,513
Fort Kearney	Dec., 1866	1,655	2,128
Omaha.....	Jan., 1866	1,845	968

The CENTRAL PACIFIC COMPANY encountered the difficulties of construction in their worst form at the very outset. Some idea of the nature and cost of the work may be gathered from the single fact that the blasting-powder alone, for the first 140 miles, cost \$900,000 in gold. Portions of the completed line have cost to grade upwards of \$300,000 per mile, and the average for the mountain section is about \$100,000 per mile. It is noteworthy, however, that the road-bed already prepared equals in cost and delay, the aggregate of the remaining 600 miles; so that practically half the work is now done, and a third of the total outlay already made.

The Construction Resources.

The Resources of the Company have been, and are, abundant for the most vigorous prosecution of the work.

The aggregate cost of the 150 miles, now nearly ready, and the equipment for the same, is upward of \$21,000,000, which have been derived from the following CASH RESOURCES, in round numbers.

CAPITAL STOCK	\$5,000,000
SURPLUS EARNINGS	1,600,000
U. S. BONDS	6,000,000
FIRST MORTGAGE BONDS	7,000,000
TWENTY YEAR BONDS	3,000,000
DONATIONS AND CONCESSIONS	715,000

The Company have on hand, and have *paid for*, iron, materials and equipment for about 200 miles in addition to what is now in use.

For the first seven miles the Central Pacific receives the same Government subsidy as the roads east of the Rocky Mountains, \$16,000 per mile; for the next 150 miles of more rugged country it receives \$48,000 per mile, and for the remaining distance (say, 570 miles) \$32,000 per mile. The people of California have shown themselves so profoundly interested in the success of the road that the State and Municipal corporations have added to the resources of the Company. The State of California has assumed the payment of the interest for twenty years upon one million and a half of the Company's bonds; a concession worth about \$3,000,000 in gold. In addition to the subsidy granted this Company by the General Government, the City of San Francisco has donated, to aid in the construction of the road, four hundred thousand dollars, in City seven per cent. thirty-year gold-paying bonds; and the City of Sacramento has donated some thirty acres of land in that city, embracing about 1,300 feet of valuable water front on the Sacramento River, which, with the privileges connected therewith, is

considered worth three hundred thousand dollars; and the Company have also received from stock subscriptions about \$5,000,000.

The following Schedule of Donations, Subsidies, Loans, etc., shows the Company's Resources for the prosecution of the work from Sacramento to the vicinity of Salt Lake City (726 miles):

1. DONATIONS, &c., (without lien.)			
U. S. PUBLIC LANDS, much valuable timber, 12,800 acres			
per miles, minimum valuation		\$10,000,000	
SAN FRANCISCO 30-year Gold Bonds		400,000	
SACRAMENTO CITY, 30 acres, valuable water front,		300,000	
STATE OF CALIFORNIA, int. on \$1,500,000 of "State Aid Bonds," 7 p. ct. gold, for 5 years during construction	525,000	\$11,225,000	
2. CAPITAL STOCK, NET EARNINGS, etc., (no lien.)			
SUBSCRIPTIONS TO CAPITAL STOCK		5,000,000	
NET EARNINGS, after interest payments, 1865-6, gold,		716,988	
NET EARNINGS, after interest payments, 1867, gold,	863,680	6,580,658	
3. SUBSIDIES, (subordinate lien.)			
U. S. GOVERNMENT BONDS—cancelled mainly by transportation services,		25,517,000	
4. LOANS.			
CENTRAL PACIFIC RAILROAD 7 per cent. "State Aid Bonds," int. paid by California, (subordinate lien.)	1,500,000		
CENTRAL PACIFIC RAILROAD 7 per cent. Bonds, convertible into U. S. 6 per cent. "Pacific Railroad Issue,"* (subordinate lien.)	1,500,000		
CENTRAL PACIFIC RAILROAD First Mortgage 6 per cent. Bonds, principal and interest in gold, (ABSOLUTE FIRST LIEN,) to the same amount as U. S. Subsidy,	25,517,000	28,517,000	
Resources on first 726 miles,		\$72,423,335	

To the above may be added the probable net earnings from the 1st of January, 1867, up to the period when the whole line is completed—estimated at more than \$5,000,000 in gold.

The aggregate amount of First Mortgage Bonds which can be issued is therefore less than one-third of the Resources at the Company's command; or in other words, for every dollar borrowed upon First Mortgage Bonds, two have been invested in the property without lien, or upon a subordinate and contingent lien.

It will be seen that only the last two items bear interest, for the payment of which the Company is annually chargeable. The whole interest liability upon the Mountain Section of 157.18 miles, now about completed, is but \$543,890, in gold, while the net earnings on the same portion for the current year, by the most moderate estimate, will amount to three or four times that sum. It is proper to add, also, that every extension of the road is accompanied by an increase of business on the portion first built, as well as a diminution of the ratio of expenses.

The total amount of public lands appropriated for the construction of the Through Line is 25,000,000 acres, or at the rate of twenty

* A present resource, which, should the holders prefer to exchange, will lessen the total.

alternate sections per mile (12,800 acres), the minimum value of which is estimated at \$1.50 per acre, while much of it must be of far greater value on the western portion, from its forests and timber, and superior attractions for settlement.

The Company are now selling quantities of their alternate sections of land at the minimum rate of \$2.50 in gold per acre; except to pre-emptors who may deem it advisable to purchase from the Company, in order to obtain a clear title at once, where the price is \$1.25 per acre. There is evidence that an active settlement will follow the progress of the road, all of which will augment the value of the unsold lands and add to its business and resources.

Earnings and Profits from Local Business.

It was an important question for the friends and projectors of this enterprise to know whether the business would be sufficient to make it a paying investment; and this question has already been answered to their satisfaction. It is difficult for persons residing at the East to form an adequate idea of the extent of the existing and prospective traffic between the ports and cities of California and the thriving people of the Great Interior Basin. San Francisco is the great natural centre of business and intelligence for the North Pacific Slope. The manufactures and wares consumed in Oregon, Washington, Columbia, Idaho, Utah and Nevada, are all drawn thence, and the three last mentioned draw subsistence and supplies also. Such were the imperative demands of the local transportation between California and the mining regions east of the Sierras, that a steam road, even at this cost, was an economy. It has been estimated that the wagon freights across the mountains, in a single year, before the commencement of the railroad, amounted to fully \$13,000,000. Such a business would, without any increase, warrant the construction of the most expensive railroad. The actual experience of the road justifies the conclusion that the local traffic alone would be sufficient to make it one of the most profitable lines of railroad in the world, independently of the through connection across the continent, of which it must receive the exclusive benefit west of Salt Lake.

The following tables, from official sources, will show the Earnings and Expenses of the road as it progressed toward the summit of the mountains, with an average of 43 miles open for business in 1865, 75 miles in 1866, and 94 miles operated in 1867.

Months.	1865.			1866.		
	Gross Earnings.	Operating Expenses.	Net Earnings.	Gross Earnings.	Operating Expenses.	Net Earnings.
January.....	\$11,040 69			\$25,759 14	\$10,793 19	\$14,965 95
February.....	10,479 55			29,772 13	9,916 47	19,855 66
March.....	15,330 26			44,408 92	12,993 85	31,416 07
April.....	20,076 14			52,993 17	13,013 17	39,980 00
May.....	22,939 36	\$93,447 77	\$219,956 30	65,115 83	15,507 04	49,608 19
June.....	32,429 07			67,429 78	16,001 23	51,428 55
July.....	35,633 83			84,756 39	19,867 76	65,888 63
August.....	39,247 42			111,637 16	21,814 08	89,823 13
September.....	60,302 62			114,433 80	20,079 59	94,354 21
October.....	65,925 34			127,065 96	18,554 55	108,511 41
November.....	48,083 40	13,994 15	34,089 25	86,236 96	20,236 55	66,000 41
December.....	40,454 45	14,227 61	26,226 84	53,257 33	22,992 53	30,264 75
Total.....	\$401,941 92	\$121,669 53	\$280,272 39	\$864,917 57	\$200,710 61	\$664,206 96

The business for the past year exhibits a remarkable increase upon the foregoing; although it has been kept greatly below its natural volume by the necessity of paying the high team-freights from Cisco to Virginia City—60 miles—averaging two cents per pound in Summer, and three and four cents as the season advanced. The four most active months afford a better basis for estimating what will be the ordinary traffic and the expenses of the road during the current year, between the steamboat wharves at Sacramento and Virginia Station. For July, August, September, and October, the totals are:

GROSS EARNINGS.	OPERATING EXPENSES.	NET EARNINGS.
\$768,769 50	\$135,067 24	\$633,702 26

or, at the rate of (say) two millions and a half per annum per 100 miles worked, of which three-fourths are net earnings.

This result was upon the actual, legitimate, local business alone, with far less than the ordinary proportion of Government transportation, and under the disadvantage that passengers and freight had to be forwarded at high rates by wagons, from the temporary terminus, at the summit of the mountains; and is also independent of the transportation of men and materials for the extension of the road.

The estimates for 1867 have been lessened by an unexpected delay in opening the road for business across the mountains; and also by the unusual visitation of severe rains and snow storms which have increased the cost of maintaining a new road, as well as interfered with its transportation facilities. The subjoined figures, however, are regarded as quite satisfactory to the friends of the enterprise:

1867.

<i>Months.</i>	<i>Gross Earnings.</i>	<i>Operating Expenses.</i>	<i>Net Earnings.</i>
January	\$38,169 22	\$21,564 79	\$16,604 43
February	51,831 38	23,867 79	27,963 59
March	60,029 14	20,115 16	39,913 98
April	81,156 31	21,242 76	59,913 55
May	95,828 59	23,184 44	72,644 15
June	121,702 59	23,689 58	98,013 01
July	174,812 05	30,973 89	143,838 16
August	181,297 25	33,338 22	147,959 03
September	200,550 67	33,750 39	166,800 28
October	212,109 53	37,004 74	175,104 79
November	128,166 77	32,181 57	95,985 20
December	75,871 77	32,710 59	43,161 18
Total	\$1,421,525 27	\$333,623 92	\$1,087,901 35

This ratio of profit (seventy-five per cent. of the gross earnings) is without parallel, even among the oldest roads in existence; and is in fact nearly three times the ratio of the best leading lines of the country, and increases as the track is extended. The following is a copy of the sworn Statement of Earnings returned to the Treasury Department for the month of September:

EARNINGS.

Freight Transportation	\$150,267 44
Passenger "	36,119 63
Mail, U. S. "	2,350 00
Express " Wells, Fargo & Co.	1,400 00
C. P. R. R. Wharf at Sacramento, Discharging Schooners, &c.	1,210 85
Miscellaneous	202 75
	<u>\$200,550 67</u>

OPERATING EXPENSES.

Station, Train and Wharf Service	\$10,277 53
Locomotive Service	9,374 43
Repairs of Track, Buildings, Engines, Cars, &c.	11,601 43
Office Expenses, Stationery, Printing, Telegraph and Miscellaneous,	1,386 90
Damages, Freight (lost), " Stock Killed, "	235 80
Taxes, U. S. Internal Revenue	874 30
	<u>\$33,750 39</u>

The Company is justified in charging the maximum rates—10 cents per mile for passengers, and 15 cents per ton per mile for freight—and these are cheerfully paid, being less than one-third what was formerly paid for far less expedition, comfort and security. It is also well understood by the customers, that not a dollar has been taken out of the revenues for dividends or profit, and that the surplus earnings are devoted to pushing onward the work.

It should be noted that during the past year the loaded trains have been carried nearly to the summit, with but little return freight. During the Spring the road will be completed to the vicinity of the famous Washoe Region, containing the most valuable mines in the world—having yielded over twelve millions of gold and silver, for each of several years past. Thousands of tons of the more valuable ores have been hauled thence to tide-water for shipment to Wales for more perfect reduction. This will form a considerable item in the future business of the railroad. It is the seat of an active population, and will receive its supplies, as well as large quantities of timber, over this railroad. The Government Commissioner of Mining Statistics reports that its forty-six companies consume, for mining and smelting purposes, timber and lumber valued at one million dollars per year. When the North Bend of the Humboldt is reached, the rich Idaho mining regions are brought within 36 hours of San Francisco.

The following is a comparative statement of the business and surplus earnings, available for purposes of construction, for the past three years:

<i>Year.</i>	<i>Average Miles Running.</i>	<i>Gross Earnings.</i>	<i>Net Earnings (gold).</i>	<i>Annual Interest Liabilities.</i>	<i>Surplus Carried to Construction.</i>
1865....	40	\$401,941 92	\$280,272 43	\$102,111 14	\$178,161 33
1866....	75	864,917 57	664,206 96	125,380 00	530,503 09
1867....	94	1,421,525 27	1,087,901 35	276,330 00	811,571 35
Total..		\$2,688,384 76	\$2,032,380 74	\$503,821 14	\$1,520,235 77

It will be observed that while its earnings are heavy, the interest engagements of the Company upon the portion of the road completed are very light, less than one and a half per cent. of the total cost of construction and equipment.

Increase of Through Traffic.

Estimates have been made of the probable amount of the through traffic which will pass over the main trunk line from the Pacific to the Missouri. The existing through trade between New York and San Francisco affords some basis for the calculation, and is given as follows:

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 "
Total,	230,000 Tons.

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.

The express time between San Francisco and New York was reduced to fifteen days at the close of 1867, and by the close of this year it is expected the time will be further reduced to eleven days, by the further extension of the Pacific Railroad from both directions. By the middle of 1870, if not sooner, we may look for the all-rail connection, and a schedule of about six days from ocean to ocean; and thereafter we may look for a prodigious stream of travel and traffic over the Main Stem Line.

By reason of the unprecedented low rates of fare on the competing steamship lines, no less than 10,000 passengers have left New York for California, *via* the Isthmus, within the first three months of the opposition. The internal and agricultural development of the Pacific coast is so rapid that the demand for labor is inappreciable.

There can be no doubt that the completion of the Pacific Railroad will not only open the way to many persons now wishing to visit that coast for purposes of business, pleasure or settlement, but also afford the opportunity to thousands at the Far West to revisit their eastern homes. The following figures indicate the passenger business as now carried by ocean and overland conveyance:

110 (both ways) steamships.....	50,000
200 " " vessels.....	4,000
Overland (both ways).....	100,000
	<hr/>
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
	<hr/>
Present cost of transportation.....	\$31,040,000

That a remarkable stimulus will be given to travel, emigration, mining, trade, and foreign commerce is unquestionable; and it is not unreasonable to suppose that, at half the above rates, the revenues will be three times the above sum, half of which will be the natural business of the Central Pacific.

The great CENTRAL PACIFIC RAILROAD is, therefore, in an

important sense, a national work, aided and commended by the people, the legislative power, and the executive officers, though its management is *administered with all the care and forethought of the most eminent private corporations*. Forming with its existing eastern connections a continuous line across the continent, it is destined to become one of the most important channels of trade and communication in the world. With its western terminus at San Francisco, the most commodious harbor on the North Pacific Coast, and its branches reaching the railroad systems of the Atlantic States by way of Chicago and Saint Louis, it constitutes, as it were, the Grand Trunk Line of this hemisphere. It lies directly in the path of the great westward movement of population and trade, along the temperate belt across this country, and becomes an essential link in the mighty inter-continental traffic between Western Europe and Eastern Asia. It presents the shortest and most practicable route to the Pacific, and must serve four-fifths of all the population west of the Missouri River. It has a dense and productive group of States at one end of the line, and an energetic coast population at the other, with a rich mining country intermediate. Already a large and busy population is settled along the western portion, and it seems certain that between San Francisco and Omaha a chain of great cities must grow up in its path, swelling the volume of trade and travel to dimensions which baffle all present estimate.

The Central Pacific Railroad Company, who have shown so much forethought and judgment in originating and developing this great enterprise, and who have carried it forward with such energy and persistence—pledging their own solid wealth for its success, even at times of grave and general national depression—may be justly regarded as possessing the richest franchise ever granted on this continent.

the Main Stem Line, and *the most valuable link in the great. National Pacific Railroad.* They are issued only in amount equal to the Government Bonds issued to aid the construction of the same section, viz: \$16,000 per mile upon the first seven miles, and \$48,000 per mile upon the next 150 miles of mountain section to the Salt Lake Basin, and thence across the Salt Lake Plains at the rate of \$32,000 per mile, or *less than one half the actual cost of construction, and one third the cost and value of the road and equipments, pledged for their redemption.* They are in Bonds of \$1,000 each, with semi-annual gold coupons attached.

Hon. D. O. Mills, President of the Bank of California, and William E. Barron, formerly agent for the Messrs. De Rothschild in San Francisco, have been made Trustees under the Mortgage Deeds executed and recorded by the Company, with all the requisite and customary forms of law in such cases.

Advantages of the Bonds.

These First Mortgage Bonds of the Central Pacific Railroad Company therefore possess characteristics and advantages peculiar to them as a class, and which render them far superior to the Bonds of other railroad or private corporations. Being under the constant supervision of the Government—which, being the principal creditor, accepts a subordinate and contingent lien—with so large an amount of additional capital also invested in the property pledged, it is believed that no securities now offered in the market possess the same claims to confidence and market value except those of the Government. They are commended to the attention of investors by the following important facts:

First. The First Mortgage Bondholders are joint investors with the National Government, to the same amount only, which places the enterprise beyond the contingencies and risks attending railroads in general.

Second. They are issued only as the work progresses, and always represent a first claim upon an exceedingly valuable property, which is astonishingly productive in its beginnings, and promises to become more and more so.

Third. The lien of the Government being specially made subordinate to that of the First Mortgage Bonds, there can hardly arise a contingency in which the Company or the Government can fail to secure the First Mortgage Bondholders.

Fourth. As the National Pacific Railroad route is destined to become the great Trunk Line of the Continent, its business must continue to increase, giving assurance of the uninterrupted payment of the interest, and the fullest security for the principal of the First Mortgage Bonds.

Fifth. Published statistics show that the First Mortgage Bonds of leading railroads have, for many years past, maintained a constant and high average selling price at the New York Stock Exchange, and are favorably regarded by capitalists for permanent investments.

Special Assurances of the Central Pacific Railroad Bonds.

The Central Pacific Railroad Company enjoys all the privileges, grants and subsidies conferred by the Acts of Congress upon the several Companies authorized to construct the National Railroad to the Pacific, and its Eastern forks; and has beside the following noticeable, exclusive, and important local advantages, peculiar to the Western end of the route,—considerations which give special security and value to its First Mortgage Bonds:

- I. The Central Pacific Railroad forms the sole Western link of the only railroad route to the Pacific selected and adopted by Congress to receive the Bonds of the Government, as well as the Public Lands, in aid of its construction. *It is exempt from competition*, either of navigable waters or parallel lines, as it commands the natural, accessible gateway between San Francisco and the East. *It must receive undivided the through traffic* which is distributed among the various branch roads building and projected east of the Rocky Mountains.
- II. The most difficult and costly portion of its road is now built, and *the only formidable mountain range in its course is practically overcome*. The remainder of the construction will be easy, inexpensive and rapid towards Salt Lake.
- III. The Company has received from the State and principal cities of California, *assistance in money, credit, and valuable property, worth over \$3,000,000 in gold*; and it will have received, upon the completion of the 726 miles between Sacramento and Salt Lake City, more than \$25,000,000 in the Bonds of the United States; or at the average rate of over \$35,000 per mile.
- IV. The road enjoys already an immense, exclusive, local trade between Sacramento and the richest portions of Eastern Cali-

fornia, Nevada, Idaho, and Utah; sufficient to make it *one of the most profitable railroads in the world, independently of the through traffic*, which cannot be diverted or withheld from it. With every extension of the track the business and profits of the completed part are increased; so that when the overland through traffic shall be poured over the Central Road, the general prosperity of the Company will be without parallel, and its securities appreciated correspondingly.

- V. The road lies wholly in territory yielding the precious metals, its revenues are collected in coin, *and its business is conducted on a specie basis*. Its rates for transportation are very advantageous, being more than double those of roads lying east of it; and the *ratio of operating expenses is less than 25 per cent. of the gross earnings*.
- VI. In consequence of the aid it receives from the General Government, from the State of California, and from municipal corporations, the annual interest obligations which the Company are called upon to assume are very light. The net earnings upon 94 miles, in 1867, were *four times the amount of annual interest liabilities, and were \$500,000 more than the annual interest to be assumed in building that distance*.
- VII. By the terms of an Amendment of the Act of Congress, (see Act of 1865, Sec. 1) inserted at the request of this Company, the Pacific Railroad Companies are authorized to make the interest upon their First Mortgage Bonds payable in *any* lawful money of the United States. The Central Pacific Company have bound themselves to pay both the *principal and interest* of their Bonds in "GOLD COIN OF THE UNITED STATES," and have expressly so stated in the body of their Bonds; and this agreement is made in California, under the provisions of Mortgages executed and recorded by them in California and Nevada—States wherein specie payments have not been suspended.
- VIII. The grant of land is destined, at an early day, to prove of great value, and may realize to the Company an amount equal to the aggregate of First Mortgage Bonds issued on the Road and equipment.
- IX. The management of this Company has been in the highest degree prudent and frugal; and the whole surplus, after payment of expenses and interest, is devoted to construction purposes.


In these important particulars the securities of the Central Pacific Company possess advantages not possessed by other railroad bonds; and they *offer a greater degree of safety, stability and profit combined, than any others now offered to investors.*

The First Mortgage Bonds of this Company are already taken in large amounts for foreign account, and are destined to occupy a prominent place among non-speculative securities in the money-markets of this country and Europe, and will, without doubt, be eagerly sought for, and actively dealt in hereafter, at rates materially in advance of the price at which they are offered by the Company.

Having been familiar with the operations of the Central Pacific Railroad Company from its commencement, we are satisfied that they are conducted with rare ability and prudence, and that the energetic and economical management of the Company's affairs entitle them to the confidence of capitalists and of the public. We have carefully investigated the progress, resources, and prospects of the Road, and have the fullest confidence in its success, and in the value and stability of the Company's securities. The attention of Trustees of Estates, Institutions, and individuals desiring a long, safe and remunerative investment, is especially invited to these First Mortgage Bonds.

Orders may be forwarded to us direct, or through the principal Banks and Bankers in all parts of the country.

Remittances may be made in drafts on New York or Legal Tender Notes, National Bank Notes, or other funds current in this city, and the Bonds will be forwarded to any address by Express free of charge. Inquiries for further particulars, by mail or otherwise, will receive punctual attention.

 For the terms and agencies where the Bonds may be obtained, see the back of cover.

All kinds of Government Securities received at the full market price in exchange for the above Bonds.

FISK & HATCH,
BANKERS AND DEALERS IN GOVERNMENT SECURITIES,
and Financial Agents of the C. P. R. R. Co.,
No. 5 Nassau Street, N. Y.

NEW YORK, 1868.

THE
Central Pacific Railroad,
THE BEST AND PRINCIPAL PORTION OF THE
NATIONAL TRUNK LINE ACROSS THE CONTINENT,

is being rapidly carried forward by an unimpeded working force; and it is reasonably certain that the CONTINUOUS OVERLAND RAILROAD CONNECTION FROM NEW YORK TO SAN FRANCISCO WILL BE MADE IN 1876.

The United States Government furnishes, upon a subordinate and contingent lien, half the means for constructing the Main Stem Line; and besides an absolute grant of 12,800 acres of valuable public land per mile, the Central Pacific Railroad Company have received from California sources donations and concessions worth more than \$3,000,000. The available resources of this Company are therefore abundant for the purpose, amounting to \$77,000,000 on the first 726 miles of the Line, including Loans secured by a First Mortgage upon the whole property, to the same amount only as the U. S. Subsidy Bonds.

The results already attained, although under comparatively unfavorable circumstances, afford substantial ground for believing the CENTRAL PACIFIC to be the

Most Favored, Productive and Valuable Railroad Enterprise in the Country.

The Company are now offering for sale, a limited amount of their

FIRST MORTGAGE SIX PER CENT. BONDS,

Principal and Interest Payable in Gold Coin,

IN SUMS OF ONE THOUSAND DOLLARS EACH, AT THEIR

PAR VALUE AND ACCRUED INTEREST FROM JAN. 1st, IN CURRENCY

These Bonds, it is believed, possess the elements of *safety, reliability and profit*, in a greater degree than any other class of Corporate Securities now offered, and are therefore very desirable for steady investments of surplus capital.

Investors will bear in mind the following advantages:

- I. They are the first claim on one of the most valuable and productive lines of railroad in the world.
- II. The actual earnings from local business in 1867 were more than four times the annual interest engagements.
- III. The hard part of the work is now done, and the prospects of rapid completion are favorable.
- IV. The Company have liberal subsidies, which enable them to prosecute the work with great vigor.
- V. The management has been exceedingly prudent and frugal.
- VI. There is already a large and growing settlement on the completed and graded line.
- VII. The lands promise to be of immense value, 37,038 acres having been already sold.
- VIII. Both principal and interest are explicitly made payable in gold coin.
- IX. Both the aggregate amount of issue and their standing in Europe will insure for them continued activity and a high rank among standard securities.

At this time they yield nearly

Nine Per Cent. upon the Investment.

Holders of Government Securities have an opportunity of exchanging them for Central Pacific Bonds bearing an equal rate of interest, with the principal abundantly secured, and of realizing a profit of from five to ten per cent. in addition.

Orders sent with the funds through responsible Banks or Express Companies will receive prompt attention. Bonds sent by return Express to any address in the United States, at our cost. Information, Descriptive Pamphlets, Maps, &c., furnished on application at the office of the Railroad Company.

No. 54 WILLIAM STREET,

AND OF

FISK & HATCH,

Bankers, and Dealers in Government Securities, and Financial Agents of the Central Pacific Railroad Company,

No. 5 NASSAU STREET, NEW YORK.

By National Banks and Bankers generally, and by

BREWSTER, SWEET & CO., (Special Agents,)

No. 40 STATE STREET.

BOSTON.