CHAPTER 6

Building the Central Pacific Rail Road of California

1863-1869

A Work of Giants

This ... is the story of the ... construction of the Central Pacific, the most difficult section by far of the nation's first transcontinental railroad. It is an epic tale, for the builders of the Central Pacific had no convenient pass such as the Rockies afforded the Union Pacific for its leg of the transcontinental line. Instead, they were confronted by the Sierra Nevada's seemingly impassable granite spires. It is the story of a battle fought by a small group of men who earned victory by thorough planning, persistent effort, and willingness to carry on against desperate and largely unknown odds.

—George Kraus¹

Judah is really the foundation of the Central Pacific.

—Lewis Metzler Clement²

A RAILROAD TO THE PACIFIC?

Pacific railroad project, he told his brother John, a congressman from Ohio, "It is a work of giants, and Uncle Sam is the only giant I know who can grapple the subject." By late summer of 1865, when the Union Pacific had completed only fifteen miles of railroad, extending from Omaha westward, and after Sherman and other celebrities had been treated to a "grand excursion" to the end of the line, he is said to have remarked: "This is a great enterprise but I hardly expect to live to see it completed." He was also quoted as having commented, wryly, "A railroad to the Pacific? I would hate to buy a ticket on it for my grandchildren!"

We shall hear more from Sherman later.

¹Kraus, High Road to Promontory, 7–8.

²⁴Statement Concerning Charles Crocker," 4, CC papers, C-D, 764:7, BL; Lewis M. Clement was an asst. chief eng. and track supt. of the CPRR. SFCD, 1878, 210.

³William T. Sherman to John Sherman, Jan 6, 1859, in Maj. Gen. Grenville Dodge, *Personal Recollections of President Abraham Lincoln, General Ulysses S. Grant and General William T. Sherman* (Council Bluffs: MPC, 1914), 185.

THE WESTERN PACIFIC RAILROAD COMPANY

In September 1862, Judah reported to his Associates that in Washington he and Huntington had been pressured to give up the right to build the western end of the transcontinental railroad (though Section Nine of the 1862 railroad bill gave this right to the Central Pacific Rail Road):

I would also state, that in pursuance of an agreement with Hon. J. A. McDougall and Hon. T[imothy] G[uy] Phelps, made in Washington, I assigned to certain parties representing the interests of the San Francisco and San Jose Road, the rights, grants and franchises, given us for that portion of the road between Sacramento and San Francisco. ⁶

In 1887 Collis Huntington corroborated Judah's account, when he testified that while he and Judah were still in Washington lobbying for what would become the transcontinental railroad act of 1862, San Francisco railroad interests had brought pressure on them either to consign to them the right to build the western end of the transcontinental railroad or to begin construction eastward from San Francisco instead of Sacramento. Either way, these men intended to have San Francisco as the western terminus of the road. Huntington did not mention the key figures in this encounter by name as he spelled out in detail their demands:

When we were in Washington, and were trying to get through the bill to give us aid, a certain party said that we must cut off our part at Sacramento, and they must have the part between San Francisco and Sacramento, or else we must begin work at San Francisco. Beginning work at San Francisco would be very much like building a road from here up to the Adirondacks, instead of commencing at Albany, because they had a good river navigation up to Sacramento, and we wanted something to pay better than competing with the river. We consented. We commenced at Sacramento, and we assigned that part of the road, as we agreed to, to Charles McLoughlin [sic] and a man by the name of [Alexander] Houston, as I remember, and Judge [Timothy] Dane [sic], and a number of them, and they located the road. We had nothing to do with them at that time.⁷

It would seem that there must have been a *quid pro quo*, otherwise the Central Pacific Associates would not have agreed to this, yet no money was paid them for the franchise. The implied threat is too obvious to miss; perhaps the San Francisco people intended to use their influence to kill the bill in the event they did not get what they wanted.

⁴Quoted in Levi O. Leonard and Jack T. Johnson, A Railroad to the Sea (Iowa City: MHP, 1939), 119.

⁵Quoted without doc. by Edwin Sabin, Building the Pacific Railway: The Construction-story of America's First Iron Thoroughfare between the Missouri River and California, from the Inception of the Idea to the Day, May 10, 1869, when the Union Pacific and the Central Pacific joined Tracks at Promontory Point [sic], Utah, to form the Nation's Transcontinental (Phil.: JBLC, 1919), 38–39.

⁶TDJ, Report of the Chief Engineer of the Central Pacific Railroad Company of California on his operations in the Atlantic States, 27.

⁷CPH test., USPRC, I, 12.

On the other hand, perhaps the Associates knew something these potential builders and managers of The Western Pacific were to learn the hard way: \$16,000 per mile would not build the railroad they intended to put together between San Francisco and Sacramento. Huntington's statement suggests that he and his partners doubted that business on the western end of the railroad, beyond Sacramento, would ever be profitable, since it would have to compete with steamship traffic on the Sacramento River.

The Associates wanted to avoid an unnecessary battle with San José-San Francisco railroad men, who had already begun building into San Francisco over the only available route along the San Francisco Bay. Perhaps they thought they could mitigate opposition to their so-called monopoly by disposing of this section of the transcontinental system and still retain exclusive control over everything east of Sacramento, most important of all, the Nevada trade.⁸

An agreement was made on December 4, 1862, to consign the right to build the railroad between San Francisco and Sacramento to men slated to become officers of what would soon become The Western Pacific Railroad. These men included Judge Timothy Dame, president of the San Francisco and San José Railroad since it was organized on October 18, 1860, who was then made president of The Western Pacific; California pioneer Erastus Sauren Holden of Stockton, vice president; Emory T. Pease, secretary; Richard Chenery of San Francisco, treasurer; William J. Lewis of San Francisco, chief engineer; and George Homer Bodfish of San José (no position specified). The group also included Charles McLaughlin and Alexander H. Houston, partners in the San Francisco construction firm of McLaughlin and Houston, who were contractors on the San Francisco & San José Railroad. 10

The editor of the *Sacramento Union* saw the San Francisco move to extort from the Central Pacific Associates that portion of the transcontinental from San Francisco to Sacramento as just another example of intercity railroad jealousy. ¹¹

Earlier sarcasm of the editor of the *Nevada Transcript* was far more biting than that expressed in the *Union*, as he reflected upon the petty ambitions of the San Francisco railroad people:

San Francisco asks for recognition of itself as the terminus of the road, as if the irreversible decrees of Nature were not enough without a reenactment by man of the

⁸HHB, History of California, VII, 577.

⁹RUSPRC, 68; USPRC, VIII, 4573; Evans, Huntington, I, 95; Dame as pres. of the SF & SJ, SFCD, 1863–64, 116, and Oscar Winther, "The Story of San Jose, 1777–1869—California's First Pueblo," CHSQ 1935–14 (2): 165–166; "Erastus Sauren Holden," Records of the Families of California Pioneers. ([SF]: DAR, 1941), X, 367–370; or see William J. Lewis, Bob Johnson, ref. lib., SJPL, to the writer, Mar 16, 2002; and SJ Pioneer, Aug 24, 1883.

¹⁰RUSPRC, 68–69; McLaughlin and Houston, SFCD, 1863–64, 192 and 252. Bodfish sent the first message over the SF & SJ Telegraph under date of Oct 12, 1853. Rockwell Hunt, "Significant Events in the History of California," APHSSC 1909–1910 8 (annual): 29.

laws of God. San Francisco is the terminus, and must remain so while time endures. We advocate building the first section of the railroad from Auburn to the summit. It is a wonder that somebody does not declare we are in favor of making that village the terminus of the Pacific railroad. It would be just as sensible to attempt to make Auburn the terminus as Sacramento. Neither could reap the great advantages to result from the Pacific Railroad. They must belong to San Francisco. Stop the road anywhere, and the points between which travel will be, must be San Francisco and the western end of the road, and the profits of that travel itself must connect those points by railway as soon as the work could be done. ¹²

On December 11, 1862, The Western Pacific Railroad Company was organized to build a line from San José to San Francisco and from San José to Sacramento. ¹³ Some writers add that the road was to be built from San Francisco to Sacramento by way of San José and Stockton, and though this may have been the understanding between parties, it was not so specified in the articles of incorporation. ¹⁴

The creation of The Western Pacific settled once and for all that the western terminus of the transcontinental railroad was to be San Francisco, not Sacramento. ¹⁵ The Sacramento Bee praised the Central Pacific Rail Road for doing what it had agreed to do even before the Pacific railroad act had been passed, and challenged San Franciscans—now that their railroad interests had gotten their way—to get behind the project and help push a road through from San Francisco to Nevada. ¹⁶

Thus it was that even though the transcontinental railroad act of 1862 had given the Central Pacific managers the right to build to or near San Francisco, under the terms of their earlier agreement, and even before construction was begun, the Associates had made a significant change in their position under the 1862 act. The exact nature of this change, however, is unclear. It has been widely assumed that the Central Pacific Associates actually consigned the right to build the railroad from San Francisco to Sacramento to The Western Pacific Railroad Company in December 1862, but this was not the case. The December 4 agreement was an informal approval by the Associates of the agreed-upon consignment, but actually making the consignment was contingent upon other factors.

Moreover, on January 2, 1863, Dame and his associates assigned these same rights to The Western Pacific Railroad Company, demonstrating clearly that their company did not yet have the consignment itself in hand.¹⁷

Later, when The Western Pacific asked the Central Pacific Associates to make a

¹²Quoted in Sac Bee, Dec 10, 1862.

¹³Arts. of Assn. of the WPRR, signed Dec 11, filed Dec 13, 1862. File 304, CSA. Recorded in SFCCR, Book C, 752–754.

¹⁴E.g., the ed. of the Sac Union, Dec 22, 1862.

¹⁵SF Bulletin, Dec 19, 1862; and copied in the Sac Bee, Dec 20, 1862.

¹⁶Sac Bee, Dec 20, 1862.

¹⁷One of the best sketches of the hist. of the WPRR is in "Report of Richard F. Stevens, Chief Accountant, to the U.S. Pacific Investigation Commission of the Accounts of the Central Pacific and Western Pacific Railroad Companies, October 8, 1887," in *USPRC*, VIII, 4509–4581. Citation, 4573.

formal consignment of the right to build the portion of the transcontinental between San Francisco and Sacramento (demonstrating again that the earlier assignment was not an actual transfer of all rights under the 1862 Pacific Railroad Act), the Associates, unsure that they had the right to make such a consignment without congressional approval, refused to transfer it to The Western Pacific until such legal authorization had been assured. ¹⁸

Once The Western Pacific applied for congressional approval and it was clear that it would be granted, and since the original "assignees" had waived their rights to whatever the agreement of December 4, 1862, had given them, on October 31, 1864, the Central Pacific consigned to The Western Pacific all its rights under the Pacific Railroad Acts of 1862 and 1864. ¹⁹ This action was confirmed by federal law on March 3, 1865, as follows:

And be it further enacted, That the assignment made by the Central Pacific Railroad Company of California to the Western Pacific Railroad Company of said state, of the right to construct all that portion of said railroad and telegraph line from the city of San José to the city of Sacramento is here ratified and confirmed to the said Western Pacific Railroad Company, with all the privileges and benefits of the several acts of congress relating thereto. ²⁰

This law of confirmation added the provisos that The Western Pacific had to complete the first twenty miles by no later than July 1, 1866, and that the entire road linking Sacramento and San José had to be finished by July 1, 1870.

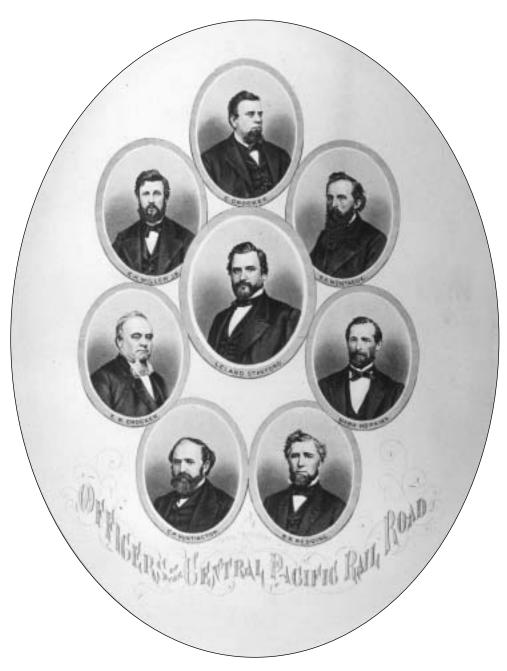
Symbolic Beginning of Construction of the Central Pacific Rail Road

With the Pacific railway bill that Theodore Judah had worked so hard to get congressional approval for finally through Congress, work on building the Central Pacific Rail Road of California was launched at last. The first visible signs of progress were largely symbolic; it took months before any genuine construction was underway. Under the terms of the 1862 legislation the railroad would have to build its first forty miles with its own financing before any federal aid would be

¹⁸LS test., ACSAJ, 20th Sess., VI, 13 and 26.

¹⁹RUSPRC, 68–69; USPRC, VIII, 4573; ACSAJ, 20th Sess. (Dec 1, 1873—Mar 30, 1874). "Testimony taken by the Special Committee on Central Pacific Railroad Matters," LS test., VI, 12, Mar 5, 1874; 26–27, Mar 10, 1874. The text of the agreement is on 27–30.

²⁰ACSAJ, 20th Sess., "Testimony taken by the Special Committee on Central Pacific Railroad Matters," LS test., VI, 26–27, Mar 10, 1874; 13 US Stats 504, 38th Cong., 2nd Sess. (Dec 5, 1864—Mar 3, 1865), Chap. 88, Sect. 2, An Act to Amend an Act 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, and to amend an Act amendatory thereof, approved July 2, eighteen hundred and sixty-four. App. Mar 3, 1865.



44. EIGHT MAJOR CENTRAL PACIFIC ASSOCIATES
Leland Stanford, Charles Crocker, Samuel S. Montague, Mark Hopkins,
Benjamin Redding, Collis Huntington, Edwin Crocker, and Edward Miller.

California State Railroad Museum.

advanced.²¹ Private sales of company stock held out little promise of success, so Central Pacific managers depended heavily upon the many pledges of support from state and county funds made at the 1859 Pacific Railroad Convention.

Once Stanford was named president of the Central Pacific Rail Road, and the Pacific Railroad Act had been adopted, on September 15, 1862, he signed a contract for William F. Knox to remodel the second floor of the building then known as Stanford Hall—his former store at 56-58 K Street in Sacramento, next to the Huntington-Hopkins hardware store at 54—dividing the area into offices for the officials of the railroad. But there was still a great deal of work to be done and negotiations with other railroad interests and building contractors to be hammered out before actual construction on the railroad could begin.

In the fall of 1862, Huntington again traveled to Washington, this time commissioned, as Cerinda Evans so graphically described his task, to "buy, sell, bargain, convey, borrow or lend"—to do whatever was needed to get construction underway. ²³ This particular mission was described by the editor of the *Sacramento Bee* as a trip to the great iron works of the East, "to hurry up the contractors, with whom bargains for iron, engines, etc., have been closed, and also to enter into some new contracts for iron and rolling stock."

Huntington, his wife, Elizabeth, and their infant niece (later, adopted daughter), Clara Prentice, sailed from San Francisco on the *Golden Age* on December 11, 1862—the very day The Western Pacific Railroad was organized. They crossed the isthmus on the Panama Railroad, boarded the *Ocean Queen* at Aspinwall, and arrived in New York on January 3, 1863. ²⁵

Huntington occupied himself from this time on with his three-fold job of financier, purchasing agent, and legislative adviser, the last to use his influence to steer legislation through Congress that would be favorable to the Associates' railroad business.

Facing what appeared to be insurmountable obstacles of financing and supplying of materials, the Central Pacific Associates placed much of their own private assets on the line to get construction underway.

Though little more than symbolic, ceremonies commemorating the beginning of construction were held in Sacramento on January 8, 1863. Governor Stanford

²¹ 12 US Stats 489–498, 37th Cong., 2nd Sess. (Dec 5, 1859–Mar 3, 1863), Chap. 120, 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. App. Jul 1, 1862.

²⁵SFAlta California, Dec 11 and 12, 1862; NY Times, Jan 4, 1863; Evans, Huntington, I, 213. Edwin D. Prentice, owner of the Plaza Grocery in Sac, and husband of Elizabeth Huntington's sister Clarissa, died on Mar 21, 1863, of injuries sustained in trying to move some barrels of foodstuffs out of the way of floodwaters. Sac Union, Mar 22, 1863, and family notes cited by Lavender, The Great Persuader, 391, n1. The childless Huntingtons decided to adopt one-year-old niece Clara, ibid., 111–112, and Evans, Huntington, I, 213.

was the keynote speaker. The editor of the *Sacramento Union* waxed poetic as he described the scene:

The skies smiled yesterday upon a ceremony of vast significance to Sacramento, California and the Union. With rites appropriate to the occasion and in the presence of dignitaries of the State, representatives of every portion of the commonwealth, and a great gathering of citizens, ground was formally broken at noon for the commencement of the Central Pacific Railroad—the California link of the continental chain that is to unite American communities now divided by thousands of miles of trackless wilderness.²⁶

A platform with a speaker's rostrum was erected near the levee not far from K Street. Charles Crocker was the master of ceremonies. He introduced the Governor—his own personal friend and partner in the Central Pacific Rail Road. Stanford's speech was brief and to the point. He congratulated his fellow citizens on commencement of the monumental project and predicted that the transcontinental railroad would be to California what the Erie Canal had been to New York. He promised that the work would progress from beginning to end "with no delay, no halting, no uncertainty in its continued progress." The Pacific would be bound to the Atlantic, he promised, "by iron bonds that shall consolidate and strengthen the ties of nationality, and advance with great strides the prosperity of our State and of our country." The Governor predicted, further, that the railroad would bring the state unbounded prosperity to be enjoyed by agriculture and commerce alike; it would bring California not only untold wealth but much-needed immigrants—in sum, it would usher in a "new era of progress."

Despite the rosy picture painted by the editor of the *Union*, the eighth day of January was a rainy Thursday in Sacramento. Undaunted by this, the celebrants had two wagons loaded with earth drawn up to the speaker's rostrum in front of Sacramento's American Exchange Hotel, and Crocker announced: "The Governor of the State of California will now shovel the first earth for the great Pacific Railroad." With this cue, Stanford began pitching dry dirt into the muddy street destined to become part of the railroad's embankment.

Following a number of shorter, perfunctory addresses, Charles Crocker closed the festivities with a few words of his own:

Allow me to say to you today that the arrangements are all made; that this is no idle ceremony; that the pile-driver is now while I am talking, driving piles for the foundation of the bridge across the American River. Tomorrow morning one of the subcontractors who owns these teams and has brought this earth here to deposit at the commencement of this road, will proceed across the river and commence the labor of grading. ²⁷

²⁶Sac Union, Jan 9, 1863.

DISAFFECTION AND DEATH OF THEODORE JUDAH

Despite Crocker's colorful and exaggerated description of work already underway, Stanford's *symbolic* shoveling of dirt remained for a time nothing more than a public gesture, mingled, perhaps, with a bit of wishful thinking. It took money to launch the Central Pacific's ambitious project, and the Central Pacific Associates were critically short on money—"under-funded," a later generation would describe their plight.

The railroad's directorate consisted of a number of strong personalities, making an inevitable clash among them. It was Judah, who, in a telling comment to Daniel Strong, referred to the Central Pacific as "my little road," left no doubt of how he viewed his importance to the organization compared to that of his partners, who enjoyed their positions of prominence, he thought, simply because they had more money and greater visibility. ²⁸

Judah's main complaint was that there was not enough actual construction going on to suit him. Still, there seems to be no justification for the undocumented and unjustified rumor repeated by one writer that Judah desired to build "too well," and that the financial backers of the railroad could not come up with the money his plans called for. 29

Judah also complained that Huntington's influence was too great and that Stanford—who he found personally "all right"—was too much under the influence of those whom he did not trust. ³⁰ Apparently Stanford, of all the Central Pacific Associates, was on the best terms with Judah. Judah's widow later wrote that Governor Stanford was a "Judah man" and had remained loyal to her husband so long as her husband lived. ³¹

Judah also grumbled to Dr. Strong that he did not have enough to do and that he was being treated as though he were not even a member of the board of directors. Following what he called a "blowout," which cleared his mind but led him to expect "decapitation," he complained that the board members were not holding enough meetings to satisfy him and that they had held private conferences to which he had not been invited. ³²

In the summer of 1863 Judah tried to gain control of the railroad by seeking outside investors who would purchase the stock owned by those of whom he disapproved. On October 3, 1863—before a single Central Pacific track had been laid—he boarded the *St. Louis* for a trip east in search of capitalists more amenable to his ideas on the railroad's construction and management.³³ His wife later corroborated the reason for this trip:

²⁸TDJ to DWS, Sep 2, 1861, in DWS test., *USPRC*, V, 2964. ²⁹Wheat, "Sketch of the Life of Theodore D. Judah," 260.

³⁰TDJ to DWS, Sep 2, 1861, Jul 10, 1863, in DWS test., USPRC, V, 2964 and 2966.

³¹"Anna Judah's Letter," 3. ³²TDJ to DWS, May 13, 1863, in DWS test., *USPRC*, V, 2965.

³³SF Alta California, Oct 4, 1863.

He had secured the right and had the power to buy out the men opposed to him and the true interests of the Pacific railroad at that time. Everything was arranged for a meeting in New York City on his arrival—gentlemen from New York and Boston who were ready to take their places.³⁴

Contemporary evidence of Judah's plans is found in a letter he wrote to Strong from the *St. Louis* on October 9, 1863, while on the way to Panamá. He wrote that if some of the managers of the Central Pacific held the same opinions three months from then, there would be a radical change in the management of the railroad. He warned that the people at the reins had better change their ideas or—after men of experience and capital had taken over—they would rue the day they had ever embarked in the Pacific railroad project. ³⁵

Whatever Judah's plans may have been, they came to naught, for barely a day after he left Aspinwall, he contracted yellow fever and died in New York on November 2, 1863, one week after arriving in New York.³⁶

Lester L. Robinson, a civil engineer and contractor of the Sacramento Valley



ASPINWALL

The name of the city Aspinwall is seen often in records involving travelers to California during the 1850s. It was the Caribbean port of Panamá, founded in 1850 and named for William H. Aspinwall, New York merchant active in building the Pacific Railroad & and Panamá Steamship Company. Later, Aspinwall was a stockholder in the Central Pacific Railroad. In 1890, the city of Aspinwall was renamed Colón.

^aJohn Kemble, *The Panama Route*, 1848–1869 (Berkeley: UCP, 1943), 65, passim.

^bSED 10, 40th Cong., 3rd Sess., 25–47 (Dec 7, 1868–Mar 3, 1869), Letter of the Secretary of the Interior [Orville Browning], communicating, In compliance with a resolution of the Senate of the 5th instant, the annual reports of the several Pacific railroad companies. *AR CPRR*, Jun 30, 1868. "Names and residences of stockholders," 27–30, 27 cited for Aspinwall. Ordered printed on Jan 7, 1869.



Railroad, later stated, in error, that Judah had severed his relationship with his Central Pacific partners before leaving California and was no longer the railroad's chief engineer when he sailed for New York.³⁷ Other than one or two similar rumors, there is no evidence that Judah actually broke with his partners before leaving California. One of these accounts was a brief article in a San Francisco newspaper at the time of Judah's death, which speculated: "At the time of his departure the interior press stated that he went on business connected with the Central Pacific Railroad Company, but from a reliable source we are informed that his connection with the Company had then ceased."38

³⁴Mrs. Theodore (Anna Ferona) Judah Ms., "Reminiscences," 10. BL.

³⁵TDJ to DWS, Oct 9, 1863, in DWS test., *USPRC*, V, 2966–2967. TDJ's orig. letter is in the TDJ Ms. BL.

³⁶Fever: Anna Judah Ms., 15; obit. in NY Herald, Nov 4, 1863, the same date his father had died in 1836.

³⁷Letter of Lester L. Robinson, C[ivil] E[ngineer], to Charles B. Sumner and Henry Epstein, chairmen, Comm. on Railroads, Nev. leg., Feb 3, 1865. PCR, Vol. 1, Pamphlet 5, 141ff., in *The Railroad System of California. Oakland and Vicinity* (SF: JHCCP, 1871). BL.

³⁸SF Bulletin, Nov 5, 1863.



45. Theodore DeHone Judah, father of the Central Pacific Rail Road.

[Anna] Pierce Family Collection.

Contrary to such rumors, in 1865 Stanford said that at the time of his death Judah was still the chief engineer of the railroad. 39

Yet there are indications that Judah may not have planned to return to the Central Pacific Rail Road. For one, on September 28, 1863, just before his departure in October, he sold all his holdings in the Nevada Railroad Company for \$10,000 to

³⁹CPRR, Statement Made to Senate Committee of Nevada Legislature (n.c.: n.p., Jan 14, 1865). Contains LS letter to Hon. Messrs. [Charles A.] Sumner, [James S.] Slingerland, [James W.] Haines, [Alfred] James, [Marcus D.] Larrowe, Jan 12, 1865, on pp. 2–3. This 15-p. pam. is bound in PCR, Vol. 2, Pam. 2. BL.



RESOLUTION OF THE CENTRAL PACIFIC DIRECTORS ON THE DEATH OF JUDAH

IN MEMORIAM—At a meeting of the Board of Directors of the Central Pacific Railroad Company of California, held on 11th November, last [1863], the following resolutions were passed by unanimous vote: Whereas, By a dispensation of the Divine will, death has entered the circle of our association, and taken from us one of its late Directors; and whereas, by the sudden demise of Theodore D. Judah, late Chief Engineer of the Central Pacific Railroad Company, the public, as well as the Company, have met with a severe and untimely loss; therefore

RESOLVED, That the Directors of the Company have heard with unfeigned sorrow of the death of their late associate on the Board, a sorrow that is as deeply felt in consideration of his private and social relations as in the remembrance of his long and faithful services to the initiation of our great enterprise.

RESOLVED, That the death of Mr. Judah, in the prime of his manhood and in the full career of his usefulness, will be felt far beyond the immediate circle of his acquaintance. His ability as an engineer, his untiring energy of character, and the success with which he followed his profession, place him among those whose lives are a benefit to the State, and in whose death the public experiences an undoubted calamity.

RESOLVED, That the earnest sympathies of this Board be extended to her, who is left to mourn the loss of her life's protector, to the stricken mother whose home is made desolate by this unexpected affliction; and to the other members of that family who are called thus suddenly to mourn the loss of a beloved brother.

RESOLVED, That these resolutions be engrossed upon the minutes of the Board and that copies thereof be forwarded to the relatives of the deceased.

Leland Stanford, President, Central Pacific Railroad Company E.H. Miller, Secretary, Central Pacific Railroad Company*

*SF Bulletin, Dec 15, 1863.



Charles Crocker. ⁴⁰ Was it just a coincidence that at the same time James Bailey, a jeweler and importer and the company's first secretary, who had also left the Central Pacific, sold his own shares in the Nevada Railroad Company to Phil Stanford? ⁴¹

Judah's successor as chief engineer of the Central Pacific was Samuel Skerry Montague. Montague had joined the Central Pacific on February 12, 1862. In November 1863 he was named acting chief engineer for the railroad; on March 31, 1868, he was promoted to chief engineer. ⁴² Sam, as he was known to all, enjoyed a long and fruitful career of more than twenty years with the Central Pacific before his death at age forty-seven on September 24, 1883. ⁴³

⁴⁰Evans, Huntington, I, 74 and 140. Evans cites as her source Doc. 29, MH Coll., SUL, and MH, Docs. relative to the CPRR Co., I, 29. The LSJU lib. has no record of either of these docs. Nor are these sources listed in Evans' biblio.
⁴¹Ibid.
⁴²Kraus, High Road to Promontory, 298.

⁴³TRG, Oct 5, 1883. See bio. sketch of Montague in the Redding Republican Free Press, Sep 29, 1883.



Thirty-three-year-old Samuel Skerry Montague (for whom Montague, California, was named) was a young man with no academic training in engineering. What he knew, he had learned from first-hand experience, working first on the Rock Island and Rockford Railroad, then the Peoria and Bureau Valley Railroad, and finally the Burlington and Missouri River Railroad. Disappointed in his 1859 quest for gold at Pike's Peak, Colorado, Montague moved to California, where in the fall of that year, he got a job on the California Central Railroad, which was to run from Folsom to Marysville, though it never got beyond Lincoln. This is probably where he met Judah, whom Charles Lincoln Wilson had hired to survey the route of the proposed railroad.

On February 13, 1868, Montague married Louisa Adams Redington, sister of Charles H. Redington, long an official of the Southern Pacific Company. Their home was in Oakland, where Montague died on September 24, 1883, and where he was buried.^d

^aGudde, California Place Names, 208.

^bKraus, High Road to Promontory, 298.

"Wheat, "A Sketch of the Life of Theodore D. Judah," 226.

^dJohn Galloway, The First Transcontinental Railroad: The Central Pacific and Union Pacific, 1863–1869 (NY: S-B, 1950; DPr, 1989), 83.



Even if Judah's unexpected death had not occurred when it did, the story of the building of the Central Pacific Rail Road may not have been much different. Many strong men lost their nerve and bowed out before the transcontinental railroad was finished. By 1863 Stanford, Huntington, the Crockers, and Hopkins—the survivors—were in almost absolute control, each having gravitated into that position for which he was best qualified.

Charley Crocker resigned from the Central Pacific directorate on December 24, 1862, and took charge of construction. ⁴⁴ Two days later, the firm of Charles Crocker & Company was given a contract to grade the first eighteen sections of road, the eighteen-mile stretch from Sacramento to Junction (now Roseville). ⁴⁵

At a meeting in July 1863, the directors of the Central Pacific awarded a series of contracts for Sections 19 to 31, stretching from Junction to Newcastle. The building of Sections 19–20 were contracted to Cyrus Collins & Company, Sections 21–24 to Turton, Knox & Ryan, Sections 25–27 to Charles D. Bates & Company, Sections 28–29 to S. D. Smith, and Sections 30–31 to Charles Crocker & Company. 46

Once grading was actually underway, contractors on various sections of the road began quarreling among themselves and forcing prices up by bidding against each other for labor.⁴⁷ Because of the scarcity of labor, these practices drove prices so

⁴⁴LS test., *USPRC*, V, 2621.

⁴⁵CC test., *USPRC*, VII, 3640–3641; LS test., *USPRC*, V, 2621–2622.

⁴⁶Kraus, High Road to Promontory, 66.

⁴⁷Moreover, these contractors were not under the control of the railroad's Board of Directors. CPH test., *USPRC*, VII, 3769; and LS test., ibid., V, 2621; Kraus, *High Road to Promontory*, 66.

high that they were unable to complete the sections they had contracted to build. Consequently, Crocker's company had to finish much of the road the others had contracted to build.⁴⁸

Stanford's part in the building of the Central Pacific consisted of far more than turning the first shovelful of earth and tapping into place the last spike when it was over. The erroneous idea that he was little more than a figurehead or front office public relations expert representing the more aggressive Huntington overlooks the Governor's driving force and his influence on legislation and finances. His services while president of the Central Pacific Rail Road show that his contributions were far more important than this view concedes. As president, Stanford's major task was to oversee California legislation as it related to the Pacific railroad: during his last year as governor, in 1863, Stanford promoted, the California legislature passed, and he then signed into law the following seven acts that benefited the Central Pacific:

The *First* authorized the supervisors of Placer County to subscribe—subject to the approval of its citizens—\$250,000 in Central Pacific Rail Road stock.⁴⁹

The Second granted to the Central Pacific the right of way in the city of Sacramento and all the overflowed land within the city limits which had been previously granted to it by the state. 50

The Third allowed the relocation of the railroad route if changing its path were found to be expedient. 51

The *Fourth* authorized the San Francisco board of supervisors to subscribe—subject to the will of the people—\$1 million to the capital stock of the Western and Central Pacific companies.⁵²

The *Fifth* authorized Sacramento County to subscribe—subject to the approval of its citizens—\$300,000 in Central Pacific Railroad stock.⁵³

The *Sixth* declared that whenever the company should have completed twenty consecutive miles of any portion of their road, it should be entitled to warrants

⁴⁸Kraus, High Road to Promontory, 68–69.

⁴⁹Calif Stats, 14th Sess., 145–150 (Jan 5–Apr 27, 1863), Chap. 125, An Act to authorize the County of Placer to subscribe to the Capital Stock of the Central Pacific Railroad Company of California, and to provide for the payment of the same, and other matters relating thereto. App. Apr 2, 1863. For an ed. by a journalist in opposition to the PCV subscription, see [Auburn] Placer Herald, Jul 23, 1864.

⁵⁰Calif Stats, 14th Sess., 288–290 (Jan 5–Apr 27, 1863), Chap. 209, 288–290, An Act granting certain rights to the Central Pacific Railroad Company of California, and for other purposes. App. Apr 14, 1863.

⁵¹Ibid., 320–321, Chap. 244, An Act to authorize the re-location of the Route of the Central Pacific Railroad Company of California, and for other matters relating thereto. App. Apr 17, 1863.

⁵²Ibid., 380–385, Chap. 291, An Act to authorize the Board of Supervisors of the City and County of San Francisco to take and subscribe One Million Dollars to the Capital Stock of "The Western Pacific Railroad Company," and "The Central Pacific Railroad Company of California," and to provide for the payment of the same, and other matters relating thereto. App. Apr 22, 1863.

⁵³Ibid., 447–451, Chap. 310, An Act to authorize the City and County of Sacramento to subscribe to the Capital Stock of "The Central Pacific Railroad Company of California," and providing for the payment of the same, and other matters relating thereto. App. Apr 25, 1863.

upon the state treasury to the amount of \$10,000 per mile—subject to two restrictions: (1) Only the first twenty-mile section should be allowed to draw before it was shown that \$300,000 had been expended upon the construction of the road between Sacramento and a point fifty miles east of the point of beginning; (2) For the first two years only \$100,000 with interest at 7 percent should be paid annually, and \$200,000 with interest each fiscal year thereafter. ⁵⁴

The *Seventh* authorized the Sacramento, Placer, and Nevada Railroad Company to sell and convey to the Central Pacific company its road, property, franchises, rights and privileges.⁵⁵

The law described as the sixth of Stanford's measures is best known as the half-million-dollar subsidy law. The Governor kept his promise: he personally lobbied on the floor of the legislature to get the half-million-dollar subsidy passed. Enemies criticized him for this: according to them, he "cajoled and bullyragged" senators into voting for the measure. ⁵⁶ Despite talk that such a subsidy bill might be unconstitutional, Stanford used all the political influence at his disposal to get it passed by the legislature. But, despite its promise, not a cent was ever given to the railroad under this law.

Many key figures in the state—among them Governor Low—thought the law unconstitutional.⁵⁷ Before the first payment was ever made, it was repealed, and then superseded in April 1864 by a law that provided that the state would guarantee the interest on \$1.5 million of railroad bonds at 7 percent for twenty years.⁵⁸ This act, like that of 1863, was opposed by many as unconstitutional, but under it the railroad *did* receive some assistance from the state. Frederick Low later said that Stanford told him several times that the Associates had been at the end of their "tether" and that without this help they could never have kept going.⁵⁹

In an age when conflict of interest had not yet become an obsession with the self-appointed watchdogs of public morality, few—and there were a few—accused or even suspected Stanford of any unethical action. After all, he had won the gubernatorial election on a platform promising that his administration would do everything it could to build the railroad; he was selected by an electorate that wanted and expected the building of a transcontinental railroad. That he was one of its major investors bothered only a small number of detractors.

⁵⁴Ibid., 465–467, Chap. 314, An Act to aid the Construction of the Central Pacific Railroad in the State of California, and other matters relating thereto. App. Apr 25, 1863.

⁵⁵Ibid., 749, Chap. 486, An Act to authorize the Sacramento, Placer, and Nevada Railroad Company to sell and convey their Road, and other matters relating thereto. App. Apr 27, 1863.

⁵⁶Becker, Some Reflections on an Early California Governor, 36.

⁵⁸Calif Stats, 15th Sess., 344–346 (Dec 7, 1863–Apr 4, 1864), Chap. 320, An Act to aid the construction of the Central Pacific Railroad, and to secure the use of the same to this State for Military and other purposes, and other matters relating thereto. App. Apr 4, 1864.

⁵⁹Frederick Low Ms., "Political Affairs," 37.

STATE AND LOCAL CONTRIBUTIONS TO THE CENTRAL PACIFIC RAIL ROAD

The laws outlined above showed that for the state of California the building of the transcontinental was a matter of state *and* national patriotism. Just after the sixth act—which came to symbolize all state aid to the Central Pacific Rail Road—was passed, the editor of the *Sacramento Union* exulted:

When the first chapter in the history of the beginning of the Pacific Railroad is made up by the future historian, the page of which California will have most reason to be proud will be the one upon which is recorded the proceedings of the Legislature while the bill to furnish state aid was passing through that body. The names of those who voted for the bill will stand prominent in the list of those who are conceded to have done most to promote the great interests of the young and vigorous State. To the true friends of a Pacific Railroad yesterday was a proud day in the Senate. The bill to advance money to insure the great work passed that body by a vote of . . . twenty-eight ayes to four noes. . . . Senators cheerfully agreed that they were all in favor of the railroad—that the people also were for the road—and that they, as senators, were ready to vote a subsidy from the State to a reasonable extent. . . . The act shows to the world that the State feels bound to advance some of her means, and lend the weight of all her moral and political influence, to promote this national enterprise.

Just before San Franciscans went to the polls to vote on whether they would pass a bond issue to contribute to railroad funding under the fourth act listed above, Stanford wrote an open letter reminding them of the advantages the railroad would bring to the state as a whole and to San Francisco in particular. He gently rebuffed San Franciscans for contributing neither their time nor their money to the railroad. Stanford reminded them that the Central Pacific had made San Francisco the terminus of the transcontinental railroad; because of this, \$800,000 in federal funds would go to the San José-San Francisco Railroad as part of the transcontinental system, and the city of San Francisco owned one-third of the stock in this road. 61

Sacramento County immediately subscribed its \$300,000 in stock—not in cash—as did Placer County its quarter of a million. On May 19, 1863, over powerful opposition, San Franciscans passed the bond subscription by an overwhelming two-to-one vote. ⁶² A taxpayer's suit brought by a member of the San Francisco Board of Supervisors led to a temporary injunction—later lifted—halting payment of its \$600,000.

Years later, Placer County brought an unsuccessful suit against the Central Pacific to recover its share of profits proportional to the subscription. It wanted a

⁶⁰Sac Union, Apr 25, 1863; Low Ms., "Political Affairs," 36.

⁶²Ibid., May 19 and 20, 1863.

million acres of land and \$15 million in cash. In 1870 Placer and Sacramento counties—joined later by Santa Clara County—sold their bonds back to the Central Pacific Associates. As the value of the stock rose, the directors made a vigorous attempt to get it *all* back. ⁶³

But in the fall of 1863, Stanford was still trying desperately to borrow money in San Francisco for the railroad. On one occasion he offered interest of 1 percent per month and \$40,000 worth of first mortgage railroad bonds for a short-term loan of half that amount.⁶⁴



LEGAL THREATS AND FILED LAWSUITS

were a constant irritation to railroad attorneys. In one, for example, in 1864 Reuben Butterfield, a farmer, sued the Central Pacific in the Placer County district court for \$2,000 in damages and a permanent injunction against trespassing. He described in court how railroad construction crews had destroyed his crops and fences. He testified that in the winter of 1863–1864 he personally saw Leland Stanford tear down his fence and order others to do the same. As out of character for Stanford as this absurd allegation was, for other damages Butterfield was awarded \$1,700, later reduced to \$1,000.*

*Butterfield v. Central Pacific Railroad Co. of Cal., 14th District Court, Placer County, in "Transcript on Appeal," CSC No. 1837 (15683), 16–17; repr. in SacHS Golden Notes July 1969 15 (4): 1–9. See William Newell Davis, Jr., "Research Uses of County Court Records, 1850–1879, And Incidental Intimate Glimpses of California Life and Society, Part I," CHQ 1973 52 (3): 253.



Opposition to the Central Pacific Rail Road

There had always been some opposition in principle to a transcontinental railroad; there now developed opposition to the Central Pacific in particular. It came from a number of San Francisco horse-power companies threatened with the loss of the lucrative Washoe mining business; among them were Wells Fargo, the California Stage Company, and the Overland Stage. The Sacramento Valley Rail Road Company and certain enterprises with near-monopoly businesses also fought the Central Pacific. These included the Pacific Mail Steamship Company, the California Navigation Company, various clipper ship owners, telegraph companies that feared the effects of the new telegraph line that the Central Pacific was to string as it built eastward, and the Sitka Ice Company, which, bringing its ice from Alaska, could not

⁶³SF Bulletin, Jun 25, 1872. ⁶⁴LS to Pres. and Directors of the Merchants Ins. Co. of SF, Aug 1, 1863.

⁶⁵LS test., USPRC, V, 2464, listed antagonisms to the CPRR. See also, Hittell, History of California, IV, 474–475.

compete with cheaper ice from the Sierra mountain lakes. ⁶⁶ President J. Mora Moss of the Alaska Ice Company challenged the Central Pacific Rail Road for what seemed to him very good reason. We have it on the authority of Bancroft that when the railroad reached the mountains the price of ice was reduced so much that San Franciscans—who consumed one-third of the ice in the entire state—saved half a million dollars a year on their ice bills. ⁶⁷ And what San Franciscans saved on their ice bills was revenue that the Sitka and other companies lost.

Later, many of these companies and others like them would condemn the Central Pacific Rail Road for its monopoly of California transportation. Their *own* monopolies, however, which the transcontinental railroad threatened to destroy, were another matter—they were good for business, good for the people, good for the state!

THE DUTCH FLAT AND DONNER LAKE WAGON ROAD COMPANY

The increase of traffic over the Placerville Turnpike between Sacramento and Nevada encouraged the Central Pacific Associates to cash in on this promising business. They decided to build their own wagon road, and on November 27, 1861, drew up papers of association for what they called the Dutch Flat and Donner Lake Wagon Road Company. Their road was to run from Illinoistown to Virginia City. The company was owned exclusively by Stanford, Charles Crocker, who was named president, Huntington, Hopkins, Elisha Lafayette Bradley, and Daniel Strong. (Bradley, like Strong, would sell all his later railroad interests to the Central Pacific Associates. (69)

These investors expected the Donner Lake Wagon Road Company to let them cash in on the profits of the mining areas, but their major reason for building it was to create a means of transportation for men and matériel while the transcontinental railroad was under construction.

Critics of the Central Pacific Associates and of the Donner Lake Wagon Road Company charged that the owners of the wagon road never intended to build a railroad to Nevada but concocted a scheme—a veritable railroad smokescreen—to

⁶⁶SF Bulletin, Jun 3, 1893, Special Hist. and Commercial Ed. Sabin, Building the Pacific Railway, 56–58; see NET, "San Francisco over the Rocks: The Sitka [Ice Company] and the City," in Robert F. Schoeppner and Robert Joseph Chandler, California Vignettes, SF Corral of Westerners Brand Book 1 (SF: GrWB, 1996), 87–105.

⁶⁷HHB, Stanford, 38; HHB, History of California, VII, 86. Full name, Joseph Moravia Moss. Bio. Info. File. CSL.
⁶⁸LS test., USPRC, V, 2927.

⁶⁹Bradley went on to make his mark in the 16th and 17th sessions of the Calif. leg. as a state sen., developer of SCC, and one of the orig. stockholders in the First National Bank of SJ. Henry Foote, Pan Pictures from the Garden of the World or Santa Clara County, California. Containing a History of the County of Santa Clara from the Earliest Period of its Occupancy to the Present Time (Chicago: LPC, 1888), 368–369; Driscoll and White, List of California's Constitutional Officers, 40.

conceal their real intention, which was simply to profit by building up the business of their wagon road. The result of their scheme would enrich the directors and impoverish the stockholders.

Determined to frustrate the will of the electorate, in January 1864 the San Francisco Board of Supervisors sent a committee to Sacramento to examine the books of the company in which their city was to invest. They claimed that Stanford refused to allow this. If this in fact happened, the reason given for his refusal is highly suspect. According to the testimony of one hostile witness, broadcast in 1864 by the Board of Supervisors in its 128-page pamphlet titled *The Great Dutch Flat Swindle, The City of San Francisco Demands Justice* (which included every conceivable anti-railroad argument its writers could come up with), Sanford recognized that an examination of the books would injure the railroad company's public image. ⁷⁰ Another of the antagonistic supervisors spread the preposterous story that Charles Crocker actually told him that the Associates refused to let anyone see the books because the railroad company had been "carrying elections." It is as difficult to believe that Crocker would have been stupid enough to say this as to believe in Stanford's alleged confession.

Responding to innuendoes that the directors of the Central Pacific had acted in bad faith toward the railroad company and had used the company's stocks for personal and illegal purposes, on August 4, 1864, twenty-seven residents of Placer County signed a petition asking the county Board of Supervisors to examine the books of the Central Pacific Rail Road. On September 6, 1864, a county supervisors committee showed up at the railroad offices to examine the company's books. As a result of its examination, the board issued a majority report saying that it had made a "full, careful and thorough examination of the books, records and papers of the Company" and found its affairs "faithfully and honestly conducted in every particular."

James R. Rogers, president of the Board of Supervisors, disagreed with the findings of his colleagues, so he prepared on September 19, 1864, his own minority report. ⁷⁵ In this report, he charged that the examination was a farce, and therefore he refused to sign the majority report, which, he charged, was actually prepared by the railroad itself and then signed by his colleagues.

⁷⁰[Horace Dawes (?)], The Great Dutch Flat Swindle: The City of San Francisco Demands Justice; the matter in controversy, and the present state of the question; an address to the Board of Supervisors, officers, and people of San Francisco (SF: [n.p.], 1864), 85 and 122. This pamphlet is bound in PCR, Vol. 4, Pamphlet 4. BL.

⁷²[Auburn] *Placer Herald*, Aug 6, 1864. ⁷³Ibid., Oct 8, 1864.

 $^{^{74}}$ lbid., PC Board of Supervisors [Majority] Report on the Central Pacific Railroad is also found in Vol. IV, as Pam. 5, 15–25, CRD. BL.

⁷⁵[Auburn] Placer Herald, Oct 8, 1864. The minority report lists thirty-eight questions to which Rogers sought answers.

THE GREAT

DUTCH FLAT

SWINDLE!!

The City of San Francisco

DEMANDS JUSTICE!!

THE MATTER IN CONTROVERSY, AND THE PRESENT STATE OF THE QUESTION.

AN ADDRESS

To the Board of Supervisors, Officers and People of San Francisco.

Meanwhile, the San Francisco supervisors refused to purchase the railroad stock mandated by the electorate, and the Central Pacific responded by bringing suit against the city's mayor, auditor, and treasurer. The case was ultimately appealed to the state supreme court, where the railroad won.⁷⁶ However, the dragged-out litigation seriously damaged the public image of the Central Pacific Rail Road. 77 A series of witnesses for the defense testified that Leland Stanford had not limited his influence in the 1863 election to mere letter-writing; they testified that they personally saw his brother Philip, a heavy stockholder in the Central Pacific, purchase votes at the polls. One witness said he saw Philip drive up to the polls in the Ninth Ward and throw handfuls of money into the street. A crowd scrambled for the money and promptly marched off to vote for the railroad subscription! Another reported seeing him at the First, Third, Ninth, and Tenth Wards throwing money from his wagon. Others were sure that he showed up at every polling place in the city. One "witness" said that at the Fourth Ward there was a crowd of people shouting against the railroad proposition, but after Philip Stanford threw a considerable sum of money in five- and twenty-dollar gold pieces, saying, "Now go to work for the railroad," these same people began cheering the railroad proposition. 78 Few readers took the testimony of these "eyewitnesses" to the purchase of votes by the peripatetic Phil Stanford any more seriously than they had Crocker's confessing to corrupting public officials with money or the Governor's admitting that the Central Pacific books would have created an unfavorable public image.

Arguing that the Central Pacific Rail Road had bribed enough people to get a majority of the votes, the defense attorneys for San Francisco asked the state supreme court to nullify the 1863 election. They bombarded the court with various arguments to substantiate their request.⁷⁹

Central Pacific attorneys may have found it hard to take either the lawsuit or the allegations of *The Dutch Flat Swindle* seriously, but they replied with a thirty-five-page brief which presented a point-by-point defense against the charges leveled against their clients. ⁸⁰ In December 1864 they presented the court with a series of irresistible legal arguments couched in biting sarcasm that laid the opposition low. The opening of the railroad defense began:

⁷⁶CSCR 1864 (Jul Term), XXV, 635–653, The People of the State of California, On the Relation of the Central Pacific Railroad of California, vs. Henry P. Coon, Mayor of the City and County of San Francisco, et als. Brief on Behalf of Defendants (SF: T & B, 1864).

⁷⁷LS test., USPRC, V, 2620. CSCR 1864 (Apr Term), XXIV, 518–560, Wheeler N. French v. Henry F. Teschemaker et als.
⁷⁸[Dawes], Dutch Flat Swindle, 89–115.

⁷⁹Ibid., 60. The legal arguments are found on 17–83.

⁸⁰For the CPRR defense, see CPRR, "A Friend to the Pacific Railroad," The Pacific Railroad. A Defense Against its Enemies, with a Report of the Supervisors of Placer County, and a Report of Mr. Montanya, made to the Supervisors of the City and County of San Francisco (SF: [n.p.], Dec [n.d.], 1864), bound in Vol. 4, Pamphlet 5, in PCR. BL.

A pamphlet entitled "The Dutch Flat Swindle," containing, among other pettifogging statements equally baseless, the minority report of J.H. Rogers [James R. Rogers], one of the Board of Supervisors of Placer County, having been recently published and extensively circulated, would seem to demand some notice from the friends of the Pacific Railroad.⁸¹

The author very prudently conceals his name, as few citizens in the State would voluntarily peril their reputation as truthful and honorable men by signing a publication containing so many gross misrepresentations, demagogue insinuations, willful fabrications, and unmitigated slanders."

The railroad won its case in court, but the supervisors defied the court's decision. They negotiated a compromise allowing the city to turn over \$400,000 worth of its gold bonds to the railroad instead of purchasing \$600,000 in stock. Thus, following two years of litigation, on April 3, 1865, the California Supreme Court found in favor of the railroad and ordered the San Francisco Board of Supervisors to grant the Central Pacific \$400,000 in city bonds and The Western Pacific \$200,000, as the voters in San Francisco had decreed. ⁸³ The Supreme Court decision upholding the appropriation act of 1864 placed Central Pacific bonds on the same level as state bonds. On April 12, 1865, these bonds were finally delivered to Stanford. The money was still needed, but not as critically as it had been two years before.

Because the road later made money and its stocks soared in value, this short-sighted move on the part of the city fathers eventually cost the city of San Francisco several million dollars. 84

Stanford later insisted that if it had not been for the delay in getting these funds the Central Pacific would have met the Union Pacific farther east, at Cheyenne instead of Promontory Summit. 85

THE CENTRAL PACIFIC LAYS IRON RAILS, NOT STEEL—OCTOBER 26, 1863

A frequently overlooked portion of Section 4 of the Pacific Railroad Act of 1862 reads, in part: ". . . the rails and all other irons used in the construction and equipment of said road to be American manufacture of the best quality, the President of the United States shall appoint three commissioners to examine the same and report to him in relation thereto."

⁸¹ Correction of Rogers' name, Placer Herald, Feb 6, 1864.

^{82&}quot; A Friend to the Pacific Railroad," The Pacific Railroad: A Defense Against its Enemies, 3.

⁸³Sac Union, Apr 5, 1864; CSCR 1864 (OctTerm), and 1865 (Jan Term), XXVII, 175–228, The People of the State of California ex. rel. J[ohn] G. McCullough, Attorney-General v. Romualdo Pacheco, Treasurer of said State, and the CPRR Co. of Calif. Sac Union, Jan 3, 1865.

⁸⁴ Calif Stats, 15th Sess., 388 (Dec 7, 1863—Apr 4, 1864), Chap. 344, An Act to confer additional powers upon the Board of Supervisors of the City and County of San Francisco, and upon the Auditor and Treasurer thereof, and to authorize the appropriation of money by said Board. App. Apr 4, 1864.
85LS test., USPRC, VI, 3611.

This citation speaks volumes in explaining future problems encountered as a result of using inferior materials in early construction. To gain congressional support needed to pass the Pacific railroad bill, and to satisfy Pennsylvania iron interests, the provision was added that materials had to be American-made. This precluded the use of British iron and steel imports, which would have been far less costly and of higher quality than American-made products.

The proviso was generally interpreted as applying only to original construction, though this was never specified in any statute. The date 1871 is significant, because in that year the Franco-Prussian War ended and the French government was looking for foreign capital to bolster its sagging economy. In the spring of 1871, Huntington placed the first Central Pacific Railroad order for steel rails for use on the Central Pacific. He wrote Hopkins on June 9, "I have just bought 2000 tons of steel rails for CP, to be shipped from Marseilles, France, in October." The shipment was delayed from what Huntington expected, as the clipper ship *Herald of the Morning* left Marseilles on April 17, 1872, and did not sail into San Francisco until September 3, then 139 days out of Marseilles, carrying a consignment to George Howes & Company of 5,500 steel rails.⁸⁷

Collis Huntington recognized that American steel was not as good as English steel. He said that the [Charles] Cammel Company of Sheffield had made him the best rails for the Central Pacific he had ever bought.⁸⁸

When, in the 1887 Pacific Railroad investigation, Stanford was questioned about the cost effect of using American rather than European metals, his answer was printed under the heading

EFFECT OF PROTECTION TARIFF

[Leland Stanford]. I do not know how much more we had to pay for iron because of the tariff which protected American iron; but I know there was a time when we had estimates made which showed that we paid out for rails, and other iron, over \$11,000,000 more than we would have had to pay if we could have bought it in England.

Mr. Cohen. That was because of the protection given to Pennsylvania at that time. The Witness. Some people seem to think that they need protection. Through the aid which we offer iron and coal in the shape of a protective tariff in order to assist and protect the poor coal mine owners of Pennsylvania, we are paying 75 cents a ton more duty on coal than we otherwise would, and part of this is used on this Central Pacific Railroad, which Mr. Anderson thinks the Government has an interest in. 89

The price of building materials was sky high in 1863, owing to Civil War inflation

⁸⁶CPH to MH, Jun 9, 1871. Letter Book in Mariners' Museum.

⁸⁷SF Alta California, Sep 4, 1872; SF Chronicle, Sep 4, 1872.

⁸⁸ Julius Kruttschnitt test., Unmerger Case, Defendants' Brief, 75. In 1860 Charles Cammel & Co. was the world's first co. to adopt the Henry Bessemer process for making steel.
89 LS test., USPRC, V, 2782.



47. Governor Stanford: The Central Pacific's first locomotive.

Union Pacific Collection.

and the fact that all materials except ties, timber, and stone had to be shipped from the East, either around South America or across the isthmus of Nicaragua. 90

On March 20, 1863, Stanford received word from Huntington that he had just purchased five thousand tons of iron for railroad construction, enough for the first fifty miles; half the order was to be shipped immediately, the balance to follow. This shipment, the editor of the *Sacramento Bee* estimated, would cost the Associates \$300,000 plus shipment costs. ⁹¹ Despite the problems of shortages of labor, lack of many needed building materials, and scarcity of money with which to overcome these obstacles, on October 26, 1863, the Central Pacific took a giant leap forward by laying its first rails. ⁹² A few months later, on March 19, 1864, the first excursion on the Central Pacific Rail Road was made in honor of members of the legislature and their friends. ⁹³ The *Governor Stanford*, the Central Pacific's first engine, led the procession, gaily arrayed with star-spangled banners. The ride started at Front Street, with a band playing *Wait for the Wagon*. Between one-half and two-thirds of the state legislature was on board, with lady friends and wives. It was remarked by the *Sacramento Union* reporter covering the festivities that never before were state legislators so popular in Sacramento. ⁹⁴

It was said that President Stanford and Contractor Crocker, true to form, "did the honors of the occasion with all that urbanity for which they are distinguished."

⁹⁰Sabin, Building the Pacific Railway, 98.

⁹³Ibid., Mar 21, 1864.

⁹¹Sac Bee, Mar 20 and 21, 1863.

⁹²Sac Union, Oct 27, 1863.



CALIFORNIA STATE RAILROAD MUSEUM LIBRARY & COLLECTIONS CENTRAL PACIFIC RAILROAD NO. 1 GOV. STANFORD

This forty-ton wood-burning steam locomotive was the pioneer engine of the Central Pacific Railroad. The *Gov. Stanford* was built in 1862 in Philadelphia, then shipped disassembled in crates around Cape Horn from Boston to San Francisco on board the sailing vessel *Herald of the Morning*. It arrived in Sacramento on October 6, 1863, by the river schooner *Artful Dodger*, and was unloaded the next day and reassembled at "K" and Front streets. It began its long career in Sacramento on November 6, 1863, when the boiler was successfully fired. The *Gov. Stanford* had the distinction of pulling the Central Pacific's first excursion train, first revenue freight train (March 25, 1864), and first scheduled passenger train (April 15, 1864). The locomotive also hauled materials for the construction of the Central Pacific over the Sierra Nevada. It was later downgraded from mainline service. From 1873 until its retirement in 1895, the locomotive served as a switcher and fire engine (outfitted with a water pump and hose to extinguish small fires along the track) in the Sacramento area.

The Southern Pacific saved the historic engine from being scrapped in 1895. The *Gov. Stanford* was refurbished and in 1899 presented to Jane Lathrop Stanford (1828—1905), widow of former California Governor Leland Stanford (1824—1893). She, in turn, donated the engine to Leland Stanford Junior University, where it was placed on display until 1963.

In May 1963 the locomotive was loaned to the Pacific Coast Chapter of the Railway & Locomotive Historical Society for inclusion in its historic railroad equipment collection. Those pieces, including the *Gov. Stanford*, form the nucleus of the California State Railroad Museum collection.

As the *Gov. Stanford* aged, parts were replaced or exchanged among similar Central Pacific or Southern Pacific locomotives. The locomotive was also painted numerous times. Reconstruction to its 1860s appearance would literally have destroyed the existing locomotive and resulted in a replica. After careful research, it was therefore decided to refinish the locomotive to its 1899 appearance, the year it was presented to Stanford University.

Today the *Gov. Stanford* occupies a prominent place in the Museum's Sierra Scene diorama, just a short distance from where it began its life under steam on the banks of the Sacramento River.

Courtesy California State Railroad Museum.*

*Stephen Drew, chief curator, CSRM, to the writer, July 26, 2002.



A few days later the first section of the road was open to business. On March 25, 1864, the *Governor Stanford* arrived in Sacramento with three carloads of granite weighing thirty tons, all taken from the Brigham quarries, the first paying freight to pass over the Central Pacific lines. ⁹⁶

⁹⁶Ibid., Mar 26, 1864. For hist. sketches of the Brigham quarries, see [Angel and Fairchild], History of Placer County, California, 396; Leonard M. Davis, Rocklin, Past, Present, Future: An Illustrated History of Rocklin, Placer County, California, From 1864 To 1981 (Roseville: RFL, 1981), 13–15, and 134; Elisha Hawes to Charles A. Brigham, signed Mar 19, recorded Mar 20, 1864, PC. Recorder's Office, Book K, 299; [Auburn] Placer Herald, Mar 28, 1863. For a hist. of the Rocklin quarry, see unpub. ms. by Roy Ruhkala, "History of Rocklin, California," 1975. SUA.

The first regular passenger service was inaugurated on April 25, spanning the eighteen-mile stretch from Sacramento to Roseville. ⁹⁷ This service brought in the first money the railroad earned from passenger service.

Later, a Central Pacific Rail Road poster announced that beginning on April 29, 1864, its line—using a connection with the California Central Railroad Company—would run a train from Sacramento to Folsom and Lincoln on a daily basis. ⁹⁸ On June 6, 1864, Central Pacific Time Card No. 1 announced daily round-trip train service, except Sundays, from Sacramento through Junction, Rocklin, and Pino to Newcastle and back. ⁹⁹

On June 10, 1864, passenger service on the Central Pacific Rail Road was opened to Newcastle, thirty-one miles from the capital city, which remained the end of the line for about a year. 100



The names "Central Pacific Rail Road Company of California" and "Central Pacific Railroad Company of California" had been used almost interchangeably since 1861, but on October 8, 1864, the Central Pacific reincorporated under the more popular form using only one word: thereafter, the correct name was "Central Pacific Railroad of California." The name change was more legal and symbolic than significant in common usage.*

*Guy Dunscomb, A Century of Southern Pacific Steam Locomotives, 1862–1962 (Modesto: GLD, 1963), 375.



On June 6, 1864, a Dutch Flat Wagon Road poster announced that on June 15—nine days after the railroad had opened freight service to Newcastle—the new wagon route over the mountains would be open by way of Dutch Flat and Donner Pass for travel by loaded teams. ¹⁰¹ The announcement described it as the "Shortest, Best and Cheapest Route to Washoe, Humboldt and Reese River." ¹⁰² Unloaded wagons could travel the road free of charge until further notice. The poster pointed out

in particular that this road could be used as the first leg of the trip to Virginia City, Nevada.

The opening of the Dutch Flat Road in June 1864 was followed by an attack mounted by the railroad's enemies, charging that the Associates had never intended to build a transcontinental railroad and that they were planning to build the line

⁹⁷Sac Union, Apr 26, 1864.

⁹⁸Elwyn Hoffman, "The Old Dutch Flat Road," *SsM*, Feb 1905, 375. The CCRR had been experiencing financial problems, and on Mar 28, 1864, a sheriff's sale was announced selling for unpaid taxes that portion of the railroad lying between Folsom and the county line, including the bridge over the American River. *Sac Union*, Mar 28, 1864.

⁹⁹Copy in G. J. "Chris" Graves coll.; see Hoffman, "The Old Dutch Flat Road," 373.

¹⁰⁰[Auburn] *Placer Herald*, Jun 4, 1864, reports the railroad to Newcastle as being ready for operation "in a few days," while the Jul 23, 1864, ed. reports the railroad to Newcastle as being in operation. Galloway, *The First Transcontinental Railroad*, 156, says it reached Newcastle on Jan 31, 1865, 156; Kraus, *High Road to Promontory*, 308, has the railroad completed to Newcastle in Jan 1865.

¹⁰¹Hoffman, "The Old Dutch Flat Road," 374; also pub. in Kraus, High Road to Promontory, 99.

¹⁰²In north and central Nev. running between Austin and Battle Mountain.

only as far as Dutch Flat, where their wagon road began, and stop there. ¹⁰³ This specious argument was confused with the advocates' simultaneous opposition to the plans of the Central Pacific Associates to build a railroad that would stretch across the continent.

Problems with the Nevada Legislature

The Central Pacific Associates also encountered an unexpected attack against them when the Nevada State Constitutional Convention assembled in the summer of 1864. As in California, Nevada toll road operators and those with an interest in the stagecoach business were against having the Central Pacific make off with their profits. They said they were not opposed in principle to having a railroad coming into Nevada; they just did not like the idea of a Central Pacific monopoly in their state. The provision written into the projected state constitution—which called for an appropriation of \$3 million in bonds to the first railroad extending from navigable rivers on the Pacific to the California-Nevada state line—prompted the Central Pacific Associates to act: they did not want a competing railroad covering the same ground as theirs, and they realized it would be even more difficult to sell railroad bonds if investors thought that a competing railroad might be built.

On July 4, 1864, Stanford was invited to address the Nevada Constitutional Convention in Carson City. He accepted this invitation, and in his message delivered July 13 he urged the convention to rewrite its proposal to fund a railroad from the Pacific to the state line between California and Nevada and simply give the proposed subsidy to the Central Pacific, either by direct grant or a guarantee on interest on bonds. ¹⁰⁴ He stressed the financial difficulties of the Pacific railroad project and pointed out that it was almost impossible to sell railroad securities. Rather than aiding in the building of a railroad into Nevada, the proposed subsidy to another railroad would hinder railroad construction by pitting two parallel lines against each other. Members of the convention insisted again that they did not want two roads, they simply wanted a railroad built as quickly as possible.

It was owing to Stanford's influence that the proposed appropriation was dropped. During the following year's session of the Nevada legislature, attorney Charles E. De Long, from Storey County, Nevada, who had served on the Nevada State Constitutional Convention, conceded as much:

¹⁰³Hoffman, "The Old Dutch Flat Road," 373.

¹⁰⁴Official Report of the Debates and Proceedings in the Constitutional Convention of the State of Nevada, Assembled at Carson City, July 4th, 1864, to Form a Constitution and State Government [Andrew J. Marsh, Official Reporter] (SF: State of Nev., 1866), 290–299. Speech of Hon. Leland Stanford in the Constitutional Convention of the State of Nevada, on Wednesday, July 13, 1864 (SF: FVC, 1865). This 12-p. doc. is bound in PCR, Vol. 3, Pam. 9, and Vol. 4, Pam. 9. BL.; also in RRP, Vol. 4, Pam. 5. CSL.

I have no earthly doubt but that if Governor Stanford had not come over here, this Nevada constitution would have contained a clause providing for an appropriation of three millions of dollars by the Legislature to the first road that reached our State line. The fact of that clause being stricken out from our Constitution was the direct result of his speech; it immediately followed the conclusion of his remarks and replies. ¹⁰⁵

Not only was the unwanted appropriation conspicuous by its absence, but the law providing for the construction of a railroad from Virginia City to the Truckee River contained the following warning: "provided, further, that the route hereby granted to the foregoing persons and their assigns, shall not in any matter interfere with the route of the Central Pacific R. R. Company, as already preliminarily surveyed."

Nevada opponents of the Central Pacific resumed the battle when the first session of their legislature convened on December 12, 1864. In the interim, two railroads had been organized which, if built and linked together, would have stretched from Folsom to the state line. Lester Robinson wrote to the Nevada state committee on railroads giving his reasons for thinking that the proposed construction of the Central Pacific into and through Nevada was not feasible. He warned that costs would be far higher than estimated, \$250,000 to \$300,000 per mile according to his estimate, and he argued that the Central Pacific simply did not have the equipment and material—particularly rails—on hand to do the job. 107

Stanford immediately responded to Robinson's letter. He insisted that Robinson was wrong and went on to reassure the Nevada railroad interests that the Central Pacific could and would build to and across Nevada. 108

Resolutions were again introduced into both houses of the Nevada legislature instructing their U.S. senators and congressmen to press Congress for the passage of a law providing \$10 million in United States bonds to that railroad completing

¹⁰⁵ List of delegates to the convention and all officers of the convention, in Nev. Stats., 1st Sess., 72 (Dec 12, 1864—Mar 11, 1865). De Long's comments are in Nev. Sen. Comm. on Railroads, Evidence Concerning Projected Railways across the Sierra Nevada Mountains, from Pacific Tide Waters in California: and the Resources, Promises and Action of Companies organized to construct the same: together with Statements concerning present and prospective Railroad Enterprises in the State of Nevada procured by the Committee on Railroads of the First Nevada Legislature (Carson City: JCSP, 1865), 178. Bound as Vol. IV, PCR. BL.

 $^{^{106}}$ Nev. Stats., 1st Sess. (Dec 12, 1864—Mar 11, 1865), 180—183, Chap. 59, An Act authorizing the Construction of a Railroad from Virginia City to the Truckee River. App. Mar 2, 1865, over the governor's veto.

¹⁰⁷Letter of L[ester] L. Robinson, C[ivil] E[ngineer], to Charles B. Sumner and Henry Epstein, chairmen, Committees on Railroads, leg. of Feb 3, 1865. PCR, Pam. 5, in The Railroad System of California. Oakland and Vicinity (SF: JHCCP, 1871), I, 121–127; see "Lester L. Robinson," in Pacific Coast Annual Mining Review and Stock Ledger, containing Detailed Official Reports of the Principal Gold and Silver Mines of Nevada, California, Arizona, Utah, New Mexico, and Idaho; A History and Description of Mining and Stock Dealing on this Coast, with Biographical Sketches of 100 of the Principal Men Engaged Therein; and a Series of Finance Articles by Col. Henry S. Fitch (SF: FVC, 1878), 49–50.

¹⁰⁸LS to Charles B. Sumner and Henry Epstein, Feb 14, 1865. Pub. as CPRR, Reply to the Letter of L.L. Robinson ([n.c.]: [n.p.], Feb 14, 1865), 10-p. pam., bound in PCR, Vol. 2, Pam. 3. BL. Includes LS letter to Charles A. Sumner and Henry Epstein, chairmen of Rail Road Committees of Nev. leg; p. 10 has letter from CC on TDJ and Lester L. Robinson.

the first line between the Sacramento River and the Nevada border with California. ¹⁰⁹ Stanford complained to the Nevada Senate about these resolutions, but this time took no direct action to keep them from being adopted. ¹¹⁰

THE 1864 AND 1866 AMENDMENTS TO THE 1862 PACIFIC RAILROAD ACT

Several other financial snags developed. For one, according to the terms of the Pacific Railroad Act of 1862, the federal government held the railroad's first mortgage bonds. Few capitalists were willing to invest in second mortgage bonds on a project considered risky even for first mortgage holders. A new transcontinental railroad act passed in 1864 greatly liberalized the terms of the 1862 law. ¹¹¹ This act was based on greater knowledge and experience on the part of railroad men and congressmen as to the realities of railroad construction and finance. The track mileage that had to be laid per year was reduced from fifty to twenty-five; the number of alternate sections of land awarded to the railroad was doubled, from ten to twenty; and the time for the building of the first fifty miles was extended by one year. Most important of all, from then on, bonds issued to the public would be first mortgage bonds, with government bonds now subordinated to second position. ¹¹² This law did not mention what position bonds already issued as second-mortgage bonds would have.

The 1864 act probably saved the two transcontinental railroad companies from financial failure. To build the first forty miles of track required that the Central Pacific Associates pledge their own personal assets as security, but with the liberalized terms of the new law, the United States government was made "virtually an endorser of the company's bonds for the full amount of the subsidy." ¹¹³

Both the 1862 and 1864 laws authorized the Central Pacific to build eastward only to the California-Nevada state line. Huntington later boasted that in 1866 he went to Washington and used his influence to get the law amended again. 114 His labors and those of others resulted in the second major change to the original

¹⁰⁹ Nev. Stats., 1st Sess. (Dec 12, 1864—Mar 11, 1865), 453. Concurrent Resolution No. VIII. Passed Feb 28, 1865.

¹¹⁰LS to Nev. Sen. Comm., Jan 12, 1865, in Statement Made to the Senate Committee of the Nevada Legislature (Sac, Jan 14, 1865), 2–3. PCR, Vol. 2, Pam. 2. BL.

¹¹¹ 13 US Stats 356–365, 38th Cong., 1st Sess. (Dec 7, 1863–Jul 4, 1864), Chap. 216, "An Act to Amend an Act 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.'"App. Jul 1, 1862. This act was app. Jul 2, 1864. A compilation of the railroad acts of 1862, 1863, 1864, 1865, 1866, 1868, 1869, 1870, 1873, and 1874 is in The Pacific Railroad Acts of Congress, and Amendments, Carefully compiled from authenticated Copies for the Central Pacific Railroad Co. (NY: EPSP, 1876).

¹¹²13 US Stats 356–365, 38th Cong., 1st Sess. (Dec 7, 1863–Jul 4, 1864), Chap. 216, Sects. 5–10, pp. 358–360. ¹¹³HHB, History of California, VII, 565.

¹¹⁴ lbid., 551-552, quotes CPH Ms. 79 on this, without identifying which of many CPH Mss. he was quoting.

Pacific Railroad act. A law adopted on July 3, 1866, authorized the Union Pacific to build westward and the Central Pacific eastward until they should meet and connect with each other. 115

Central Pacific bonds were still not attractive to investors and did not sell at anywhere near par; the Associates were fortunate to get 75 percent of face value. Hopkins was sure that state aid bonds would not sell at all in California, and he hoped Huntington would make out better in the European market. The Associates could not purchase rails for the first fifty miles of road on credit until they put up their personal securities and guaranteed that—as private individuals—they would pay the interest on these securities for a ten-year period. Nor did increasing the authorized stock issue to \$20 million in 1864 and to \$100 million in 1868 attract capital. If they had not risked everything they owned in accepting these terms, there would have been no railroad built, at least not then.

Construction continued without interruption throughout 1865 and 1866. At the 1887 United States Pacific Railway Commission hearings, Stanford presented a summary of The Western Pacific and Central Pacific bond revenues showing that money was coming in from federal government bonds at 79 percent of face value, Central Pacific bonds were selling for as low as 56 percent, and county bonds at between 50 and 75 percent. 119

CHINESE LABORERS ON THE CENTRAL PACIFIC

In January 1865 the railroad advertised for 5,000 laborers for "constant and permanent work." A shortage of labor caused in part by the Comstock Lode drain on manpower induced a reluctant Charles Crocker to employ Chinese laborers, contrary to the wishes of his construction boss, Jim Strobridge.

Although Strobridge resisted the plans of Charles Crocker to use Chinese workers, he was not necessarily prejudiced in principle against the Chinese, any more than most Caucasians were. It is likely that he thought the Chinese, who weighed no more than 110 pounds on average, were simply incapable of doing the heavy labor required in building a railroad. ¹²¹ (They must have been terrified to encounter the 5'10½"-tall Crocker, who weighed by his own testimony as much as 265 pounds

¹¹⁵ 14 US Stats 79–80, 39th Cong., 1st Sess. (Dec 4, 1865–Jul 28, 1866), Chap. 159, An Act to amend An Act entitled "An Act to amend an Act 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, 'App. Jul 1, 1862." App. Jul 2, 1864. App. Jul 3, 1866.

 $^{^{116}\}text{Darius}$ O. Mills test., USPRC, VI, $_{3493-3494}.$

¹¹⁷MH to CPH, May 31, 1865. ¹¹⁹LS test., *USPRC*, V, 2731.

¹¹⁸ Daggett, Chapters on the History of the Southern Pacific, 24.

¹²⁰Sac Union, Jan 7, 1865; Shasta Courier, Jan 2, 1865.

¹²¹For a study of the Chinese on the CPRR, see Tzu-Kuei Yen, "Chinese Workers and the First Transcontinental Railroad of the United States of America," Ph.D. diss. (St. John's Univ., NY, 1976).



48. Central Pacific Superintendent of Construction James H. Strobridge and family at Alta, his base camp, sixty-nine miles from Sacramento. *Union Pacific Collection*.

during the construction of the railroad. 122) At Crocker's insistence, the reluctant construction boss agreed to try 50 of the so-called "Celestials" for a limited time. He soon employed another 50. They worked so well that between March 1865 and early 1866 the railroad hired between 2,000 and 3,000 Chinese laborers. 123

Hopkins described the difficulty they had in getting laborers for the railroad. "Idaho fever" and prospecting in general drew men off in such large numbers that at the end of May 1865, two-thirds of the total work force of about 1,600 men were Chinese. "Without them," he lamented, "it would be impossible to get along with the work." But the arrival of more laborers from China encouraged even Charles Crocker to think that the labor crisis would soon be over. 125

Judge Crocker wrote his friend Cornelius Cole, who was retiring from Con-

¹²²CC Ms., 63. BL.

 $^{^{123}}$ CC test., USPRC, VII, 3660; see George Kraus, "Chinese Laborers and the Construction of the Central Pacific," UHQ 1969 37 (1): 41–57. 124 MH to CPH, May 31, 1865. 125 lbid.



JAMES HARVEY STROBRIDGE,

Charles Crocker's thirty-nine-year-old superintendent of construction (born April 23, 1827), had already made a name for himself by 1866 as a tough, no-nonsense railroad boss. He left his home in Albany, Vermont, at the age of sixteen to lay track on the Boston and Fitchburg Railroad in Massachusetts. Drawn to the West by gold fever, Strobridge sailed from New York on January 30, 1849, on the *Orpheus*. He sailed around the Horn and 160 days later, on July 8, 1849, arrived in San Francisco. C

In 1850 Strobridge worked with Edward Merritt Pitcher in "teaming to the mines." Also in 1850, the pair staked mining claims in Placerville and Coon Hollow, and in the following year located on the Rancho del Paso on Dry Creek, near today's Rio Linda, where for several years they raised grain and ran a hotel. d (Pitcher, Strobridge's partner in these enterprises, was the son of Gov. Nathaniel Pitcher of New York. d)

In 1863 Strobridge worked at building the San Francisco and San José Railroad, and a year later took a job with the Central Pacific. He was soon placed in charge of all railroad construction, except bridges, buildings, and snowsheds, which were delegated to Arthur Brown. Brown also built the Stanford and Crocker houses on Nob Hill and the original Del Monte Lodge.

In cutting his way through Bloomer Cut near Auburn, on April 15, 1864, Strobridge lost his right eye in a blasting accident. The [Auburn] *Placer Herald*, April 16, 1864, reports the loss of the left eye, but photographs of Strobridge show it to have been the right.^h

Strobridge and his wife Maria (Keating) Strobridge had no children, but they adopted six orphans: Julia and her half-brother Sam Conover (their father, who worked for Strobridge, had died), Maria's orphaned nephews and nieces Edward, Nellie, and Emma Keating, and Carrie Ferguson, niece of Strobridge's third wife. i

^aKraus, *High Road to Promontory*, has a bio. sketch of JHS, 298–299.

^bNY Herald, Feb 1, 1849.

^cSFAlta California, Jul 12, 1849; see John Taylor, "A Notable Voyage of the Days of '49" [A letter given to the SCP on Jun 15, 1901, describing the voyage of the *Orpheus* from NY to SF, from Jan 30 to Jul 8, 1849]. JHS is on the passenger list. RG 36, U.S. Bureau of Customs, Port of SF, "Record of Arrival of Vessels Under and Over 20 Tons, Mar 26, 1849—Dec 30, 1851." Box 1, unnumbered, [13–14], in NARA, FARC, San Bruno, Calif.

d"James Harvey Strobridge," in Guinn, History of the State of California, 739-740.

°Mrs. Dixon A. "Pearl" to Calif. Sect., CSL, Mar 23, 1872; Pitcher Bio. File, CSL.

"Strobridge," in Guinn, History of the State of California, 740.

gKraus, High Road to Promontory, 300.

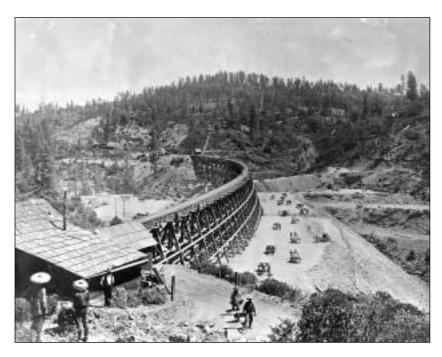
hEdson Turner Strobridge to the writer, Jul 19, 2001.

i"The Strobridge Family," *AT* 1970 6 (4): 9—10.



gress and returning home to California, that in April 1865 the Central Pacific Railroad had a work force of about 2,000 men, a large number of whom were Chinese; he described them as *nearly* equal to white men in the amount of labor they could perform and *far more* reliable. They were not heavy drinkers, did not join labor unions, and did not strike for higher pay. 126

¹²⁶EBC to Cornelius Cole, Apr 12, 1865; Cole later said that he did everything he could to help the CPA with their railroad bills. CPH was an "old personal and political friend, and because, moreover, my constituency were all in favor of the measures." Cornelius Cole to Harrison Gray Otis, Apr 14, 1890, in Cole papers; also, a handwritten essay on his achievements in Cong., in Cole papers.



49. Chinese laborers with hand tools and carts working on the Secrettown trestle in the Sierra Nevada in 1866. *Union Pacific Collection*.



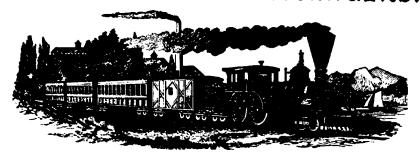
50. Railroad construction in Cisco, 1866. Union Pacific Collection.

PACIFIC RAILROAD

OPEN TO CISCO.

98 MILES FROM SACRAMENTO.

FOR FREIGHT AND PASSENCERS.



Trains leave Sacramento DAILY, (Sundays excepted) connecting at Cisco with Stages of the PIONEER STAGE CO. for Virginia City, Austin, and all parts of Nevada. Also, connect with the OVERLAND MAIL STAGES for Great Salt Lake City and all parts of Utah and Montana Territories. The Stages of the PIONEER STAGE CO. connect at Hunter's, on Truckee River, with

HILL BEACHEY'S LINE

To Ruby City and Silver City, Owyhee. Also, Boise City, Idaho City, Placerville, Centreville, and all parts of Idaho Territory.

THIS EXTENSION OF THE

CENTRAL PACIFIC RAILROAD,

In connection with the New Wagon Roads now open, via Humboldt River, will enable Passengers between Idaho Territory, Owyhee and California, to make the trip IN FOUR DAYS, being much less time than by any other route, and one-half the time formerly consumed via the Columbia River. Also, at much less risk and expense.

LELAND STANFORD, Prest. C. P. R. R. Co.

CHARLES CROCKER, Supt. C. P. R. R. Co.

SACRAMENTO, SEPTEMBER 1, 1867.

51. Early Central Pacific poster, 1867. Union Pacific Collection.

There was one exception to this last point. In June 1867, the Chinese railroad laborers did go on an eight-day strike. Charles Crocker was one of the speakers at the July Fourth Independence Day celebration in Sacramento when the subject of Chinese strikes came up. Crocker said he had just returned from the summit of the Sierra Nevada where he had made a "war speech to the Chinamen." When the Chinese told him, "Eight hours a day good for white man; all the same good for Chinaman," he rejected their demands for shorter workdays, and they, in no position to negotiate, went back to work on their old terms. ¹²⁷

Newton Booth was in the audience and asked, playfully, "Charlie, in your Summit speech, did you speak in the Chinese language?" Crocker responded in the same frolicsome style: "Says I—John, Chinaman no make laws for me; I make laws for Chinaman. You sell for \$35 a month, me buy; you sell for \$40 a month and eight hours a day, me no buy."

Strobridge later said that once construction was in full swing, the Central Pacific employed as many as 11,000 Chinese—known as "Crocker's pets" or "Chollies' Boys"—with an average, he estimated from memory—of about 8,000 of them on the payroll at a monthly wage of approximately \$33.

A San Francisco newspaper reporter estimated that the number eventually grew to more than 10,000. 129 Other estimates of the number of Chinese workers on the payroll at one time ran as high as 15,000. 130 In 1868, as construction of the Central Pacific neared completion, the use of Chinese labor caused one wag to quip, "The Pacific Railroad—the only piece of crockery ware made out of China." 131

Though such an accounting was not mandated by law, Stanford kept Gov. Frederick Low apprised of the progress of railroad construction, particularly what was being done with the first federal assistance the railroad had received. 132

In his various reports, Leland Stanford made no secret of his feelings about the Chinese and his estimation of them as a work force. On October 10, 1865, he wrote to President Andrew Johnson and Secretary of the Interior James Harlan:

¹²⁷Sac Union, Jul 6, 1867. Yen, "Chinese Workers and the First Transcontinental Railroad of the United States of America," 131, cites this issue of the *Union* as the authority for the statement that CC withheld pay and food from the Chinese workers until they were forced into submission. There is not even an allusion to this cruelty in the Sac newspaper.

¹²⁸JHS test., *USPRC*, VI, 3140. In his test., entirely from memory, JHS estimated the number of Chinese and white workers and their monthly wages on an annual basis from 1864 to 1869; CSRML, Ms. 1.92. CPRR, Chinese Payroll, 1865. This payroll sheet, dated Apr 1865, provides info. on wages for Chinese construction crews.

¹²⁹SF Chronicle, Sep 10, 1868. ¹³⁰Evans, Huntington, I, 156.

¹³¹Sep 3, 1868, by Caxton, the pen name of *SF Chronicle* and freelance reporter William Henry Rhodes, in *SF Times*, Oct 2, 1868; inter. with SupC Judge Richard W. "Dusty" Rhodes, direct descendant of William Henry Rhodes, Oct 14, 1998.

¹³²LS, Report from the Hon. Leland Stanford, President of the Central Pacific Railroad Company, to His Excellency, Frederick F. Low, Governor of California (Sac: OMC, 1865), 4, pub. as Pam. 8, a 5-p. doc. bound in Business Regulation Pam., Crown Law Library, Stanford University—CN H₇.

As a class they are quiet, peaceable, patient, industrious and economical—ready and apt to learn all the different kinds of work required in railroad building, they soon become as efficient as white laborers. More prudent and economical, they are contented with less wages. We find them organized into societies for mutual aid and assistance. These societies, that count their numbers by thousands, are conducted by shrewd, intelligent business men, who promptly advise their subordinates where employment can be found on the most favorable terms.

No system similar to slavery, serfdom or peonage prevails among these laborers. Their wages, which are always paid in coin, at the end of each month, are divided among them by their agents, who attend to their business, in proportion to the labor done by each person. These agents are generally American or Chinese merchants, who furnish them their supplies of food, the value of which they deduct from their monthly pay. We have assurances from leading Chinese merchants, that under the just and liberal policy pursued by the Company, it will be able to procure during the next year, not less than 15,000 laborers. With this large force, the Company will be able to push on the work so as not only to complete it far within the time required by Acts of Congress, but so as to meet the public impatience. ¹³³

Collis Huntington became a major advocate of importing Chinese labor to work on the Central Pacific Railroad. He wrote Judge Edwin Crocker in late 1867 that his brother Charles could get more done toward railroad construction than any other man in America, and then he went on to say: "I like the idea of your getting over more Chinamen; it would be all the better for us and the State if there should be a half million come over in 1868."

Years later, when asked by a *San Francisco Examiner* reporter for his opinion on the Chinese, he answered, "I favor the Chinese on the ground that any man born of a woman is deserving of kind consideration until he proves himself a rogue." This same edition of the paper criticized Huntington for becoming "a New Yorker, and a bitterly anti-California, pro-Chinese one at that."

Occasionally cultural differences led to problems. In one amusing episode that occurred in the summer of 1868, some Paiutes who were working with a Chinese construction crew between Reno and Wadsworth caused operations to halt for a day. The Indians told the Chinese that the Nevada desert was inhabited by snakes so large they could swallow a man whole in one gulp. That night, reportedly between 400 and 500 Chinese workers beat a hasty retreat in the direction of Sacramento. Infuriated, Charles Crocker dispatched several men on horseback to round up the frightened Chinese and persuade them that they were the brunt of Paiute humor! 136

¹³³LS, Central Pacific Railroad. Statement Made to the President of the United States, and Secretary of the Interior, of the progress of the work, Oct 10th, 1865 (Sac: HSCC, 1865), 7–8; Hittell, History of California, IV, 98–102; LS sent other messages directly to Pres. Johnson, e.g., one signed by LS, CC, and Sam S. Montague, Oct 13, 1866, in LS Papers.

¹³⁴CPH to EBC, Oct 3, 1867.
¹³⁵SF Examiner, Apr 10, 1890.

¹³⁶Kraus, High Road to Promontory, 201; Dee Brown, Hear that Lonesome Whistle Blow: Railroads in the West (NY: HRW, 1977), 102–103.

The gullibility of the Chinese drew the following comment Huntington made in a letter to Charles Crocker: "I am surprised at what you write about Chinamen, but not that they should be afraid of snakes fifty feet long and Indians twenty-five feet high." 137

Col. George Edward Gray, former chief engineer of the New York Central, proved to be one of the Central Pacific's key men. He acted as a consultant during the entire course of construction and made several inspection tours with Leland Stanford. At the end of 1865, on one of his inspections of construction progress, Gray declared that the Central Pacific Railroad compared favorably in every respect with



Collis Huntington and the Brothers Charles and Philip Stanford

During the early years of construction of the Central Pacific Railroad, Charles and Philip Stanford often annoyed Huntington by dropping into his New York office and demanding a return of the money they had invested in the transcontinental project. Huntington, who found relief from routine problems by writing to "Uncle Mark," penned the following letter to his older colleague in May 1866—a couple of months before the rails had been extended as far as Dutch Flat. This letter reflects the low estimation he had of Leland's older brother Phil:

"I think you are quite right in keeping all the securities together until the road is completed. It is very uncertain about what a fellow like Phil Stanford would do with his—build a windmill or do some other foolish thing that would not only put the securities out of the company's reach, but would likely bring the company into bad odor before public [sic] with his foolish pranks." b

Eleven months later to the day—the Central Pacific was now about halfway between Cisco and the Summit—Huntington wrote another letter on the same subject to Hopkins. This one he marked confidential:

"I saw Charles Stanford again a few days since and he said he was interested in the Central Pacific, that it was his money that had carried it through. He said the Boys [his brothers] owed him large amounts and whenever he wrote for money, they answered that they were putting it in the Pacific Railroad, and he was not going to be cheated out of it. If he could not have what belonged to him, he would, like Samson, pull down the building if he destroyed himself in doing so . . . I said to him quietly that if the Boys had used his money, they ought to pay him, that I was inclined to think they would. I thought it just possible that Phil Stanford had gotten some foolish notions and written to Charles."

Charles said he had written to Leland six times about the matter and had received no reply. After Charles made several appeals to Huntington, the Central Pacific vice president made arrangements with Hopkins to pay Charles Stanford in installments the full amount he had invested.^d

^aEvans, Huntington, I, 361.

^bCPH to MH, May 11, 1866.

°CPH to MH, Apr 11, 1867.

dEvans, Huntington, I, 362.



¹³⁷CPH to CC, Jul 1, 1868.

any other railroad in the United States. ¹³⁸ He reported that the roadbed and mechanical structures were well constructed, that ample drainage had been provided where needed, that cross ties were of redwood, and that the entire track had been laid with rails that weighed between fifty-eight and sixty-six pounds per yard. ¹³⁹

The following illustrates the prodigious use of wood for cross ties:

[The] tributary to Truckee and the stations along the railroad are about 230,000 acres of timber land, that for thirteen years have witnessed the toil of the lumberman and furnished material for the tireless saw. When the railroad began to approach the summit, the saw mills went in advance of it, and were kept busy in furnishing timbers and wood for its construction. In 1868 there were fourteen mills at work, producing 66,000,000 feet of lumber. 140

Meanwhile, Stanford established a branch office of the Central Pacific at 415 California Street in San Francisco, about three blocks from his brothers' oil company office, and made it his base for political, financial, and business operations. ¹⁴¹ Later, he moved the office to 639 Market Street. ¹⁴²

Apparently Stanford alone or Stanford and the Judge together—it is unclear from the correspondence—was the first to suggest to Charley Crocker that he switch from hand drills to steam-drilling machines for penetrating rock. In a letter dated April 1, 1867, Stanford complained to Hopkins that Strobridge had rejected the idea, with the lame excuse that the present engine could not be stopped for the two hours needed to make necessary connections for steam.

Stanford was determined to get what he considered to be the best available equipment into the field, and was not to be put off easily. In the same letter, he told Hopkins, "I have bought an engine and will have sent up what is necessary to connect it with the *present* boiler."

As expected, he met with resistance from Strobridge, who was, after all, the construction superintendent. Because he was Charley Crocker's man, the burly and domineering Strobridge usually got his way when there was any disagreement with others. A little over two weeks later, Stanford conceded that the new drilling machines would most likely prove a failure, not because they didn't work, but because Strobridge didn't use them. "There does not appear a will that they should succeed, and usually where there is no will there is no way," he wrote. 143

Also on April 1, 1867, the same day that Stanford wrote to Mark Hopkins, Judge Crocker wrote a similar letter to Hopkins. He complained, as Stanford had, that

¹³⁸Kraus, *High Road to Promontory*, 121, does not disclose his source for this evaluation.

¹³⁹Weight range is based on a study by Lynn D. Farrar of every CPH purchase order for rails from 1865 to the mid-1870s. The results of his study are now in the CSRML, Sac. Lynn Farrar to the author, May 4, 2002.

¹⁴⁰Thompson & West, *History of Nevada County, California with Illustrations* (Oakland: T&W, 1880), repr. by Henry Wells (Berkeley: HNB, 1970), 168.

¹⁴¹SFCD, 1869, 145.

¹⁴² Ibid., 1873, 575.

¹⁴³LS to MH, Apr 16, 1867.

Strobridge's refusal to allow a tap-off from the existing boiler to power the steam drill and his own brother's failure to make his superintendent use it seemed to have made it necessary to buy a separate boiler and engine and have them sent up to the construction site. 144

Again like Stanford, the Judge was annoyed with the outright refusal of Strobridge to avail himself of what he and Stanford considered the latest advancements in technology, and he wrote a letter to brother Charley protesting the situation. Tellingly, Edwin confided to Hopkins: "The truth is that things have got to such a pass that there can't be a thing done unless it suits Stro. Whenever a man gets Charles' confidence, he swears by him & all he says or does is right." ¹⁴⁵

Use of Nitroglycerin on Central Pacific Construction

The Summit Tunnel (No. 6)—parallel to and four hundred feet north of Donner Pass—was the most difficult construction project facing the builders of the Central Pacific. In some places the rock was so hard that it was almost impossible to drill far enough into it to use blasting powder effectively.

The granite of Tunnels 5-9 was hard, but not as hard as the "hard trap" rock of Tunnels 3 and 4, known during construction as "ironstone." 146

To speed construction, Tunnel 6 was cut from both ends simultaneously. Then work started on a central shaft on August 27, 1866, which permitted drilling on four faces simultaneously, but even then skilled workers could cut through the first thirty feet of stone at the rate of only one foot per day on each of the four faces. 147

After struggling day and night—literally twenty-four hours a day—for several months, using black powder, the progress of drilling through the rock averaged at most only fourteen inches per day per face. 148

Finally, Charles Crocker showed some interest in using nitroglycerin, the highly unstable miracle explosive of the day, to blast through the Summit Tunnel. It has been speculated that Crocker's interest came from his having read about the power of nitroglycerin from an accident that took place in the courtyard behind the head-quarters building of Wells Fargo & Company at the corner of Montgomery and California streets in San Francisco. On April 16, 1866, a case of nitroglycerin that

¹⁴⁴EBC to MH, Apr 1, 1867.

 $^{^{146}}$ John Gilliss, "Tunnels of the Pacific Railroad," ASCET 1872 1 (13): 167, App. A. Lynn Farrar to the writer, May 4, 2002.

¹⁴⁷See Wendell Huffman, "Iron Horse along the Truckee: The Central Pacific Reaches Nevada," NHSQ 1995 38 (1): 19–36, passim, on the building of this portion of the CPRR.

¹⁴⁸Mead Kibbey (Peter Palmquist, ed.), *The Railroad Photographs of Alfred A. Hart, Artist* (Sac: CSLF, 1996), 28. For an excellent treatment of drilling and blasting tunnels, see Henry Drinker, *A Treatise on Explosive Compounds, Machine Rock Drills and Blasting* (NY: JWS, 1883). The daily distances are rounded off for headings, which are much more difficult to drill than bottoms. For precise breakdown, see Gillis, "Tunnels of the Pacific Railroad," 1677, App. A.



Stanford was always a man of ideas, and Judge Crocker had been trained as an engineer, but in their differences over the use of steam drills they were wrong and Strobridge was right. It was not for another five or six years that steam machine drilling was practical. The process was described as being in its infancy and not yet practical—as late as 1873 the drills were in constant need of repairs and were far more expensive overall than hand labor. Eliot Lord, a former clerk in the United States Geological Survey, explained the attendant problems in this way:

"The drills in use were of complicated construction and constantly requiring repairs. The Sommeiller drill [named for Italian engineer Germain Sommeiller], at the Mount Cenis Tunnel [Alpine tunnel between Italy and France], could rarely bore to the depth of a foot without refitting, and to provide sixteen serviceable machines two hundred were kept in the repair shops. The cost of their use was computed to be two and a half times the cost of hand labor, which offset the advantage of an increased rate of progress. In its employment of the Burleigh drill [named for American engineer Charles Burleigh], at the Hoosac Tunnel [in northwestern Massachusetts], better results were attained, but the average endurance of a machine without repair was only five days, and even as late as 1869 the number of drills in the machine shops was double the number of those in use at the west heading of the tunnel."a

It was not until 1874 that improvements in drill technology caused machine drilling to be demonstrably superior to hand drilling. $^{\rm b}$

^aEliot Lord, Comstock Miners and Mining (Berkeley: HNB, 1959, c1883), 335. Lord cites Report of U.S. Commissioner of Mines and Mining, 1869, 514, for his authority of two hundred drills in repair shops, and Proceedings of Institution of Civil Engineers of Great Britain, XXII, 258 and XXXVI, 1, for his statement on the relative cost of drills and hand labor.

^bIbid., 336.



had arrived from Hamburg by steamer, and which was now leaking, was being opened for examination when it detonated. The next day's *Daily Dramatic Chronicle* reported nine people killed, seventeen injured, and six missing. 149

Regardless of how they heard about it, Crocker and Strobridge began using nitroglycerin on the four headings of Tunnel 6 on February 9, 1867. They also used it to a limited extent on Tunnel 8. ¹⁵⁰ The other thirteen tunnels were all cut with blasting powder, despite the fact that nitro proved to be eight times as powerful as the same weight in blasting powder and was cheaper than powder when measured in terms of producing a given effect. ¹⁵¹

This was probably the first regular use of nitroglycerin in the United States as an agent of construction. 152 The Central Pacific engaged English chemist James Howden, said to have been the best chemist in San Francisco at the time, to manufacture it. 153 Howden manufactured it "on the spot," in a nitroglycerin factory established near Donner Lake. The "factory" consisted simply of a "shed roof supported by four posts, which was erected over an old kettle which was used as a nitrator." Howden had the glycerin and the nitric and sulfuric acids shipped by train to Cisco and then hauled fifteen miles by wagon to

¹⁴⁹SF Daily Dramatic Chronicle, Apr 17, 1866.

 $^{^{150}}$ Gilliss, "Tunnels of the Pacific Railroad," 162. See Kraus, $High\ Road\ to\ Promontory$, 136 and 151–152, and Howard, The Great Iron Trail, 355, for more commentary on these events.

¹⁵¹Gilliss, "Tunnels of the Pacific Railroad," 162–163.

¹⁵²Kibbey, The Railroad Photographs of Alfred A. Hart, Artist, 28 n28.

¹⁵³ Arthur Van Gelder and Hugo Schlatter, History of the Explosives Industry in America (NY: CUP, 1927), 408.

the vicinity of the central airshaft that was being sunk. 154

In the spring of 1867 Judge Crocker was exuberant in his praise of the benefits of using nitroglycerin for blasting tunnels through stone. He wrote Huntington on May 3 from Sacramento that his brother Charles reported breaking up sixty feet of stone in one week, and advancing about three feet per day on one of the tunnels. The Judge added, "Hurrah! For nitroglycerine."

Writing again a few days later, Edwin reported that on the first of May the Summit Tunnel had only 681 feet to go. "Nitroglycerine tells."¹⁵⁶

One of the things that bothered the Judge about using nitro was the legal liability of the Associates' possible patent infringement. He discussed this at great length with Huntington. He was sure that for five hundred dollars they could get the right to use it in the construction of the Central Pacific, The Western Pacific, and all branches and extensions. ¹⁵⁷ He was in favor of contin-



THE EXPLOSIVE ARRIVAL OF NITROGLYCERIN IN SAN FRANCISCO

George M. Mowbray, described as an "operative chemist" on the title page of his book on the use of nitro on the 4.82-mile long Hoosac Tunnel under the Berkshire Mountains of northwestern Massachusetts on the Boston & Maine Railroad, embellished this news report with the following first-hand account given him: "A man passing by Wells Fargo & Co.'s office, heard one of the employees address a gentleman riding on horseback, saying, 'Doctor, we have got a case of glonoina oil, and it seems to be smoking, I wish you would step in and advise us what had better be done with it:' the doctor (Hill) dismounted, requesting a passer by [sic] to take charge of his horse and walk it up and down the block, the animal being too high spirited to stand without an attendant; scarcely had the person in charge gone a block from the office when the explosion occurred. It can only be inferred that in breaking open the case to discover the cause of the leakage of red fumes, the Nitro-Glycerin was exploded."b

^aAuthor's note: "glon' o-in = Glyceryl trinitrate."

^bGeorge Mowbray, *Tri-Nitro Glycerin, as Applied in the Hoosac Tunnel, etc., etc., etc.* (rev. ed., NY: DVN, North Adams, Mass.: JTRS, 1874), 13. The hard-to-find orig. ed., pub. by JTRS in 1872, has different pagination, with the above account on 4–5. Neither the *SFCD* of 1861 nor that of 1863 (none was pub. in 1862) lists a Dr. Hill in SF.



uing the manufacture of nitro, for even though they would most likely be held liable for damages, owing to the low expense of manufacturing it the patent owner would probably recover only a nominal sum. Still, he had to remind himself and his partner that Charles would have nothing to do with it beyond using it for railroad tunnel construction. He added: "We don't want to trade in patent rights, but I think it will be worth a good deal for Cal. Nevada & Idaho." And, he pointed out, there was an immense need for nitro in those states not only for tunnel work but in mining.

¹⁵⁴Ibid., 1097; see Joel O. Wilder Memoirs, inter. with Erle Heath, SP historian, in SPC files, cited by Kraus, High Road to Promontory, 136. Sixteen-year-old San Franciscan Wilder began his railroad career on May 30, 1866, as a CPRR survey team "back flagman." He retired on Aug 1, 1920, after fifty-four years of continuous service. Kraus, High Road to Promontory, 128. See Sac Bee, May 13, 1930.

¹⁵⁶EBC to CPH, May 8, 1867. It seems inconsistent for the Judge to be praising nitro. so highly at the same time he and LS were complaining about not using power drills.

¹⁵⁷EBC to CPH, Jul 6, 1867.



NITROGLYCERIN AND DYNAMITE

Nitroglycerin (once known as Nobel's Blasting Oil) was discovered in 1846 by Ascanio Sobrero, and was first used as a homeopathic medicine, particularly for nervous headaches. Nothing significant was done with Sobrero's discovery until October 14, 1863, when Alfred Nobel was granted a Swedish patent on nitroglycerin in its application to blasting. This was followed immediately by patents in France, England, and Belgium.^a

The challenge to make nitroglycerin stable was met by Alfred Nobel in his new product which he called dynamite, described in his American patent of October 24, 1865, as "an improved substitute for gunpowder." Whatever it was, dynamite was *not* a substitute for gunpowder, and the patent name of Nobel's invention struck fear into the hearts of manufacturers of gunpowder everywhere.

Dynamite was first manufactured in 1868 under license by the Giant Powder Company in San Francisco, California. Nobel was able to patent dynamite only after incorporating nitroglycerin in an inert absorbent substance making it comparatively safe to use. Dynamite was never used in the construction of the Central Pacific Rail Road.

^aNicholas Halasz, *Nobel* (NY: OP, 1959), 51; see Edward North, "Blasting with Nitro-Glycerine," *ASCET*. 1872 I (2): 14, a paper read before the ASCE, Mar 4, 1868; Stephen Chester, "Nitro-Glycerin: Its Manufacture and Use," *ASCET* 1872 I (11): 117, a paper read before the ASCE, Jun 2, 1869.

bUSDC, Annual Report of the Commissioner of Patents for the Year 1865 (3 vols., Wash.: GPO, 1865), II, 829, and text of Patent No. 50,617. See George Brown, The Big Bang: A History of Explosives (Stroud, Gloucestershire: SPub, 1998), 109.

Brown, The Big Bang, 109.

Brown, The Big Bang, 109.



He confided to Huntington that he thought Charles wrong in not wanting to use nitro other than for blasting tunnels.

All the elation and speculation about using nitroglycerin came to an end when Charles Crocker discontinued its use upon the completion of the Summit Tunnel in November 1867. When finished, the 1,659-foot-long tunnel, cut through almost solid granite, extended 124 feet below the surface. 159

One might speculate that perhaps Crocker was leery about the possibility of accidents and decided not to press his luck, but there is no evidence of any kind that he halted the use of nitroglycerin for safety concerns. Civil Engineer John R. Gilliss, field office engineer of construction between Cisco and Truckee, could remember only two nitroglycerin accidents on Central Pacific construction sites, and these, he said, "would have happened with powder." ¹⁶⁰

¹⁵⁸Kraus wrote that because of an accidental explosion of nitroglycerin, its use was abandoned, and that CC ordered his men to "bury that stuff." He fails to document his erroneous statement. *High Road to Promontory*, 136.

¹⁵⁹Gilliss, "Tunnels of the Pacific Railroad," 161. From a paper read before the ASCE on Jan 5, 1870.

¹⁶⁰Ibid., 163. Genuine loss of life from accidents was tragic enough without the addition of untruths propagated by the Cape Horn myths and others just as erroneous. Alexander Saxton, e.g., in "The Army of Canton in the (continued)

In examining Crocker's reason for abandoning the use of nitro, there is also the possibility that with the completion of the Summit Tunnel there was simply no longer a need for the more powerful explosive.

Nitro was probably given up for several reasons: the expense, the legal liability, the fact that it was no longer needed, and the realization that it probably would have saved little time if its use had been continued.

Pre-Promontory Corporate Expansion of the Central Pacific Railroad 161

Even before completion of the transcontinental railroad, the Central Pacific partners had begun to extend their railroad holdings and their influence; the later linking up with the Union Pacific Railroad was far from the beginning of the railroad careers of Stanford and his Associates. It was little more than an early step in the direction of the near-monopoly of railroad transportation they would later develop in California and much of the Southwest.

It must be pointed out, however, that the creation of a railroad monopoly did not necessarily imply any personal or collective unethical behavior; monopoly as such was not condemned at the time unless it was detrimental to the public as a whole.

While Central Pacific construction crews were still pushing their rails and bridges to, through, and beyond Summit Tunnel in anticipation of racing across Nevada and western Utah—two years before the transcontinental railroad mainline was complete—the Central Pacific Associates were expanding their operations in a number of other ways.

For one thing, Leland Stanford was kept busy leasing and purchasing smaller railroads that would expand the Central Pacific system long before main line construction had conquered the summit of the Sierra Nevada. Thus, in addition to building the main line of the Central Pacific Railroad of California, the Associates' construction companies built a number of railroads that became little more to them than branch lines. Moreover, the Associates took control of a number of roads they did not purchase, and in other cases consolidated into their system existing railroads. Because so many of these roads paid their construction bills in stock, the Associates naturally came into ownership or control of them. ¹⁶²

⁽continued) High Sierra," PHR 1966 35 (2): 146, wrote that JHS lost his eye due to a premature explosion of nitroglycerin. What Saxton did not bother to learn was that JHS lost his eye at Bloomer Cut on Apr 15, 1864, whereas the first use of nitro. on the CPRR was on Feb 9, 1867.

¹⁶¹The Oct 8, 1864, reincorporation changed the name to use only one word.

¹⁶²In this way they became the chief stockholders in the SJVR and the C & O. CPH test., *USPRC*, I, 13, 17–21; CC test., VII, 3674. For an extensive list of consolidations, see LS test., *USPRC*, V, 2497–2498, and 2783; also Daggett, *Chapters on the History of the Southern Pacific*, 125ff.

The Central Pacific Buys a Controlling Interest in the Sacramento Valley Rail Road—August 1865

For some time the Central Pacific Railroad must have appeared a thorn in the flesh, a presumptuous and unnecessary interloper, to managers of the older and more experienced Sacramento Valley Rail Road. But with the Sacramento flood of January 1862, and other factors, the "intruder's" fortunes swung around. Sacramentans had never fully supported the Sacramento Valley Rail Road—calling it a San Francisco concern—and, when floodwaters ripped up much of its railway, their support turned squarely toward the Central Pacific, which to them was a genuine Sacramento railroad. Finally, with the 1862 transcontinental railroad law that favored the Central Pacific over all other California railroads, it appeared that nature, public sentiment, and state as well as national legislative acts had conspired to favor the Associates.

One railroad historian argued that the Central Pacific Associates refused to buy the Sacramento Valley Rail Road for the reason that "it was cheaper to build at the expense of the federal government from Sacramento to Auburn than to buy a railroad already in active operation for most of the distance between these points." ¹⁶³

A later writer has it that the Sacramento Valley Rail Road owners offered to sell their railroad to the Central Pacific, but that "Stanford rejected them out of hand." One reason he suggested to explain Stanford's action was that the Central Pacific could take advantage of government largess under the 1862 act by building a new railroad, but there was no financial advantage to be gained from buying an existing railroad. It is not there must have been a change in the thinking of the Central Pacific men. In July 1865 Hopkins wrote Huntington that "we" had been having some discussion about buying a controlling interest in the Sacramento Valley Rail Road. The transaction would have included about \$200,000 in mortgage bonds on the railroad, but the purchase could probably be made for less than \$300,000, two-thirds cash down and the rest later. Tellingly, in the same letter he said that his negotiations with [George F.] Bragg were strictly private "with and through him," the reason being that "McLean [McLane] would not allow such a thing to be done if he knew it." Unfortunately, Hopkins did not clarify which of the McLane brothers

¹⁶³Daggett, Chapters on the History of the Southern Pacific, 43, cites as his authority for this statement Judah's discussion of the relative costs of the two options, in TDJ, Report of the Chief Engineer upon recent Surveys, Progress of Construction, and an Approximate Estimate of Cost of First Division of Fifty Miles of the Central Pacific Railroad of Cal., July 1st, 1863 (Sac: JAC, 1863), [4–5].

¹⁶⁴ Lavender, Nothing Seemed Impossible, 190.

¹⁶⁵Ibid. Lavender also cites as his own authority Judah's July 1, 1863, Report of the Chief Engineer, without mentioning Daggett's interpretation and citation of Judah's Report as his [Daggett's] authority, pub. fifty-three years earlier than Lavender's own account.

¹⁶⁶MH to CPH, Jul 19, 1865.

he was talking about, and both of them—Charles and Louis—were deeply involved in the Sacramento Valley Rail Road. 167

After struggling against insurmountable odds for three years, finally, in early August 1865, the cash-hungry Sacramento Valley Rail Road Company sold out to the Central Pacific Associates. Stockholders Lester L. Robinson and the San Francisco banking house of Pioche & Bayerque sold a controlling interest in the Sacramento Valley Rail Road to George F. Bragg of San Francisco. ¹⁶⁸ Bragg was obviously working as an agent for the Central Pacific Associates, for just a few days later they bought from Bragg his entire interest in the railroad. ¹⁶⁹ Reportedly, the Associates paid \$800,000 for the stock in the railroad. ¹⁷⁰

Newly-appointed directors were Leland Stanford, Edwin B. Crocker, Charles Crocker, Mark Hopkins, Edward H. Miller, Jr., and Philip Stanford, taking their seats alongside fifty-five-year-old Ralph Stover Fretz. ¹⁷¹ In the preceding March, Fretz had replaced William C. Ralston as a member of the Sacramento Valley Rail Road board of directors and now continued in the same position under Central Pacific management. ¹⁷² On Tuesday, August 15, 1865, the directors elected Leland Stanford president, Judge Edwin Crocker vice president, Miller secretary, and Hopkins treasurer. ¹⁷³

¹⁶⁷For a sketch of the career of Louis McLane, see Phelps, Contemporary Biography of California's Representative Men, 43–46.

¹⁶⁸It has to be the company intended here, since French-born forty-four-year-old Bayerque had died on Jan 21, 1865, in Mazatlán, Mex., where he had gone for reasons of ill health. *SFAlta California*, Feb 28, 1865. [Jules Barthélemy] Bayerque had been a director of the Freeport Railroad Company (as had George F. Bragg). *Sac Union*, Apr 4, 1863. His partner, F. L. A. Pioche, lived from Jun 30, 1816, to May 2, 1872 (according to his obit.), when he committed suicide over financial troubles. *SF Call*, May 5, 1872. According to the executors of his will, Pioche gave his name as François Louis Alfriede Pioche, and his date of birth as Jun 1, 1818, "F. L. A. Pioche," *California Mail Bag*, May 1872, i and viii. The town of Pioche, Nev., was named for him. HHB, *History of California*, IV, 781. For a sketch of the life of Pioche, see James Hart, *A Companion to California* (Berkeley: UCP, 1987), 387. Hart errs in giving 1875 as the year of Pioche's death.

¹⁶⁹This purchase did not include that portion of the P & SV road that ran from Folsom to Shingle Springs. Sac Union, Aug 17, 1865; HHB, History of California, VII, 539; Daggett, Chapters on the History of the Southern Pacific, 141.

¹⁷⁰Davis, An Illustrated History of Sacramento County, 119. William Ladd Willis, History of Sacramento County, California, with Sketches of The Leading Men and Women of the County Who Have Been Identified With Its Growth and Development From the Early Days to the Present (LA: HRC, 1913), 195.

¹⁷¹Ralph Stover Fretz and William Ralston met when Captain Fretz, the skipper of the Mississippi River steamer *Memphis*, and his two younger brothers were engaged in merchandising and wholesale trade as R.S. Fretz & Brothers, grocers and commission merchants, in NO. Ralston and Fretz later became partners in the firm of [Cornelius Kingsland] Garrison, Fretz & Co. By the late 1850s Ralston and Fretz were doing business in SF as bankers. On Jun 15, 1864, Fretz joined Ralston and six other men as the incorporators of the Bank of California. Fretz died on Jun 6, 1867, leaving an estate of a half-million dollars, \$20,000 of which he left to the U.S. govt. for the reduction of the national debt. See Cecil Tilton, *William Chapman Ralston, Courageous Builder* (Boston: CPubH, 1935), 27, 31, 37–41, 69, 76–77, 84–85, 96–97, 102, passim. See also Lavender, *Nothing Seemed Impossible*, 23–24, 39–42, 51–53, 60, 71–72, 82, 127, 195, 205–206, passim. Death and estate, *SF Alta California*, Jun 6 and 20, 1867.

¹⁷²Sac Union, Mar 4, 1865. Fretz undoubtedly retained his seat after the CPA took charge because of his connections with Ralston and the Bank of California.

¹⁷³Sac Union, Aug 17, 1865.



LESTER LUDYAH ROBINSON AND THE SALE OF THE SACRAMENTO VALLEY RAIL ROAD

An intriguing memoir of James G. Patterson (b. Aug 2, 1837), son of Arnold D. Patterson (February 25, 1804—December 4, 1884), says that his father was very friendly with Leland Stanford, and that Stanford and his father held three meetings in his father's house in Folsom with Sacramento Valley Rail Road people to discuss the sale of the Sacramento Valley Rail Road to the Central Pacific Rail Road. Negotiations fell through because [L. L.] Robinson insisted on having one director on the railroad if the sale were made.^a

It is questionable just how reliable Patterson's account is, based on memory of events published sixty years after the fact, and containing, as it does, several historical errors, and obviously designed to make James Patterson seem more important to posterity than he actually was

Charles Crocker later offered the following statement on Robinson and the sale of the Sacramento Valley Rail Road: "Mr. Judah, in his lifetime, exhibited to me a letter from L.L. Robinson to him, in which he, Robinson, stated that unless the Central Pacific Railroad Company purchased his interest in the Sacramento Valley Railroad upon his own terms, which he fixed at an extravagant price, that he would throw every obstacle in our way that he could; that he, Judah, was well aware of the difficulties in the way of building railroads in California, with no opposition, and all interests favorable to it, but with the active opposition of his Company, wielding a money influence of \$30,000 per month, we could not hope to succeed; and that he, Robinson, would wield that influence with all his power and energy against the Company, both here and at the East, unless they complied with his terms. The Company did not purchase his interest, and he has been fulfilling his threat ever since, and has done his utmost, hesitating at no means which he thought would accomplish his object."

^aWillis, History of Sacramento County, 308-311.

 $^{\mbox{\scriptsize bw}}$ Statement of Charles Crocker," appended to letter from LS to Charles B. Sumner and Henry Epstein, Feb 14, 1865 (supra).



Reflecting again the intercity rivalry between Sacramento and San Francisco, the editor of the *Sacramento Union* gloated that the Central Pacific's purchase of the Sacramento Valley Rail Road confirmed the capital city's position as the railroad center of the state of California. He scoffed at the frustrated plans of San Francisco railroad men who attempted to push Sacramento aside and make the City by the Bay the state's paramount railroad center. About the Associates' purchase of the San Franciscans' railroad, he wrote:

By this adroit and sagacious movement, various schemes for carrying trade and travel around Sacramento, running iron tracks to paper towns and getting Government aid

for a balloon route to Washoe are suddenly blighted, and, henceforth, in developing the railroad system of the great valley, there will be consistency of plan, harmony and convergence of interests, and a devotion of wise effort to building up from foundations already secured rather than a waste of energy and money in fanciful competition. ¹⁷⁴

The Central Pacific Associates Purchase The Western Pacific—June 8, 1867

Haltingly, and straining for every dollar spent and over every mile of railroad completed, The Western Pacific Railroad attempted to build the line from San José to Sacramento. Despite the use of private capital along with local and federal subsidies, The Western Pacific was unable to keep the terms of its contract with the United States government.¹⁷⁵ To accommodate the railroad, and help it over its financial difficulties, on May 21, 1866, the Senate and House adopted a joint resolution to extend the deadline for building the first twenty miles to January 1, 1867.¹⁷⁶

The directors of the railroad had let contracts to McLaughlin and Houston. Finally, on September 15, 1866, McLaughlin presented an account to The Western Pacific certifying that the first sixteen miles of the road had been completed and equipped, and were in good running order, and asked the company to take possession of this finished portion of the road (still a little short of the twenty miles required to qualify for federal bonds). ¹⁷⁷

In April and May of 1867 Stanford and Judge Edwin Crocker entered into negotiations to buy the troubled Western Pacific (and thereby regain the franchise to build from Sacramento to San Francisco) and a number of other short lines they needed if they were to control the entire railroad system of California.

There was also some talk about the Associates purchasing the San Francisco–San José Railroad, which banker Darius O. Mills had told Stanford its owners did not know how to manage. The Judge regarded this critical comment as a feeler. ¹⁷⁸

Negotiations to buy The Western Pacific were excruciating, not because its own-

¹⁷⁴Ibid.

¹⁷⁵ Calif Stats, 14th Sess., 80–87 (Jan 5–Apr 27, 1863), Chap. 77, An Act to authorize the Board of Supervisors of the County of San Joaquin to take and subscribe Two Hundred and Fifty Thousand Dollars to the Capital Stock of "The Western Pacific Railroad Company," and to provide for the payment of the same, and other matters relating thereto. App. Mar 21, 1863; ibid., 276–281, Chap. 207, An Act to authorize the Board of Supervisors of the County of Santa Clara to take and subscribe one hundred and fifty thousand dollars to the Capital Stock of the Western Pacific Railroad Company, and to provide for the payment of the same, and other matters relating thereto. App. Apr 14, 1863; ibid., 15th Sess., 388 (Dec 7, 1863–Apr 4, 1864), Chap. 344, Sect. 5, An Act to confer additional powers upon the Board of Supervisors of the City and County of San Francisco., and upon the Auditor and Treasurer thereof, and to authorize the appropriation of money by said Board. App. Apr 4, 1864; ibid., 16th Sess., 157–158 (Dec 4, 1865–Apr 2, 1866), Chap. 176, An Act to legalize and confirm a certain contract made between the County of Santa Clara, by the Board of Supervisors thereof, and the Western Pacific Railroad Company, bearing date the twentieth-eighth day of March, A.D. eighteen hundred and sixty-five. App. Mar 3, 1866.

¹⁷⁶14 U.S. Stats 356. 39th Cong., 1st Sess. (Dec 4, 1865—Jul 28, 1866). No. 40, A [Joint] Resolution to extend the Time for the Construction of the first Section of the Western Pacific Railroad. App. May 21, 1866.

¹⁷⁷Report of Chief Acct. Richard F. Stevens, USPRC, VIII, 4574–4575.

¹⁷⁸EBC to MH, Mar 29, 1867.

ers were not willing to sell—in fact, they were anxious to rid themselves of it—but for three different reasons: Charles Crocker was reluctant to buy the railroad, Huntington was long undecided, and Hopkins was unwilling to sign a purchase agreement without Huntington's concurrence. Stanford and the Judge were piqued with their two California Associates and they let them know of their displeasure. Stanford had already agreed to buy The Western Pacific, contingent upon the approval of his Associates, and never suspecting that even one of them might hold back, he had proceeded with the negotiations. ¹⁷⁹ The Judge wrote Hopkins that he would be mortified to have his entire work amount to nothing because he, Hopkins, and his own brother Charles opposed it. 180 As for himself, the Judge was decidedly in favor of buying The Western Pacific, which was not only the terminus of all the lines, but would bring with it a "big slice" of government bonds. Stanford, meanwhile, afraid that the delay would cause The Western Pacific owners to change their minds, waited anxiously and impatiently for Huntington's reply. 181 Crocker implored Hopkins to approve the deal so that it could be closed, and even pledged that he and Stanford would buy him and Charles out if Huntington did not approve. 182 Stanford wrote Edwin that the two of them were honor bound to consummate the deal even if the other three Associates did not like their so-called "outside operation." He said he would go ahead with the purchase by himself if necessary. 183

Thus it was that for months in the spring of 1867 much of Stanford's time was spent raising money to buy The Western Pacific and in trying to persuade his three reluctant partners to join him and the Judge. 184

In late April 1867 Hopkins and Charles Crocker finally gave their consent; Huntington appears to have approved at that time, if The Western Pacific could be bought without a money transfer—which, in the event, it was. 185

Seeing the handwriting on the wall, on June $_3$, $_1867$, McLaughlin, owing to litigation over the contracts, chose to sever all relations with The Western Pacific. He wrote the railroad:

The undersigned, Charles McLaughlin, reports that he has become involved in litigation respecting his contracts with said company (The Western Pacific) for the construction of its railroad, and that he is surrounded by difficulties which prevent him from prosecuting the work of construction as speedily as desirable, and he is confident that arrangements can be made with other parties that can do the work faster than he can. He thereupon requests that all contracts between himself and said company be rescinded, annulled, and canceled, and that he is willing to execute the proper instruments for that purpose. ¹⁸⁶

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    179 LS to MH, Apr 12, 1867.
    180 EBC to MH, Apr 12, 1867.
    181 LS to MH, Apr 19, 1867.
    183 LS to EBC, Apr 22, 1867.
    184 LS to MH, Aug 10, 1867.
    185 EBC to MH, Apr 29, 1867.
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¹⁸⁶McLaughlin's letter, found in the minutes of the WPRR, is quoted in LS test., USPRC, V, 2785.

On June 8, McLaughlin was released from his contract, and all his rights were assigned to the Contract & Finance Company, represented by five Central Pacific Associates. ¹⁸⁷ Their company would finish building the railroad. In his later explanation of this, Huntington said:

They . . . finally got embarrassed and did not see their way clear to complete the road to San Francisco, and said if we would take it and finish it to San Francisco, we could have it, and they would keep the land grant. They had built from San José toward Sacramento to a distance of about twenty miles. 188

On June 8, 1867, the Judge wrote to Hopkins, "We have finally completed the trade with the Western pacific [sic]." The trade consisted of returning to the Central Pacific the franchise to build the railroad and let McLaughlin keep the lands.

Stanford was named president of the newly-organized Western Pacific, with his Central Pacific Associates and his brother Philip (only nominally and temporarily) serving on the board of directors. Stanford's paramountcy in this purchase is reflected in the fact that for years afterward The Western Pacific was called "the Governor's Road"—a name Huntington must have loathed. Southed.

The California and Oregon Rail Road Company

A group of investors signed organizational papers on June 29, 1865, for the California and Oregon Rail Road Company to build from Marysville to the California and Oregon state line, a distance of approximately 278 miles. ¹⁹¹ On July 25, 1866, federal law authorized this company to build until it met a southward-building Oregon railroad. ¹⁹² Whichever reached the state line first could continue building "with the consent of the State in which the unfinished part may lie" . . . until the two railroads met. ¹⁹³

The Oregon Central Railroad was incorporated on October 6, 1866, in order for Oregon interests to have a railroad capable of receiving the federal land grant. ¹⁹⁴ A

¹⁸⁷Report of Chief Acct. Richard F. Stevens, *USPRC*, VIII, 4575. The text of the agreement is on 4575–4578.

¹⁸⁸CPH test., *USPRC*, I, 12.

¹⁸⁹EBC to MH, Jun 8, 1867; SED 10, 40th Cong., 3rd Sess., 25–47 (Dec 7, 1868–Mar 3, 1869), Letter of the Secretary of the Interior, communicating, In compliance with a resolution of the Senate of the 5th instant, the annual reports of the several Pacific railroad companies. Annual Report of the Western Pacific Railroad Company, of California, to the Secretary of the Interior of the United States, for the Six Months Ending December 31, 1867. The Annual Report for the Year Ending December 31, 1867. SSN 1360. Includes the names of all directors and the names and residences of stockholders, 41, as does Henry Varnum Poor, Manual of the Railroads of the United States for 1869–1870 (NY: HVP & HWP, 1869), 441.

¹⁹⁰ANT to JLS, Jun 17, 1895.

¹⁹¹Arts. of Assn., C & O, signed Jun 29, filed Jun 30, 1865. File 52, CSA.

¹⁹²14 US Stats 239—242, 39th Cong., 1st Sess. (Dec 4, 1865—July 28, 1866), Chap. 242, An Act granting Lands to aid in the Construction of a Railroad and Telegraph Line from the Central Pacific Railroad, in California, to Portland, in Oregon. App. Jul 25, 1866.
¹⁹³Ibid., 239. Unmerger Case, Defendants' Brief, 18—19.

¹⁹⁴For a succinct statement on the creation of the OCRC, its early hist., and how in 1870 it became the O & C, see "From Trail to Rail," Chap. 41, "Oregon's First Railroad Projects; Early Surveys; Activities of [Joseph] Gaston and [Simon G.] Elliott; Government Land Grants; 'West Side' Oregon Incorporated," SPB 1929 17-(10): 15–18, (continued)

joint resolution of the houses of the Oregon state legislature on October 10, 1866, designated this line as the road to receive the benefits of the federal law of July 25, 1866, and to build from Portland to the California-Oregon state line, there to connect with the southern road. ¹⁹⁵ These were not bond-aided roads. ¹⁹⁶

Just a little more than two years later, on November 23, 1867, the Central Pacific Associates—lacking only Huntington—created the Marysville Railroad, a road intended to run about thirty-five miles, from Marysville to some point on the line of the Central Pacific, near Roseville. 197

On December 10, 1867, the California and Oregon and the Marysville Railroad consolidated into one company, to do business under the corporate name of California and Oregon Railroad Company. ¹⁹⁸ Stanford, not surprisingly, was named president.

The Central Pacific Associates already owned the Marysville Railroad, and by this consolidation they were able to gain control of the California portion of the California and Oregon Railroad.

The Associates Form the San Joaquin Valley Railroad Company—February 4, 1868

In early 1868, the Central Pacific Associates formed the San Joaquin Valley Railroad Company. ¹⁹⁹ This road was to begin from a point on The Western Pacific Railroad at or near Stockton to a point on the Kern River in Tulare County, with the exact path to be determined later. Mark Hopkins was appointed company treasurer, the five Associates were made directors. Leland Stanford was made president. ²⁰⁰

The Central Pacific Assumes Control of the California Central Rail Road—March 1868

The California Central Rail Road was organized on April 20, 1857, largely by the same men who had created the Sacramento Valley Rail Road. ²⁰¹ It was to run from

⁽continued) particularly 18; and 17 (11): 12; Chap. 42, "'East Side' Organizes; Elliott's Contracts; Fight of Two Companies; [Benjamin] Holladay Takes Charge and Completes First 20 Miles," 17 (11): 12–15; 17 (12): 10–14; Chap. 43, "Holladay Blocks 'Humboldt Line,' Organizes O. & C. and 'Buys Out' Gaston; [Henry] Villard Succeeds Holladay; Road Opened by Southern Pacific," 1930 18 (1): 10–14; 18 (2): 10–13; 18 (3): 11–15; Chap. 44, "Narrow Gauge Railroads and Other Oregon Lines Purchased or Built by Southern Pacific," 18 (4): 12–15; 18 (5): 10; 18 (6): 13; 18 (9–10): 10–11. The series ends abruptly at this point.

¹⁹⁵Acts and Resolutions of the Legislative Assembly of the State of Oregon, passed at the Fourth Regular Session, 1866. With an Appendix. JR 13, Relating to the railroad land grant from the Central Pacific Railroad in California to Portland, Oregon, 11–12 (Salem: W & AM, 1866). A joint resolution of the Ore. leg. had the force of law, but was not filed among the statutes. Inter. with Dennis Hyatt, dir. of the law lib., Univ. of Ore., Sep 20, 2002.

¹⁹⁶ Unmerger Case, Defendants' Brief, 21.

¹⁹⁷Arts, of Assn. of the MRRC, signed Nov 23, filed Nov 29, 1867. File 120, CSA.

¹⁹⁸Ibid.

¹⁹⁹Arts. of Assn. of the SJV, signed Feb 4, filed Feb 5, 1868. File 241, CSA. Since the CPA founded the SJV, it is impossible to understand why the ed. of the Sac Union, Jan 1, 1869, complained that this railroad was controlled by the managers of the Central and Western Pacific railroads.

²⁰⁰Arts. of Consol. of the CPRR and the (1) C & O, (2) SF, O & A, and (3) the SJV, signed Aug 20, filed Aug 22, 1870. File 41, CSA. LS signed this doc. as pres. of the CPRR and the SJV. LS as pres., Donald B. Robertson, *Encyclopedia of Western Railroad History*. Vol. IV, *California* (Vol. 4 of 4, Caldwell, Idaho: CP, 1998), 220.

²⁰¹Arts. of Assn. of the CCRR, signed Apr 4, filed Apr 5, 1857. File 67, CSA; Wheat, "Sketch of the Life of Theodore D. Judah," 226.

Folsom to Marysville, a distance of about forty miles. The railroad had long suffered financial problems, and on March 28, 1864, a sheriff's sale was announced, selling for unpaid taxes that portion of the railroad lying between Folsom and the Sacramento-Placer county line, including the bridge over the American River. The railroad company was bankrupt in 1868, and was managed thereafter by the Central Pacific Railroad. According to the Sacramento Union, the California Central at this point had "ceased to exist." 204

Though the Central Pacific Railroad managed and operated the California Central Rail Road, the latter railroad retained its own corporate existence, even after December 28, 1870, when the company was reorganized and reincorporated.²⁰⁵ Under its new organizational structure, none of the Central Pacific Associates was an officer or in any way mentioned.

Early Steps in the Central Pacific Takeover of the Southern Pacific Railroad—March 5—July 15, 1868

In late 1868 Stanford cautioned Judge Crocker not to neglect The Western Pacific, now that they owned it, insisting that the construction of this road be pushed forward as fast as possible. Ownership of The Western Pacific gave them the undisputed right to complete the transcontinental to San Francisco or Oakland.

Meanwhile, the Central Pacific president not only kept a close eye on the management of the western portion of the transcontinental railroad, but incorporated into the Central Pacific system a number of other roads, among them the Southern Pacific Railroad Company, which had been organized by San Francisco investors on December 2, 1865, to run from San Francisco to San Diego. 207

The Central Pacific Associates ultimately decided that the Southern Pacific Railroad should run not only from San Francisco to Los Angeles or even San Diego, but also to and then beyond the Arizona border.

Though from 1865 until 1868 the Southern Pacific existed in name only, in 1866 it had been authorized by Congress to connect with and become a part of a southern transcontinental. On April 4, 1868, its officers—among them President Lloyd Tevis, Secretary Butler B. Minor, and Treasurer Edgar Mills—signed a contract agreeing to purchase the San Francisco & San José Railroad. This transaction was to cost \$2.77 million and was to be completed before December 31, 1870. December 31, 1870.

²⁰²Sac Union, Mar 28, 1864. ²⁰³Ibid., Jan 1, 1869. ²⁰⁴Ibid.

 $^{^{205}\}mathrm{Arts.}$ of Assn. of the CCRR, signed Dec 28, filed Dec 29, 1870. File 60, CSA.

²⁰⁶LS to EBC, Dec 8, 1868.

 $^{^{207}\}mbox{Arts.}$ of Assn. of the SPRR, signed Nov 29, filed Dec 2, 1865. File 256, CSA.

²⁰⁸ 14 US Stats 292—299, 39th Cong., 1st Sess. (Dec 4, 1865—Jul 28, 1866), Chap. 278, An Act granting Lands to aid in the Construction of a Railroad and Telegraph Line from the States of Missouri and Arkansas to the Pacific Coast. App. Jul 27, 1866. Gilbert Kneiss, Bonanza Railroads (Stanford: SUP, 1963, c. 1941), 46; Grodinsky, Transcontinental Railway Strategy, 26ff.

²⁰⁹AR SPRR, Dec 31, 1869, signed by Treas. Edgar Mills, Feb 15, filed Feb 17, 1870, CSA.

The exact year that the Central Pacific Associates took control of the Southern Pacific Railroad has long been a matter of dispute. Dates suggested range from 1868 to 1871, and whichever is accepted determines whether this takeover is to be treated in this chapter—which deals with pre-Promontory takeovers—or in the next. Evidence for the earlier date seems overwhelming to the writer, though the complete takeover was not accomplished in one step. It is fitting to say that it started in 1868 and ended in 1871; thus, the subject is treated in both chapters.

On March 5, 1868, the *San Francisco Bulletin* printed a rumor that the Central Pacific Associates had acquired both the San Francisco & San José and Southern Pacific railroads. Three days later, the *Bulletin* published letters from Stanford and Southern Pacific president Timothy G. Phelps denying this report.²¹⁰

The *Bulletin* report was generally passed off as nothing more than railroad rumor, of which the press spread more than its share.

There is no denying that the Central Pacific Associates had their eyes on the Southern Pacific Railroad. Huntington wrote to Judge Crocker in July 1868, "But if we could get hold of this Southern Pacific and build, say, 100 miles of it, it would make us much stronger than we now are." Within two weeks, Stanford made Huntington's dream come true. The ground for the ultimate takeover of the Southern Pacific was laid by Stanford a week and a day after Huntington's letter to the Judge, as shown in the following letter from Stanford to Huntington:

San Francisco July 15th, 1868

Friend Huntington

On the 10th inst I drew on you in favor of the Bank of California in gold (\$500,000) five hundred thousand dollars. I had to draw heavily to make up for what we were short in the month previous. Before drawing—we owed at the Bank a little upwards of \$200,000. The CPRR owes in other places borrowed \$350,000. The W Pacific borrowed \$150,000. On Saturday last the 11th I concluded a trade for the Southern Pacific at \$350,000—giving us a majority of the Stock and the board of directors. [William] Ralston . . . is the nominal purchaser so far as is know [sic] to those who tell except [Lloyd] Tevis and [Horace W.] Carpentier. 212

All are to keep still and we will change the board gradually so as to avoid attracting attention. We will put in the board our confidential friends, Lewis Cunningham was elected a director yesterday. We shall put in Edgar Mills, and probably Wm E. Barron, C.T[emple] Emmet and others of the like Saturday. ²¹³ Tevis is bought out with the others but I think we will keep him in the board. I think we will not be sure in it until we want to assume control. We have the eight [sic, right] to buy the San Jose Road under the contract made last winter by Tevis & Carpentier.

Hoping it will meet your approval. I am

Truly yours, Leland Stanford

²¹⁰LS to *SF Bulletin*, Mar 6, 1868; Phelps to *SF Bulletin*, Mar 6, 1868, printed on Mar 8, 1868.

²¹¹CPH to EBC, Jul 2, 1868.

Further undeniable evidence that the Associates had more than just a passing interest in the Southern Pacific presented itself in the early fall of the year. It could not be dismissed as baseless rumor when on September 25, 1868, Huntington actually signed the following letter to Secretary of the Interior Orville H. Browning delivering the Southern Pacific Railroad's *Annual Report* for the year 1868:

Office CENTRAL PACIFIC R.R. of California. No. 54 William Street

> C.P. Huntington, V.P. New York, Sept 25, 1868

Hon, O.H. Browning Secretary of the Interior Washington, D.C.

Dr Sir

Herewith I have the Honor to hand you the Annual Report of the Southern Pacific Railroad Company as required by the Acts of Congress in relation thereto & of which please acknowledge the receipt.

Resply Yours C.P. Huntington²¹⁴

As though this were not enough to establish an early takeover of the Southern Pacific, the following record appeared in a railroad manual that did not truck in rumor. ²¹⁵ It describes the ownership of a railroad that the Southern Pacific had an option to purchase, as mentioned earlier, if the transaction could be consummated by December 31, 1870:

San Francisco and St, [sic] Railroad.

(Now owned by the Central Pacific Railroad Company.)

Line of Road—San Francisco, Cal., to St. [sic], Cal., 50 miles.

Peter Donohue [sic]—President San Francisco, Cal.

Principal Office and Address. San Francisco, San Francisco Co., Cal.

It is obvious from this entry that the Central Pacific Associates by some time in 1868 had purchased both the Southern Pacific Railroad and the San Francisco & San José railroads, but had not taken complete control.

²¹²More likely Horace rather than his brother Edward R. Carpentier.

²¹³William E. Barron & Co. (with Joseph Barron and Thomas Bell) were "commission merchants" in SF; C. Temple Emmet was a SF att. *SFCD*, 1865–66, 71 and 168, respectively.

²¹⁴In Unmerger Case, Defendants' Brief, 25.

²¹⁵Henry Varnum Poor, Manual of the Railroads of the United States, for 1868–1869, Showing Their Mileage, Stocks, Bonds, Cost, Earnings, Expenses, and Organizations, with a Sketch of their Rise, Progress, Influence, &c. Together with an Appendix, containing A Full Analysis of the Debts of the United States, and of the several States (NY: HVP & HWP, 1868), 412.

The Associates Organize the San Francisco Bay Railroad Company—September 25, 1868

The second railroad the Central Pacific Associates organized in 1868 was the San Francisco Bay Railroad Company, for the purpose of constructing a railroad from Goat Island to connect with The Western Pacific. ²¹⁶ The five Associates were the principal stockholders, with Stanford president and Edwin B. Crocker vice president. ²¹⁷

In October 1869, a few months after the Central Pacific was completed, the Associates, acting as directors and principal stockholders of the San Francisco Bay Railroad, awarded to the Contract & Finance Company—their own construction company—a contract for building the balance of the line from San Francisco to San José. ²¹⁸

THE GOAT ISLAND CONTROVERSY

As president of the Central Pacific, Stanford took on a variety of management problems, from buying equipment to arranging finances. After 1867 he concentrated on expanding the system by purchasing other railroads and finding a deepwater terminus so he and his partners could cash in on the lucrative commerce with Asia. He and his Associates fixed their sights upon Goat Island—now called Yerba Buena (today it has a man-made appendage named Treasure Island)—in San Francisco Bay as the terminus of the Central Pacific, as an alternative to the circuitous Sacramento, Stockton, San José, San Francisco route. ²¹⁹ This 141-acre island was about a mile long. ²²⁰ It was the failure of The Western Pacific and the San Francisco and San José railroads to complete the road between San Francisco and Sacramento that prompted the Associates to consider Goat Island. ²²¹ San Francisco and Oakland railroad interests opposed the idea, each hoping to become the terminus of the transcontinental railroad.

Goat Island had been set aside for military use, so it would take an act of Congress to release it for any railroad operation. The editor of the *Sacramento Union* aligned himself with the many opponents of the project. He was afraid that all com-

²¹⁶Arts. of Assn. of the SFBRR, signed and filed on Sep 25, 1868. File 221, CSA.

²¹⁷Sac Union, Jan 1, 1869, for a synopsis of the status of the CPRR, the CCR, the WPRR, the C & O, the SJV, the CPac, the SF & O, the SF & A, the SF & SJ, and the NVR lines. The story of the now almost-forgotten SF & A is told briefly by John F. Due, "The San Francisco and Alameda Railroad," *PRJ* 1956 1 (11): 2–8.

²¹⁸RUSPRC, 76. Cohen attempted to broker the sale of the CPH and MH interest in the CPRR. See Evans, *Huntington*, I, 217, 224–225, 302–303, and 363–364 on the relationship between Cohen and the CPA. At one time, CPH considered Cohen "the meanest man on earth." CPH to MH, Mar 28, 1876. On Aug 2, 1879, Cohen delivered an anti-railroad speech at Platt's Hall in SF. *An Address on the Railroad Evil and its Remedy* (SF; FVC, 1879).

²¹⁹SF Bulletin, Jun 14, 1867.

²²⁰USWD, United States Military Reservations, National Cemeteries, Military Parks, Title, Jurisdiction, Etc. (Wash.: GPO, 1916), 38–39.

²²¹The hist. of the SF & SJ, the WPRR, and also the SPCR is sketched in Arbuckle, *Clyde Arbuckle's History of San José*, 103–109.

merce from the Orient would land at the island and that the Central Pacific would gain control of all the business of the interior of the state, bypassing not only San Francisco, but Sacramento's lucrative river trade. ²²² This editor was elated in 1870 when he could report that the measure had been defeated in the House of Representatives, thus killing the Central Pacific Railroad's bid for Goat Island. ²²³

If the Associates were going to build a transcontinental railroad, it was inevitable that they become involved in politics. With needed bills to be put through the state legislature and Congress, the railroad managers obviously could not operate in a political vacuum. But Stanford insisted that they tried to avoid politics, except in cases of self-defense. ²²⁴

For a number of years, as a member of the Select Committee of the Pacific Railroad, Cornelius Cole—Stanford's campaign partner back in 1861—provided the support needed by the Central Pacific in the House of Representatives. Many of the amendments of the 1862 and 1864 railroad acts were suggested by Huntington, the Associates' political agent in the nation's capital, but it was Cole who actually introduced the amendments into Congress and helped get them passed. ²²⁵ But now the conscientious Senator Cole broke with his old railroad friends. Coming to think it inappropriate to hold financial interests in the road, he sold his modest holding of twenty-five shares of Central Pacific stock to Stanford for less than \$4,000, stock later worth several times that amount. ²²⁶

The Central Pacific partners and Cole ultimately fell out over the Goat Island issue. Cole charged that they had become greedy as a result of government assistance during the Civil War, and now that the war was over he thought they had no legitimate or justifiable reason for demanding Goat Island. In response to appeals by hundreds of San Franciscans, he came out in open opposition to the railroad's plan. ²²⁷ The Associates vowed not to let Cole's action go unchallenged; Stanford threatened that if nothing else could be done about the matter, he intended to "spike his battery." ²²⁸ He never explained exactly what he meant by this. ²²⁹

The Cole split with the Central Pacific had serious repercussions in California politics. In 1869 open warfare broke out between Cole and Congressman Aaron Sargent over California patronage. Cole, so thought Sargent, "claimed the right to name a man for every place," and Sargent challenged this claim. "So war exists," wrote the editor of the *Sacramento Union*, after explaining in detail the quarrel between the two men. ²³⁰

²²⁵Cole, *Memoirs*, 180; EBC to Cole, Apr 12, 1865, on 182–184.

²²⁷Ibid., 266–267.

²²⁸LS to MH, May 30, 1867.

 $^{^{229}}LS$ seemed to have some extreme action in mind, since the usual meaning of the expression was to disarm a muzzle-loading cannon by driving a spike into the vent. It is more likely that it was spontaneous hyperbole.

²³⁰Sac Union, Apr 19, 1869.

STANFORD AND THE OAKLAND WATER FRONT COMPANY

Leland Stanford was also busy looking for a West Coast terminus in the event that he and his partners built beyond Sacramento. He extended the holdings of the Central Pacific Associates to other corporations inseparably related to the operation of the Central Pacific Railroad when it was finished, as on March 27, 1868, when he participated in the organization of the Oakland Water Front Company. Horace W. Carpentier was named president, Mayor Samuel Merritt of Oakland vice president, Lloyd Tevis secretary, and Leland Stanford treasurer. ²³²

The company was capitalized at \$5 million, subscribed for 50,000 shares at \$100 each. Horace Carpentier subscribed 23,000 shares, for 46 percent; Stanford's 17,000 shares, worth \$1.7 million, made him the second largest shareholder, with a 35 percent interest; John B. Felton purchased 4,999 shares, for a 10 percent interest; Lloyd Tevis took 2,500 shares; Edward R. Carpentier, characterized as the alter ego of his brother Horace, ²³³ purchased 2,000 shares; and Samuel Merritt one share. ²³⁴ Actually, this project was not as far removed from the railroad business as it might appear, since the entire transaction had to do with The Western Pacific Railroad's ownership of Oakland waterfront property and the possibility that the Oakland waterfront might become the terminus of the transcontinental railroad.

The city fathers of Oakland made an early bid for the terminus, but Stanford made it clear that he would be looking for a *quid pro quo* before a decision was made. He suggested that the city improve its waterfront by building wharves and facilities for handling railroad traffic. ²³⁵

CENTRAL PACIFIC RAILROAD HOSPITAL, 1868

The Central Pacific Associates engaged in another kind of expansion in 1868 when they built a hospital for railroad employees. Hospital benefits provided for

²³¹Cert. of Inc. of the OWFC, signed Mar 28, filed Apr 1, 1868. File 6894, CSA. Inter. with Linda Johnson, archivist, CSA, Aug 14, 2001. For an excellent overview of the OWFC, see unpub. "History of the Oakland Water Front, with Map of Oakland Water Front." Oakland, 1879. A coll. of hundreds of pages of newspaper articles dealing with the co. is in the Oakland Hist. Room, OPL.

²³²Arts. of Inc. of the OWFC. See LS test., *USPRC*, V, 2918–2920; also Daggett, *Chapters on the History of the Southern Pacific*, 88; Dr. Samuel Merritt came to SF in 1849. He made a fortune in cargo and real estate, and his business ventures in Oakland made him wealthy. He was mayor from Nov 1867 to Mar 1869. Lois Rather, *Oakland's Image, A History of Oakland, California* (Oakland: RP, 1972), 40; Beth Bagwell, *Oakland, The Story of a City* (Novato: PrP, 1982), 126–128. Merritt obit., *SF Call*, Aug 18, 1890.

²³³Edward Staniford, "Horace W. Carpentier—King of Controversy," Berkeley Independent and Gazette, Jun 15, 1980.

²³⁴Stock apportionment reported by William Halley in The Centennial Year Book of Alameda County, California, containing a Summary of the Discovery and Settlement of California; A Description of the Contra Costa under Spanish and American Rule . . . to which are added Biographical Sketches of Prominent Pioneers and Public Men (Oakland: WHa, 1876), 452–453, differs from Daggett's figures, which show Carpentier as having 25,000 shares, LS 20,000, and Felton 5,000, Chapters on the History of the Southern Pacific, 88. See Frank Aleamon Leach, Recollections of a Newspaperman, A Record of Life and Events in California (SF: SL, 1917), 282–286.

railroad workers by the creation of a Central Pacific Railroad Hospital in Sacramento are often overlooked by railroad historians.²³⁶

Most railroad companies had some sort of hospital for their employees, and the one built at Sacramento was a model. Before its construction began in November 1868, an old wooden frame residence formerly occupied by the Protestant Orphan Asylum at the corner of Thirteenth and D streets was leased and used as a temporary hospital for the benefit of sick and injured railroad workers until a permanent hospital could be built.²³⁷

In 1869, the Central Pacific Railroad began building a new hospital on the corner of Thirteenth and C streets.²³⁸ The completion of this structure was celebrated on February 1, 1870.²³⁹ The frame structure with a brick foundation cost \$64,000 to build.²⁴⁰ This hospital had four storeys, each 60 by 35 feet, having two wings, each measuring 35 by 52 feet.

Injured or ailing employees received the finest in medical care. The institution had eight private rooms and six wards, each ward having water closets, bath rooms, and stationary wash stands with hot and cold water. ²⁴¹ There was a library boasting between 1,200 and 1,500 volumes.



Leland Stanford was an active office-holder in the Oakland Water Front Company, attending meetings until just a few months before his death. In 1882 he was vice president of the company.^a On July 6, 1887, Stanford (along with William Eustace Brown,^b Charles F. Crocker, Stephen T. Gage, Moses Hopkins, and Timothy Hopkins) was elected to the board of trustees.^c Gage was later made president of the company.^d

^aCSC, The City of Oakland (A Municipal Corporation). *Plaintiff and Respondent*. Vs. The Oakland Water Front Company (A Corporation). *Defendant and Appellant*. Vs. The City of Oakland. No. 109485. Transcription on Appeal, II, 1665.

^bWilliam Eustace Brown became the private sec. of LS in early Jan 1862, *SF Alta California*, Jan 3, 1862. He later worked for the CPRR and was sec. of the C & FC, *SF Call*, Dec 13, 1900.

 c Defendant and Appellant. Vs. The City of Oakland. No. 109485. Transcription on Appeal, I, 849.

^dIbid., I, 906. Co. records show LS in attendance at meetings on Aug 15, 1882, Nov 6, 1891, and Apr 9, 1892, 906 and 932, and II, 1660–1665.



The hospital was run by a chief surgeon, the first of whom was Sacramento physician Dr. Samuel P. Thomas.²⁴² A monthly levy of fifty cents from every employee of the railroad—officers too, including the president—paid the expenses of the institution.²⁴³ This hospitalization plan was very popular among railroad workers, though Chinese were excluded from this health care system.²⁴⁴

²³⁶William Thayer, Marvels of the New West. A Vivid Portrayal of the unparalleled Marvels in the vast Wonderland West of the Missouri River. Graphically and truthfully described by William M. Thayer . . . Illustrated with three hundred and seventy-nine fine Engravings and Maps (Norwich, Conn: HBPC, 1888), 323; "Central Pacific Railroad Company's Hospital; Sacramento, Cal.," SF Centennial Spirit of the Times, Jul 4, 1876), special ed. of SFCSTUJ.

²³⁷Sac Union, Apr 23, 1869; Davis, History of Sacramento County, 133; J. Roy Jones, The Old Central Pacific Hospital (Sac: WARS, 1960), 3.

²³⁸SCD, 1875, 112.

²³⁹Jones, The Old Central Pacific Hospital, 3.

²⁴⁰Sac Union, Apr 23, 1869; G. Walter Reed, History of Sacramento County California, 217.

²⁴²Dr. Thomas is generally identified as S. P. Thomas; his hard-to-find first name is in the Index to County Recorder Death Book, Sac, Old City Cemetery.

²⁴³In 1948 the fifty-cent monthly fee was still the same. Lynn Farrar to the writer, May 4, 2002.

²⁴⁴Jones, The Old Central Pacific Hospital, 4.

Dr. Thomas resigned in late 1869 or early 1870, and was succeeded by Dr. Alexander Butler Nixon. 245 Nixon headed up the new hospital from the time it opened in 1870 and was later surgeon-in-chief of the Southern Pacific Company's hospital for sixteen years. 246

When the Central Pacific was leased to the Southern Pacific Company in 1885, the balance of the Hospital Fund, in the amount of \$29,726.03, was transferred to the new holding company.²⁴⁷

In 1900 the Sacramento hospital facilities were moved to the former residence of Charles Crocker, at F and Eighth streets; in 1911 construction was begun for a new hospital on Second Street.²⁴⁸ This was completed in the following year. The new facility was used primarily as an emergency hospital, with most ordinary cases being sent to another company hospital at the northwest corner of Fell and Baker streets in San Francisco.²⁴⁹

CENTRAL PACIFIC MAINLINE CONSTRUCTION CONTINUES

Record snowfalls in the two winters of 1866–1868 almost stopped progress. To avoid laying men off, Crocker and Strobridge had building materials hauled over the mountains in advance of construction; if the Associates had not kept building, they would not have received federal assistance. ²⁵⁰ And even building beyond the point where continuous tracks had been laid might have threatened their receiving federal bonds. Though it was sporadic at times, building continued, even though occasionally camps were destroyed by snowslides and men were killed. ²⁵¹

An explosion at Camp 9 near Gold Run in the spring of 1866 left six men dead, three whites and three Chinese. A *Sacramento Union* reporter wrote that the foreman was blown to pieces and part of his body was never found. ²⁵² This was a blasting powder accident that happened a year before nitroglycerin was first used on the railroad.

A few months later, on December 25, 1866, a local newspaper reported that one entire Chinese work camp had been covered by snow and in another case a work gang of Chinese was covered by a snow slide and four or five of them died before they could be dug out.²⁵³

There is no explicit documentation as to whose idea it was to build snow sheds under which construction could be continued during years of record snowfall. In a romanticized account of a lunch meeting between Stanford and Crocker—in

²⁴⁵ Ibid., 6

²⁴⁶Ibid., 7. Davis, History of Sacramento, 133; Sac Bee, Aug 1, 1872, and Sac Record-Union, Nov 3-4, 1889.

²⁴⁷AR, SPC, 1885, 31.

²⁴⁸Davis, History of Sacramento, 133.

²⁴⁹SFCD, 1911, 1539, e.g.

²⁵⁰LS to MH, Feb 5, 1867.

 $^{^{251}} JHS$ test., USPRC, VI, 3150.

²⁵²Sac Union, Apr 12, 1866.

²⁵³Dutch Flat Enquirer, Dec 25, 1866, repr. in Sac Union, Dec 28, 1866.

which he even describes the kind of sandwiches they were eating—Bancroft credits Stanford with drawing out a pencil and sketching the sheds that eventually were built.²⁵⁴ This is the only "record" noting it was Stanford's idea to build these sheds.

Arthur Brown, superintendent of Bridges and Buildings, wrote a letter to Stanford during the 1887 Pacific Railway investigation that provides the best summary of how the snow shed plan was developed:



LABORERS IN BASKETS, FACT OR FICTION?

Yes, Chinese laborers were killed during their four years of arduous and dangerous work on the Central Pacific Railroad, but no amount of danger or death could justify the creation of the absurd and ridiculous story that they dangled over the side of Cape Horn on chairs or in baskets and often fell to their deaths on the rocks below.

This "historical" fiction has been laid to rest by Edson Turner Strobridge in his *The Central Pacific Railroad and the Legend of Cape Horn 1865–1866*.



It became evident from our experience then that the snow problem had become serious, and it was decided, after various discussions on the subject by the directors of the company, that the only positive means of protecting the road was by snow sheds and galleries, although the expense of building a shed nearly 40 miles in length was almost appalling and unprecedented in railroad construction, yet there seemed to be no alternative but build the sheds. I was therefore instructed to make preparations and plans for such sheds as was deemed best, from our limited experience at that time

In the summer of 1867 we built some experimental sheds, which we had to modify considerably. The snow-shed building in the spring of 1868 was commenced in earnest. Owing to the short season in which the work had to be done (less than five months) it was decided to cover all the cuts and the points where the roads crossed the great avalanches beyond the summit, with the idea that the high embankments on the road could be kept clear of snow. ²⁵⁵

According to Brown's account, building snow sheds was what today might be dubbed a "committee decision." With Stanford's limited background in engineering, and the magnitude of design and execution of the "snow-tunnels," Brown's account seems much more plausible than Bancroft's.

Nor must the influence of Lewis Metzler Clement, assistant chief engineer of the Central Pacific, be overlooked. He is often credited with having "devised the system by which the road was patrolled through thirty-seven miles of snow sheds from Blue Canyon to Truckee."

One Southern Pacific historian surmises that "Stanford may have been at the meeting where Arthur Brown and Lewis Clement came up with the idea of snow sheds." ²⁵⁷

²⁵⁴HHB, *Stanford*, 40. Other accounts crediting LS with the idea are all based on this statement by HHB. GTC, *Stanford*, 224, e.g.

²⁵⁵Arthur Brown, supt. of Bridges and Buildings, to LS, Jul 25, 1887, LS test., USPRC, V, 2581–2582.

²⁵⁶Galloway, The First Transcontinental Railroad, 84.

²⁵⁷Lynn Farrar to the writer, May 4, 2002.

At any rate, by 1869 thirty-seven miles of sheds had been built, at a cost of over \$2 million, and they were worth every dollar they cost. ²⁵⁸

On August 28, 1867, a locomotive finally climbed to the summit. Among the congratulatory dispatches received by Stanford was one signed by "Governor" William Bross of Illinois—actually, he was lieutenant governor:

Chicago, August 28th—To Hon. Leland Stanford: Our congratulations on the completion of the Summit Tunnel. The Locomotive crossing the Sierra Nevada Mountains marks one of the noblest triumphs of energy and enterprise ever known to history. All honor to you and to California. ²⁵⁹

Celebrations were premature, for though the summit had been reached, and a hole had been bored through, the Summit Tunnel was not finished or capable of handling rail traffic until November.

When railroad construction moved slowly, money from government bonds dwindled to nothing. Stanford—not Huntington alone—worked hard to find desperately needed money to keep the track moving. He told Hopkins that since it would be some time before there would be any government funds coming in, he had been scouring San Francisco for ways to raise money. ²⁶⁰ At one point he borrowed \$60,000 from the financial house of Davidson and Company, an agent of the noted Rothschild organization. He did not say where the rest of the money came from when he sent Hopkins a check for \$125,000, remarking, "Charley writes that he needs that amount."

Owing to their critical financial straits, the Central Pacific Associates decided to place Central Pacific bonds on the London market. Stanford collected a number of letters of recommendation from San Francisco bankers and financial houses to use in his promotion of these bonds. ²⁶² He arranged to have prominent San Francisco banker Milton S. Latham wined and dined on a tour of the road to Donner Lake: Latham's influence was necessary if negotiations with the Morgan financial firm to oversee the project on the London market were to prove successful. ²⁶³

CREATION OF THE CONTRACT & FINANCE COMPANY—OCTOBER 28, 1867

Desperate for money with which to continue construction of the Central Pacific across Nevada, and unable to get contractors to carry on the work or investors to put money into the project, on October 28, 1867, the Associates belatedly incorpo-

²⁵⁸Arthur Brown to LS, Jul 25, 1887, in *USPRC*, LS test., V, 2582.

 $^{^{259}}$ Lt. Gov. William Bross et al. to LS, in "Leland Stanford," *CMB* 1874 5 (4): ix. The ed. mistakenly identifies Bross as the *gov.* of Ill. 260 LS to MH, May 17, 1867.

²⁶¹LS to MH, Apr 10, 1867.

²⁶²LS to MH, Apr 16, 1867.

²⁶³LS to MH, Apr 5, 1867.

rated the Contract & Finance Company, which had already been doing business for some months, as seen in the arrangement made to purchase The Western Pacific. The new company was a \$5 million enterprise designed to attract the outside capital that Crocker's company had failed to raise and then build the railroad from the California-Nevada border to its junction with the Union Pacific. ²⁶⁴ Stanford claimed credit for the idea of organizing the company, while Charles Crocker was made president. ²⁶⁵

The five Associates thought that by forming the Contract & Finance Company and agreeing to give to this company stock of the Central Pacific Railroad, the new company might be able to interest outside capital. In doing this, they were practically giving the contractors all the assets of the Central Pacific, but this seemed preferable to outright failure. But this move, too, failed to attract investors, as even Stanford later confessed, "We did not succeed in any quarter, and finally gave it up."

After the Contract & Finance Company failed to attract the expected and desperately needed investors, Stanford, Huntington, Hopkins, and the two Crocker brothers divided the company's shares equally among themselves. ²⁶⁷ Stanford then submitted to the company a contract for building the rest of the Central Pacific, and he and the other directors present awarded the contract to their own company. ²⁶⁸ The Contract & Finance Company agreed to complete the railroad construction, build depots, roundhouses, turntables, and station-houses, and furnish the Central Pacific Railroad with all necessary equipment, including cars, engines, tools, and machinery. It was to be paid a flat rate per mile for building the road, half in cash and half in Central Pacific securities. ²⁶⁹

For the lifetime of the Contract & Finance Company, these five men (or their estates) continued to hold all its stock, as well as the bulk of that in the Central Pacific Railroad. This proved in the long run to be a very profitable arrangement to all concerned:

Contracts between the finance company and the railroad company were made by the associates in one capacity, with themselves in another capacity. . . . The funds of the Contract and Finance Company, over and above the sums received from the Central Pacific, were derived from loans to the company by its stockholders and not from payments on the stock subscribed. There is no evidence that Hopkins, Stanford,

²⁶⁴Arts. of Assn. of the C & FC, signed and filed Oct 28, 1876. File 2024, CSA. The co. charter was forfeited on Dec 13, 1905, for failure to pay license tax for year ending Jun 30, 1906. See LS test., *USPRC*, V, 2624, 2637–2638. Enemies of the C & FC called it the "Crédit Mobilier of the Central Pacific Railroad" and the "Crédit Mobilier of the Pacific coast." *SF Bulletin*, Jan 3 and 4, 1873. See William E. Brown test., *USPRC*, V, 2894.

²⁶⁵LS test., *USPRC*, V, 2636 and 2638.

²⁶⁶For an account of the creation of the C & FC, see LS test., USPRC, V, 2634–2649.

²⁶⁷CC test., ibid., VII, 3661. ²⁶⁸EHM, Jr. test., ibid., V, 3062; VI, 3436–3437.

²⁶⁹Ibid., V, 3062.

Huntington, or either of the Crockers paid a cent in cash on their subscriptions. Instead, they gave their notes. To provide the Contract and Finance Company with funds they deposited money . . . paying interest on their notes, and receiving credit for interest on their balances, each partner as a rule putting in all the funds which he could spare, and having an individual account kept of his transactions. The Contract and Finance Company was, therefore, always heavily in debt, although the debt was owed to its own stockholders. The advantages of this arrangement would seem to be two: first, that it concealed effectively the profits which the company was making; and second, that it did not limit any stockholder to a proportionate share in the burdens and gains of the undertaking. ²⁷⁰

The anti-railroad editor of the *San Francisco Bulletin* condemned the practice of allowing the Central Pacific Associates to let contracts to themselves under a different name as the "most vicious system of railroad building ever introduced into the United States," far worse even than that of the Crédit Mobilier.²⁷¹

But railroad construction progressed rapidly under the Contract & Finance Company. This company facilitated the building of the western end of the transcontinental by taking over what there was of faltering construction of The Western Pacific. ²⁷²

All the books of the Contract & Finance Company were later lost. Citing huge profits alleged to have been described in the company books—largely imaginary in those early days—railroad critics thought it not surprising that the books were "lost."

The Contract & Finance Company became one of the most controversial subjects in the history of the Central Pacific.

STANFORD AT THE CENTRAL PACIFIC CONSTRUCTION SITE

During the building of the Central Pacific, Stanford traveled to Salt Lake City several times (five by one count), ²⁷³ to encourage Crocker and his crews to work faster to beat the Union Pacific to Ogden and thus tap into the lucrative business of nearby Salt Lake City. He—again, not Charley Crocker—negotiated with Mormon Church president Brigham Young for laborers to build the road. Young was also supplying workers to the Union Pacific. Stanford apparently had full power to let out contracts, and he not only negotiated contracts with the Mormons who lived near the construction sites, but signed contracts with construction companies. ²⁷⁴

²⁷⁰Daggett, Chapters on the History of the Southern Pacific, 77–78.

²⁷³GTC, Stanford, 244ff. LS traveled to Omaha on one of these trips to meet with CPH. LS to MH, Jan 15, 1869. On Feb 6, 1869, the Sac Union reported that LS was back in town after three months' absence. The best record of these trips to the front is found in LS corres, with MH and EBC.

²⁷⁴LS to MH, Jun 9 and Nov 21, 1868.

On each of these journeys Stanford watched the construction project carefully and offered advice freely on how best to continue at a record-breaking pace. He even advised in areas of responsibility belonging to Crocker, such as how many men and horses should be working on a project, when and how grading should be done, and how far beyond the base of supplies it was possible to work. ²⁷⁵ In spite of continued progress, Stanford was depressed by the rapid advance of the Union Pacific, which threatened to beat the Central Pacific into Ogden. He once complained to Hopkins that if Crocker had stayed out on the line pushing materials faster, there would have been more progress. ²⁷⁶

Stanford and Charley Crocker spent considerable time together at the front. No matter what the hardships, they willingly endured them with the workers. They often slept on flat cars, wrapped in buffalo hides, and found themselves covered with snow in the morning. Bertha Berner repeats the testimony that railroad engineers later recalled these incidents, saying that this very much endeared them to the workers. ²⁷⁷ In this and other ways President Stanford of the Central Pacific showed his regard for his workers; it was the beginning of a long line of favorable labor relations for him.

CENTRAL PACIFIC CONSTRUCTION CONTINUES

Despite almost universal praise for the Associates as they pushed their railroad eastward—and the dreams of unlimited wealth that iron tracks (steel after 1871) would give to every town and village along its way—there were those who still had doubts. ²⁷⁸ Henry George may have been either a realist or a cynic as, when watching the Central and Union rush madly toward one another, he predicted the fate of the nation as a result of the three-thousand-mile footprint of the iron horse. In "What the Railroad Will Bring Us," he penned the words:

The Truth, that the completion of the railroad and the consequent great increase in business and population, will not be a benefit to all of us, but only to a portion. As a general rule (liable of course to exceptions) those who have, it will make wealthier; for those who have not, it will make it more difficult to get. Those who have lands, mines, established businesses, special abilities of certain kinds, will become richer for it and find increased opportunities; those who only have their own labor will become poorer, and find it harder to get ahead.²⁷⁹

²⁷⁵LS to MH, Nov 1, 1868.

²⁷⁶LS to MH, Nov 8 and Dec 4, 1868.

²⁷⁷BB, Mrs. Stanford, 13-14.

²⁷⁸There is a description of the construction of the snowsheds and of the material, weight, and length of the rails used in "Transcontinental Railroad Postscript" to the *SFNLCA* May 15, 1869 9 (15): 1–4. On the use of iron versus steel on the transcontinental railroad, see Richard Morgan, Jr., inspecting eng. for the USPRC, "Report on the Union Pacific Railway and its Branches; the Central Pacific Railway and its Branches; the Central Branch of the Union Pacific Railroad; also on Auxiliary and Leased Lines, October 15, 1887," *USPRC*, VIII, 4439–4465, passim. SSN 2509; also, G. J. "Chris" Graves, CPRR collector and researcher, to the author, Jan 28, 1999.

²⁷⁹Henry George, "What the Railroad Will Bring Us," OM 1868 1 (4): 302.



52. Chinese camp and James H. Strobridge construction train in Nevada, 1868. *Union Pacific Collection*.

The Central Pacific Railroad filed a map and profiles of its proposed route from Monument Point, at the north end of the Great Salt Lake, to Echo Summit, at the north end of Echo Canyon, with Secretary of the Interior Orville Freeman Browning. ²⁸⁰ Though Browning knew he had the authority to approve this path, because of its importance, on October 16, 1868, he submitted the matter to the presidential cabinet for its approval. Some of the cabinet members thought that since the Union Pacific and Central Pacific had not agreed on the proposed route, perhaps an engineer should be sent to investigate and locate the route. Since this would delay construction for sixty days, Browning decided that if the full cabinet did not make a decision at its next meeting, he would.

²⁸⁰Orville Browning, The Diary of Orville Freeman Browning, Vol. II, 1865–1881, James Randall, ed., (2 vols., Springfield: ISHL, 1932), II, 221.

He resubmitted the matter to the cabinet on October 20. In order to keep construction going during the winter months, a unanimous decision was reached in favor of the Central Pacific's route. ²⁸¹

Huntington had written to Crocker on July 1, 1868, "So work on as though Heaven was before you and Hell behind you." Now that Browning's decision had been made, Huntington was beside himself trying to get tracks laid on the new line to Echo Summit. He penned a similar plea to Crocker on October 22: "I have got the new line to Echo Summit approved. You must lay the track to the tunnel. By God, Charley, you must work as man never worked before. Our salvation is you."

Huntington wrote to Stanford, "If it is the power of God, man, or the devil to get our rail to within 300 miles of Echo by say the tenth of December, it should be done." 282

Stanford interpreted this as meaning that the government would recognize only the railroad company that built on this line; thus, if the Union Pacific built westward and passed them on another route, the Central Pacific line would *still* have to be recognized. Huntington wanted either to force the Union Pacific to build on this line or to stop its construction altogether, but Stanford spelled out his strategy as follows: "Now my idea is and has been that if our theory is sound that the accepted line is the only Pacific R. R. line, then let the U. P. work off it and when they want to draw bonds on their line raise the question." 283

In one of his many trips to the construction site, Stanford discovered that the Union Pacific line was going to be very near that of the Central Pacific; in certain places they would be within one hundred feet of one another. ²⁸⁴ Neither road had purchased a right of way through nearby farms, so Stanford, cautioning Hopkins that he had kept this question entirely to himself, set about cornering the needed passage. He decided to block the Union Pacific's progress by buying, if necessary, the right of way through every farm in the valley where the road had to be laid. He wrote the Judge: "I think I may conclude to buy in some proper person's name some land between here and the mouth of the Weber over which the Union Pacific cannot avoid passing." ²⁸⁵

Stanford soon realized the inadvisability of getting too involved in these purchases. In his place he sent Chauncey W. West, a partner in a Salt Lake City construction company of E[zra] T[aft] Benson, [Lorin] Farr & [Chauncey] West, to survey farms across which the road must pass. He commissioned West to secure a one-hundred-foot right of way through the whole area. ²⁸⁶ This would be the key to victory if a showdown with the Union Pacific became necessary. Later, if the Union Pacific tried to get authorization to build into this territory, Stanford would be in a position to assert that

²⁸¹Ibid., 222.

²⁸⁴LS to MH, Dec 1, 1868.

²⁸²CPH to LS, Nov 13, 1868.

²⁸⁵LS to EBC, Dec 8, 1868.

²⁸³LS to MH, Dec 13, 1868.

²⁸⁶LS to MH, Dec 10, 1868.

the Central Pacific tract was the only Pacific railroad route allowable and that all others would have to keep off its right of way. ²⁸⁷ Benson, Farr & West were also active in procuring supplies and materials needed for Central Pacific construction. ²⁸⁸

Stanford's strategy backfired. When the government commission certified for payment a section of Union Pacific road that had not even been built, Stanford conceded defeat. ²⁸⁹ The roads were building toward each other, with little serious thought as to where they might meet; in fact, the 1862 transcontinental railroad law as written had failed to mention the obvious intention of everyone concerned—that the two roads should meet! This was obvious from a letter Huntington wrote to Charles Crocker, asking, "Why doesn't Stanford go to Salt Lake and stay until the roads meet?"²⁹⁰

Huntington and Crocker seem to have had no idea just how much Stanford was doing. With presidential duties relating to the Central Pacific, arranging for the consolidation of a number of other railroads into the Associates' empire, traveling back and forth between Sacramento and Salt Lake City, negotiating purchase and labor contracts, and meeting political and financial crises, he was as overworked as the others.

But Huntington's complaint led to an outburst by Crocker that was never heard before or was ever voiced by him again: "We have not heard from Stanford in ten days, dont [sic] know what he is doing. I guess nothing. In fact I never knew him to do much himself, he is awful lazy & never attends to details—wants somebody to come along after & stop the leaks & do the work." ²⁹¹

It is unfortunate that before confiding his negative remarks about Stanford's value to Huntington that Crocker did not take the time to ascertain where Stanford was and what he was doing. In fact, on December 1, 1868, the day Crocker dated this letter to Huntington, Stanford and Gray were in Salt Lake City where Stanford was trying to work out some construction problems, some of which undoubtedly should have been handled by Crocker. ²⁹²

Gray returned to California on January 15, 1869, to make a report to Hopkins and Huntington, who was on his way there from New York, but Stanford was to remain until sometime in March.²⁹³

In Answer to Crocker's Question, "What is Stanford Doing?" And in Response to his Answer, "I guess nothing."

The following is offered as a sample—by no means exhaustive—of correspondence that shows the extent of Stanford's work on just one of his half-dozen trips to

²⁸⁷LS to MH, Dec 1 and 4, 1868.

²⁸⁸Benson, Farr & West, Ogden City, to George Gray, CPRR consulting eng., Oct 12, 1868.

²⁸⁹Benson, Farr & West, Ogden City, to George Gray, Jan 15, 1869.

²⁹⁰CPH to CC, Oct 21, 1868.

²⁹¹CC to CPH, Dec 1, 1868.

²⁹²LS to MH, Dec 1, 1868.

²⁹³LS to MH, Jan 15, 1869.

the "front." This covers the period just before and just after December 1, 1868, the day Crocker posed his question:²⁹⁴

- September 25, 1868. Stanford is busy completing the organization of the San Francisco Bay Railroad Company.
- 2. October 31, 1868. From Salt Lake City. Stanford telegram to Mark Hopkins. He has arrived at Salt Lake City on railroad business.
- November 1, 1868. From Salt Lake City. Stanford letter to Mark Hopkins on need to organize a scraper force and need to send barley to Humboldt Wells.
- 4. November 3, 1868. From Ogden. Stanford letter to Mark Hopkins on sending a message for Phelps (?) to come to Salt Lake City.
- November 3, 1868. From Ogden. Stanford letter to Huntington on Utah federal elections.
- 6. November 8, 1868. From Salt Lake City. Stanford letter to Mark Hopkins reporting on Union Pacific progress.
- November 9, 1868. From Salt Lake City. Stanford letter to Mark Hopkins on grading at Humboldt Wells.
- 8. November 13, 1868. From Salt Lake City. Stanford telegram to Charles Crocker on "UP will try to get 3,000 of our men."
- November 21, 1868. From Salt Lake City. Stanford telegram to Charles Crocker on "Did not buy that stock?"
- 10. November 21, 1868. From Salt Lake City. Stanford telegram to Mark Hopkins on contract regarding four hundred teams grading west of hundred-mile contract.
- 11. November 21, 1868. From Salt Lake City. Stanford telegram to Mark Hopkins on French Loan Society can wait, grading contracts, line on Promontory Mountains, progress of the Union Pacific.
- 12. November 29, 1868. From Ogden. Stanford telegram to Mark Hopkins on supplies at Humboldt Wells.
- 13. November 30, 1868. From Ogden. Stanford telegram to Mark Hopkins on supplies at Humboldt Wells.
- 14. December 1, 1868. From Salt Lake City. Stanford letter to Mark Hopkins.
- 15. December 2, 1868. From Salt Lake City. Stanford telegram to Mark Hopkins. Send 500 kegs of powder.
- December 4, 1868. From Salt Lake City. Stanford telegram to Mark Hopkins on powder and payments to Benson, Farr, and West.
- 17. December 5, 1868. From Salt Lake City. Stanford letter to Mark Hopkins.
- 18. December 8, 1868. From Ogden. Stanford letter to Judge Crocker on securing a right of way, pushing construction, wants Charley to hasten track laying.
- December 10, 1868. From Salt Lake City. Stanford letter to Mark Hopkins on rights-of-way and contracts.
- 20. December 10, 1868. From Salt Lake City. Stanford telegram to Mark Hopkins.
- 21. December 13, 1868. From Salt Lake City. Stanford telegram to Charles Crocker on contractors and supplies.

²⁹⁴LS was also at the front in Jun 1868. LS to MH, Jun 9, 1868.

- December 13, 1868. From Salt Lake City. Stanford telegram to Charles Crocker on construction matters.
- 23. December 13, 1868. From Salt Lake City. Stanford letter to Mark Hopkins.
- 24. December 16, 1868. From Echo City. Stanford telegram to Mark Hopkins. He was going to meet Huntington in Omaha on December 22.
- 25. December 22, 1868. From Omaha. Stanford telegram to Central Pacific office about sending horses to meet Huntington, who was leaving Omaha that night.
- 26. December 27, 1868. From Ogden. Stanford telegram to Central Pacific office. Huntington is leaving Salt Lake City by stage on December 27, 1868.
- 27. January 3, 1869. From Ogden. Stanford letter to Judge Crocker on need to name Southern Pacific Railroad directors.
- 28. January 21, 1868. From Ogden. Stanford letter to Charles Crocker on "Gray carried off my cipher book."
- January 21, 1869. From Salt Lake City. Stanford telegram to Mark Hopkins. "I
 expect to leave for California tomorrow." (But he did not.)
- 30. January 29, 1869. From Salt Lake City. Letter to Mark Hopkins. In February he would be inspecting railroad lines with government inspectors.
- 31. January 31, 1869. From Salt Lake City. Stanford telegram to Mark Hopkins. Huntington will arrive at Echo City on February 4, 1869. Send more powder to Benson, Farr, and West.
- March 9, 1869. From Salt Lake City. Stanford telegram to Mark Hopkins. Commissioners just left.
- 33. March 10, 1869. From Salt Lake City. Stanford telegram to Mark Hopkins.
- 34. March 14, 1869. From Salt Lake City. Stanford letter to Mark Hopkins. On his arrival at Brigham City, "a week ago tonight."

Crocker was about to learn that while he was criticizing Stanford as a "do-nothing" railroad president, Huntington—the man to whom Crocker was confiding his groundless accusations—had an even lower opinion of him, Charles Crocker, as construction superintendent, than he himself had of the president. When Hopkins showed Crocker a letter from Huntington giving opinion about Crocker's worth to the rialroad, Crocker learned just how the vice president felt about him. He flew into a rage, and dispatched the following letter to Huntington:

Sacramento May 21, 1869
C.P. Huntington Esq. Vice Pres.
Dear Sir—
In this connection I desire to advert to your want of confidence in my ability & Man-

agement of affairs under my charge which you have expressed so frequently during the past winter & this Spring & which is again brought to my attention this morning in a letter of yours to Mr. Hopkins, in which you ask him if he does not think a first class Supt. is needed etc., etc., etc.

The work is done, or partially done. The hurry is over and the great strain is off. My connection with it can now be severed without public discern of it. I do not know but my other associates think as you do & now while I am away will be the best time suited to determine this matter & as I have executed to a full power of attorney to the Judge which will empower him to sell & transfer all I have R.R. stock, Bonds etc. etc. I will have my resignation as Superintendent of R.R. and Prest. of the Contract & Finance Company in his hands. I will empower him to sell out my connection with all the enterprizes with which I am connected, at such prices as you & the others concerned may be able & willing to pay or I will retain my Property in these enterprizes & only retire from an active participation in the Management, whichever will suit you all best. I only desire to have this accomplished immediately in order that I need not return to California for a year or more.

I am aware that this will seem all foolishness to you but I assure you that I can submit to losses of position &, property much easier than I can bear the constant thought & consciousness that I am in the way of others, or that my management is deemed by my associates a "Miserable Failure", "a damnable failure", "Opportunities thrown away" etc., etc., etc.

While I have seemed to have based this letter upon yours to Hopkins rec'd. this morning about a Supt. That is really the least I care about. I have frequently expressed my willingness to resign & urged upon all to use their own judgment without regard to me. But as I have failed to notice or hear of any depredation on the part of Stanford & Hopkins of the sentiments you have so freely expressed & which I have quoted. I feel that they are probably in sympathy with you (though they have not expressed it that I know of) & therefore my position becomes very unpleasant & irksome & my usefulness is more or less cramped.

I am not one of those that believe that we are entirely within the breakers & that we can go on with divided consuls and lack of competence in each other and spread out and absorb, as the tendencies now seem. Therefore I think this frank and open expression of my feelings should be made now and that you should act upon it at once, and weed out of the organization all that is in the way of success & harmony.

You will receive this but a few days before I shall meet you in person & will have had time to make up your mind as to what is best to do in the premises & I desire to assure you that you need not feel any hesitancy in expressing yourself freely to me. I shall not be there skinned & shrink from your judgment or that of my associates. I have thought over the matter fully & am prepared to sacrifice much in the way on money in order to secure a prompt & friendly secerence of our relations.

I shall show this letter to Mr. Hopkins before I mail it, which will be the first intimation he will have had of my feelings unless he has observed my deportment closely.

Respectfully yours s/ C. Crocker²⁹⁵

²⁹⁵CC to CPH, May 21, 1869. CC's orig. spelling and punc. have been retained.

The Central Pacific / Union Pacific Agreement to Link Up

Even the vague language of the 1866 law *authorizing* the two railroads to build until they met fell short of *requiring* them to link up. The enterprising railroad builders actually graded over one hundred miles of parallel roadbed. ²⁹⁶ However, the dual grading was not continuous; it was sporadic, and at times there were miles of no parallel grading at all. ²⁹⁷

In November 1868 the two railroads apparently agreed to a compromise on grading between Promontory Summit and Humboldt Wells that would have ended parallel grading. However, the terms of this agreement were vague and did not define a meeting point of the two lines. According to the *Salt Lake Reporter*:

The companies have agreed to grade only to Monument Point. But it is not to be considered the terminus of either road. The company reaching there first has the privilege to extend their road beyond the Point, no matter whether it be the Central coming East or the Union going West. The grading is to be pushed forward the same as heretofore, but only for one road. 298

When Brig. Gen. John Stephen Casement—the Union Pacific's construction superintendent—viewed the parallel lines stretching across the countryside, he wrote his wife: "I am afraid we will have trouble agreeing upon a meeting point." Awakening to the possibility that they might build past each other and both claim federal funds for the same section—for which neither might be paid—they decided on a junction. On April 9, 1869, the Union Pacific and Central Pacific powers agreed upon a place where the lines should meet—within eight miles of Ogden, Utah Territory. In Washington, D.C., Huntington signed for the Central Pacific; Grenville Dodge, Rowland G. Hazard, and Samuel Hooper signed for the Union. The next day, just a month before the joining of the two railroads, Congress belatedly acted on the matter by ratifying this agreement, calling not by law but by joint resolution for the two roads to meet at or near Ogden.

Promontory Summit was forty-five miles northwest of Ogden. It is often con-

²⁹⁶EHM, Jr., test., *USPRC*, V, 3039.

²⁹⁷G. J. "Chris" Graves to the author, Jan 16, 2002.

²⁹⁸Salt Lake Daily Reporter, Nov 6, 1868.

²⁹⁹Jack Casement to Mrs. Casement, Mar 12 and 16, 1869, in John S. and Frances J. Casement, "The John Stephen and Frances Jennings Casement Papers, 1857–1928." Accession No. 308, AmHC, UWy.

³⁰⁰The orig. hand-written agreement is now in the Hammond-Rollins Corres., Ms. 3761, SG 8, Series 2, Outgoing Corres., Oct 23, 1868—Aug 31, 1869, I, 86—89, NSHS, State Archives. Henry B. Hammond was the UPRR sec. until May 1869; Edward Henry Rollins was the sec. from May 1869 to Mar 3, 1877. Inter. with Karrie L. Dvorak, ref. asst., NSHS, May 27, 1998; on Hazard, see Nelson Trottman, *History of the Union Pacific: A Financial and Economic Survey* (NY: RPC, 1923); Klein, *Union Pacific*, 41 and 207; and *HR 78*, 42rd Cong., 3rd Sess., 2 parts, Part 1 (Feb 20, 1873), "Select Committee on Credit Mobilier and Union Pacific Railroad, Report of the Select Committee of the House of Representatives, appointed under the resolution of January 6, 1873, to make inquiry in relation to the affairs of the Union Pacific Railroad Company, the Credit Mobilier of America, and other matters specific in said resolution and in other resolutions referred to said Committee." SSN 1577. Pub. separately as a 770-p. book (Wash.: GPO, 1873), 180.

fused with Promontory Point, which is thirty-five miles south of Promontory Summit, at the southern extremity of the Promontory Mountains and on the shores of the Great Salt Lake. This confusion is found at times even in official documents. ³⁰¹

The Union Pacific sold to the Central Pacific that portion of the line between Promontory and five miles of Ogden; the five miles west of Ogden were leased to the Central Pacific for 999 years.³⁰²

Perhaps as a reminder of how much the railroads were beholden to the United States government for bond sub-



JOINT RESOLUTION FOR THE PROTECTION OF THE INTERESTS OF THE UNITED STATES:

"The common terminus of the Union Pacific and Central Pacific railroads shall be at or near Ogden; and the Union Pacific Railroad Company shall build, and the Central Pacific Railroad Company pay for and own the railroad from the terminus aforesaid to Promontory Summit, at which point the rails shall meet and connect and form one continuous line."*

*16 US Stats 56–57, 41st Cong., 1st Sess. (Mar 4–Apr 10, 1869), No. 19, Joint Resolution for the Protection of the Interests of the United States in the Union Pacific Railroad Company, the Central Pacific Railroad Company, and for other Purposes. App. Apr 10, 1869.



sidies, or perhaps as a slap on the wrist for not satisfying the government entirely with their construction and finances, the resolution calling for the two railroads to link up further authorized the president of the United States to withhold all bond issuance to either or both railroads if they failed to complete a "first-class road" over sections for which bonds had already been issued. ³⁰³ It gave the attorney general of the United States the authority to investigate both railroads to determine whether they had forfeited any charter and franchise rights or had made any illegal dividends on their stocks. ³⁰⁴

CHART DEPICTING CONSTRUCTION PROGRESS

On April 28, 1869, the Central Pacific's track-laying crew—Chinese and Caucasians alike—men who had worked hard to make the completion of the transcontinental possible, pushed and prodded by the determined Strobridge and his boss, Charles Crocker, set an all-time record of laying ten miles of rails in one day. Though all the tracklayers were Caucasians, as always, this statement of fact does not detract from the contribution of the thousands of Chinese laborers. ³⁰⁵

The story is told that for several days before the great day, Crocker and Stro-

³⁰¹This common confusion of Promontory Summit and Promontory Point is found even in federal legislation and in the official agreement signed by CPRR and UPRR officials identifying the place where the two railroads would meet, and in several railroad histories.

³⁰²Galloway, *The First Transcontinental Railroad*, 164–165; Lynn Farrar to the writer, May 4, 2002.

³⁰³16 US Stats 56–57, Joint Resolution No. 19.

³⁰⁴Ibid., Sect. 4, pp. 56-57.

³⁰⁵Lynn Farrar to the writer, May 4, 2002.

bridge laid their plans and marshaled their forces. Ties were hauled ahead and distributed along the right-of-way. Many were placed on the already-graded roadbed. Rails and track materials were moved to the front and held in trains ready to advance. On April 27, the day selected for the foray, an engine derailed and the great event was postponed for one day. The following day, the eight Irish railhandlers and a support of hundreds of others laid ten miles and fifty-six feet of rails. ³⁰⁶

Ten miles in one day was a spectacular feat, but there were other days on which not a foot was covered, for the Central Pacific construction crews always had Sundays off, even during "the frantic rush at the end." ³⁰⁷

The Central Pacific finally met up with the Union Pacific, at Promontory Summit on May 10, 1869.

The following is an estimate of the progress from Sacramento to Promontory Summit, showing end of the line, completion date, and miles from Sacramento. Some of the distances and dates are a matter of dispute; others, according to Central Pacific Railroad records, are wrong.

Newcastle, Jan 1865	31	Miller's Bluffs	88
Clipper Gap, Jun 10, 1865	42	Crystal Lake	89
Colfax, Sep 1, 1865	54	Butte Canyon Bridge	90.5
Long Ravine Bridge	56	Cisco, Nov 29, 1866	92
Cape Horn	57	Tunnel #3 (Cisco)	92.25
Cape Horn Mills, May 6, 1866	59	Tunnel #4 (Red Spur)	92.5
Secrettown	62	Tamarack	95
Secrettown Gap Bridge	62.5	Tunnel #5 (Crocker's Spur)	97
Dixie Cut Spur	63	Mountain Mill	98
Gold Run, May 30, 1866	65	Lower Cascade	98.5
Dutch Flat, Jul 5, 1866	67	Upper Cascade Bridge	99
Alta, Jul 10, 1866	69	Cascade	99
Green Bluffs	71	Pattersons	IOI
Shady Run	74	Tinkers	102
Prospect Hill	75	South Yuba Bridge	102
China Ranch	76	Soda Springs	102
Fort Point	76+	Summit, Nov 30, 1867	105
Tunnel #1 (Grizzly Hill)	77	Tunnel #6 (Summit)	105.5
Blue Canyon	78	Tunnel #7	106
Lost Camp Spur Cut	80	Tunnel #8 (Black Point)	106.5
Sailor's Spur	80+	Tunnel #9 (Donner Peak)	106.75
Heath's Ravine	82	Tunnel # 10 (Cement Ridge)	107
Putnam's	82 +	Tunnel #11 (Tunnel Spur)	107.5
Emigrant Gap	84	Tunnel #12 (Tunnel Spur)	107.75
Tunnel #2 (Emigrant Gap)	84	Tunnel #13 (Lake Ridge)	112

³⁰⁶"A Railroad Record that Defies Defeat," SPB 1928 16 (5): 4.

³⁰⁷Lynn Farrar to the writer, May 4, 2002.

Strongs	113	Granite Point 242
Stanford's Mill	114.75	Lovelock's 251
Miller's Mill	116	Humboldt Bridge
Donner Lake	117	(First Crossing Humboldt) 255
Donner Creek Bridge	118	Oreana, Sep 20, 1868 262
Truckee, Apr 3, 1868	119	Rye Patch 273
Proctor's	122	Humboldt (Desert) 284
Martin Creek	123	Mill City (Mill Creek) 296
Union Mill	125	Raspberry (Creek) 304
Prosser Creek	126	Rose Creek 313
Prosser Creek Bridge	126	Winnemucca, Oct 1, 1868 325
Boca	127	Tule 331
Little Truckee Bridge	127.5	Golconda 342
Clinton	130	Iron Point 353
Cuba	132	Stone House 366
First Crossing of Truckee	132	Battle Mountain 380
Juniper Creek Bridge	132	Nebur 389
Bronco	133	Argenta, Nov 19, 1868 397
Eagle Gap	₁₃₃ +	Shoshone 404
Tunnel # 14 (Adler Creek)	133.5	Be-ow-awe 418
Adler Creek Bridge	133.5	Cluro 426
Mystic	137	Second Crossing Humboldt 428
Tunnel #15 (Quartz Spur)	137.5	Sentinel Rock (Ten Mile Canyon) 432
Camp #24	137.94	Palisade 437
Old State Line	138	Mary's Creek Bridge 444
Second Crossing Truckee	138.5	Maggie's Creek Bridge 445.5
New State Line	140	Carlin, Jan 25, 1869 446
Third Crossing Truckee	141.5	Moleen 457
Essex	142	Elko, Feb 8, 1869 469
Verdi	143	Osino 479
Fourth Crossing Truckee	145.5	North Fork Bridge 486
Reno, Jun 19, 1868	154	Peko 489
Camp #37 (Truckee Meadows)	162	Halleck 497
Clarks	174	Deeth 505
Red Bluffs	178	Third Crossing Humboldt 505.5
Wadsworth, Jul 22, 1868	189	Bishop's Creek Bridge 515
Fifth Crossing Truckee	189	Tulasco 518
Two-Mile Station	191	Wells 526
Desert	198	Cedar 532
Hot Springs	208	Moors 534
Mirage	216	Talbots 535
White Plains	223	Independence 540
Humboldt (Lake)	232	Otego 550
Brown's, Aug 21, 1868	235	Pequop 552

Toano	562	Matlin	637
Loray	570	Kelton	661
Montello	578	Monument (Lake)	669
Tecoma	587	Monument Point	674
Lucin	597	Rozel	682
Bovine	610	Promontory[Summit], May 10, 1869*	
Terrace	622		690

*The first three on the list are from a pub. titled the *Sac Union*, with no pub. info. It contains an account of the Jan 8, 1863, ground-breaking ceremonies (pub. on Jan 9), an account of the first CPRR rails laid on Oct 26, 1863 (pub. on Oct 27, 1863), and a partial list showing progress made, having no issue citation; the rest are from Kraus, *High Road to Promontory*, 308–310.



Story of 1869 Record Recalls Early Days to President of Santa Fe

"I have read with very great interest the article in the May number of the Southern Pacific Bulletin entitled, 'A Railroad Record That Defies Defeat.'

"Many years ago, and in fact during my younger railroad life, I was employed by the Southern Pacific in the Engineering Department and recognize the correctness given in the article as to the method of track laying.

"There is one incident connected with the work of April 28, 1869, which I think is of interest. Mr. Strobridge personally told me that he had provided relays of men to handle the work and that when the relay for the iron gang came to relieve the original force the latter refused to be replaced and therefore the same men handled the entire ten miles of iron rails in that one day. You will note from the facsimile of the time book page shown in the May issue that the men were given four days' time for that one day."*

*William Benson Storey, pres., Santa Fe Railroad, to Fred Q. Tredway, SFCD, 1928, 1431; SPB 1928 16 (6): 4. The May 1928 issue of the SPB lists the eight Irish railhandlers as George Elliott, Edward Kelleen, Thomas Daley, Mike Shaw, Mike Sullivan, Mike Kenedy, Fred McNamare, and Patrick Joice.



Completion of the Transcontinental Railroad

In November 1868 Central Pacific engineering consultant Col. George Gray and Stanford were again out on the line inspecting progress. Stanford was so dissatisfied with a portion of the line, which necessitated cutting a tunnel through eight hundred feet of limestone, that he directed Lewis Clement, resident engineer on that part of the line, to try a different path. ³⁰⁸ It is said that Clement's work saved the company \$75,000 and a great deal of time. ³⁰⁹

³⁰⁸LS to MH, Nov 21, 1868.

³⁰⁹Lynn Farrar to the writer, May 4, 2002.

Despite construction problems and a constant shortage of money and manpower, the railroad reached completion, and as the scheduled day to join the Central and Union tracks approached—May 8, 1869—celebrants from all over the country converged on Promontory Summit, in the middle of nowhere, in a territory still almost three decades away from statehood.

Stanford received a telegram notifying him that his brother Phil had been elected to direct the celebrations at San Francisco:

May 3, 1869

To Governor L. Stanford:

Dear Sir. Col. A.P. Stanford was elected unanimously by the Executive Committee Grand Marshall; of the Pacific R.R. celebration in this city today.

Jacob Deeth³¹⁰

On May 7, Leland Stanford sent a telegram to Phil in San Francisco explaining that there was going to be an unavoidable delay: "The Union Pacific Co. say[s] impossible to make connection until Monday the 10th."³¹¹

Stanford and his party barely escaped catastrophe as they raced toward Promontory Summit in a car built in the Central Pacific shops in Sacramento and known variously as the Commissioner's Car, the Director's Car, or the Charley Crocker Car. 312

Some of "Crocker's Pets" almost disrupted the final events designed to celebrate this "work of giants." Chinese workmen, cutting timber on the mountains above the entrance to Tunnel No. 14 near the state line east of Truckee, saw the regular train pass but knew nothing of the special train with Stanford and others on board, drawn by the *Antelope*, following it. They skidded a log fifty feet long and forty-two inches in diameter down to the track below. ³¹³ Upon rounding a curve and seeing the log on the tracks, the *Antelope*'s engineer slammed on the brakes but was unable to stop in time. The train struck the log, disabling the engine; the log scraped along the side of the train, taking the steps with it, and injuring one passenger—a celebrant riding on the cowcatcher.

A message was wired ahead to hold the regular train at Wadsworth until the special Stanford coach could be attached. This is how the *Jupiter* was present at the Promontory Summit ceremony instead of the *Antelope*.

³¹⁰The colonelcy of APS was from his appt. on Aug 28, 1862, by Gov. LS to be paymaster of the Calif. Nat. Guard. "A.P. Stanford. Paymaster General. Rank of Colonel." Confirmation of his appt. made on Aug 30, 1862, in Governor Leland Stanford Daily Journals and Diaries. 1862 F3637:4; 1863 F3637:5. Roster of Military Forces of State of California. Officer Lists, 1863. Military Series, Vol. IX, 1855–1867 (Pomona: PVGS, 1991), lists APS as Paymaster on the staff of the Commander-in-Chief of Calif. for the year 1863.

 $^{^{312}}$ For a hist. of this car, which later became Coach 17 of the V & T and still later saw service as a movie car owned by Paramount Pictures and Twentieth Century Fox, and now housed in a shop at the NSRM, Carson City, awaiting complete restoration, see Kyle Wyatt, "From the Gold Spike to the Silver State," SH 1998 19 (2): 4–7.

³¹³Kraus, "Chinese Laborers," 57.



53. Westward-bound covered wagons meet the Central Pacific's Jupiter at Monument Point—the Great Salt Lake in the background—headed for the ceremonies at Promontory Summit, May 8, 1869.

Union Pacific Collection.



54. Celebration at Promontory Summit when the Union Pacific and Central Pacific are joined, May 10, 1869. *Bancroft Library*.

On May 10, 1869—two days later than originally announced—at Promontory Summit, the two railroads were linked into one great transcontinental road.

Stanford was the only one of the Central Pacific Associates present. He arrived at the site at 8:45 A.M. with an entourage of California notables. From the East came Dr. Thomas Clark Durant, vice president—president in all but title—and other high officers of the Union Pacific, arriving between ten and eleven. ³¹⁴ The Central Pacific's wood-burning engine *No. 60*, the *Jupiter*, and the Union's coal-burner *No. 119* were drawn up cowcatcher to cowcatcher opposite the last gap in the transcontinental line. ³¹⁵

The famous golden spike symbolizing the linking of the two ends of the transcontinental railroad completion was a gift from David "Steam-Paddy" Hewes—a nickname traced to the fact that he imported and used the first steam-paddy (shovel) in the United States—of Hewes & Richards, Sacramento wholesale dealers in groceries and provisions. ³¹⁶

In honor of its most famous precious metal, Nevada presented a silver spike. ³¹⁷ Anson Peasley Keeler (known commonly as A. P. K.) Safford, Republican governor of Arizona Territory from 1869 to 1877, presented a spike of gold, silver, and iron alloy: "Ribbed in iron, clad in silver, and crowned with gold." ³¹⁸ There were numerous other ceremonial spikes accompanying these. ³¹⁹

Stanford, on behalf of the Central Pacific, and Durant of the Union Pacific delivered brief speeches fitting the occasion. Stanford concluded his remarks: "Now, gentlemen, with your assistance we will proceed to lay the last tie, the last rail, and to drive the last spike."³²⁰ The gold spike, which was not the last spike, would be tapped into place—not driven—by a five-pound silver sledgehammer, manufactured by Conroy & O'Connor and Vanderslice & Company of San Francisco. ³²¹ The hammer was a gift of the Pacific Union Express Company. ³²²

One of California's scientific luminaries, Dr. Harvey Willson Harkness, stepped up and placed the golden spike into the hands of Durant, who then placed it into the auger hole prepared for it. 323

³¹⁴Kraus, High Road to Promontory, 272.

³¹⁵Oscar Winther, *The Transportation Frontier: Trans-Mississippi West, 1865–1890* (NY: HRW, 1964), 114; by the same writer, see *Express and Stagecoach Days in California, from the Gold Rush to the Civil War* (Stanford: SUP, 1936), based on "The Express and Stage-coach Business in California, 1848–1866." A rev. Ph.D. diss. (LSJU, 1934).

³¹⁶Frank Shay, "A Lifetime in California," 34A; Friis, *David Hewes*, 32ff., business poster.

³¹⁷Bowman, "Driving the Last Spike," CHSQ 1957 36 (2): 99.

³¹⁸Ibid., 100–101.

³¹⁹Ibid., 101–102.

³²⁰Bowman, "Driving the Last Spike," 36 (3): 268–269.

³²¹ SF Alta California, May 6, 1869.

³²²Bowman, "Driving the Last Spike," 36 (2): 103.

³²³Bowman, "Driving the Last Spike," 36 (3): 268. Since 1869, golden and gold have been used interchangeably in reference to the spike, with more people using the former. Harkness, who was also ed. of the Sac Press, was standing in for a friend who was unable to be there.



The Central Pacific leaders were never sentimental about the *Jupiter*, their locomotive at Promontory. It was generally known as just plain *No. 60*. In 1891 it was renumbered 1195 and in 1893 it was outfitted with a new boiler in Sacramento and sold to the Gila Valley, Globe & Northern Railroad then under construction in Arizona. It worked there as the G. V. G. & N. *No. 1* until it was scrapped in Globe, Arizona, in 1901, two years before the Union Pacific's *No. 119* met the same fate. Thus neither of the most famously depicted iron horses in the world was preserved for posterity.*

*Gerald Best, "Rendezvous at Promontory: The 'Jupiter' and No. 119," UHQ 1969 37 (1): 75.

THE GOLDEN SPIKE FABLE OF HISTORY

According to a romanticized account of unknown origin, much to the understandable delight of men who had driven spikes all the way from Omaha and Sacramento, with his first pass at the spike, Stanford missed. Then Durant tried his hand at tapping the spike, and he too missed it. The ceremonial spikes were finally pushed home and then removed and replaced by others made of more conventional materials.

How a person could miss making a gentle tap on the head of a precious gold spike, or how the keen eye of the *Sacramento Union* reporter covering this event missed this remarkable hammering *faux pas* have never been explained. But the story is so good that it will never go away.



Forty-five-year-old Leland Stanford was stationed on the north side of the track facing Durant, age forty-nine, on the south, each armed with a silver sledge for tapping into place the spike already set into its pre-drilled hole.

To complete the new telegraph lines paralleling the railroads and to symbolize the linking of the two sections of the nation, an iron spike was connected to the two telegraph wires. Nearby, seated at a table, the Union Pacific telegrapher operated the equipment and sent the appropriate messages east. 324

The role of David Hewes in this festive celebration is a story in itself, though he was not present. Apparently the national telegraphic hookup—the nation's first "on-the-spot" news coverage—was Hewes' brainchild. 325 He conceived a plan whereby the telegraph circuit when completed would fire cannons simultaneously across the country; the essence of his plan was utilized, but using only telegraphic messages, not cannons.

Stanford said he wired the Central Pacific office the simple message: "Last spike driven." ³²⁶ In what was one of the

greatest understatements made about the celebration that followed, Stanford later said: "We were exceedingly relieved when we got through and we 'jollified' a little." Speeches, music, and the readings of congratulatory telegrams followed.

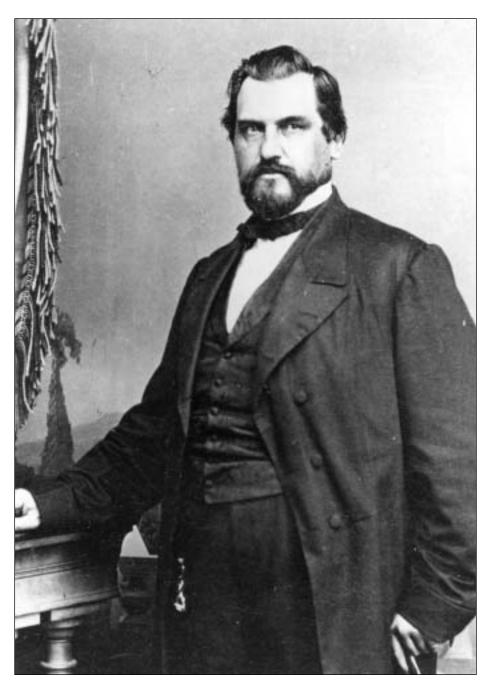
According to the account of one Hewes biographer, after the ceremony Stanford returned the gold spike to Hewes, who later said that he had several mementos made from the nugget attached to the end. When Secretary of State William H. Seward vis-

³²⁴Bowman, 36 (3): 269.

³²⁶LS to CPRR office, May 10, 1869.

 $^{^{325}}$ Friis, David Hewes, 23, 31–32.

³²⁷LS test., USPRC, V, 2773.



55. Leland Stanford in 1869, the year the transcontinental railroad was completed. Stanford University Archives.



HARVEY WILLSON HARKNESS, M.D.,

forty-eight-year-old California pioneer, was born in Pelham, Massachusetts, on May 25, 1821, and came to California in October 1849.

Dr. Harkness was "Physician in Attendance" at two o'clock in the morning of May 14, 1868, when Leland Stanford, Jr., was born.

On November 17, 1869, the peripatetic Dr. Harkness was an invited guest of the Viceroy of Egypt at the opening of the Suez Canal.^a

This intellectual giant was a Sacramento physician for twenty years, a scientist (an authority on Pacific Coast fungi, he discovered truffles in California), a capitalist who held a great deal of real estate in Sacramento, and served nine times as president of the California Academy of Sciences—from 1887 to 1896, when he was succeeded by President David Starr Jordan of Stanford University.^b

But Harkness had his detractors. One of them wrote: "When Dr. Harkness joined the Academy, harmony and peace departed, as he conceived the idea that he was the supreme power who should direct its affairs, and all who differed from him he regarded as his personal enemies. This caused wide-spread animosity and ill-feeling among the members, which inharmonious condition prevailed until his death fifteen years later." This writer then appended what he regarded as an example of one of Dr. Harkness' disgraceful exhibitions of temper: "One day, while [the narrator was] conversing with him in the library of the Academy in the presence of several members, he [Harkness] pointed toward Dr. [Hans Herman] Behr, who was approaching us, and said: 'There is the biggest ingrate on the face of the earth! I got him a place in the Academy, and he is now my enemy.' 'Yes,' Dr. Behr replied, 'but your judgment is bad and you can't tell the truth.' 'Go to hell!' said Harkness. Behr, bowing low, replied, 'After you.'"

^aSF Chronicle, Jul 11, 1901. Edward Bosqui, Memoirs of Edward Bosqui (Oakland: HBC, 1952), 55.

LAST TIE, SPIKE, AND HAMMER

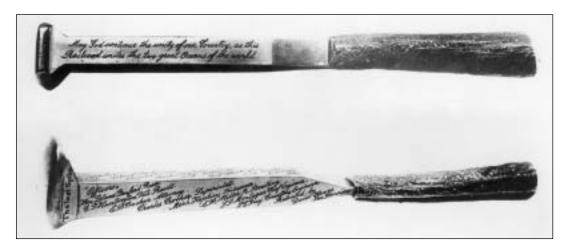
"There was brought up from San Francisco last evening by the Pacific Union Express Company a railroad tie, full size, manufactured out of California laurel, highly polished, and presented to the Central Pacific Railroad by West Evans, their contractor for furnishing ties. . . . This tie will be forwarded by the special train this morning. . . . The same train will also convey to the "front," for use in the ceremonies of completion, a beautiful and valuable golden spike, suitably inscribed, presented to the Railroad Company by D. Hewes of San Francisco. The Pacific Union Express Company furnish [sic] the hammer with which the last spike will be driven."*

*Sac Union, May 5, 1869.



ited San Francisco in July 1869, Hewes presented him with a ring made from the gold and set with two stones—California gold quartz, representing the Central Pacific, and a moss-agate from the Rocky Mountains, representing the Union Pacific. ³²⁸

³²⁸ Friis, David Hewes, 32.



56. The golden spikes before the nuggets were cut off. Stanford University Archives.

(In 1892 Hewes presented the gold spike along with his art collection to Stanford University. ³²⁹ Today the spike is secured in a vault and is brought out only for festive occasions.)

As soon as the wet-plate photographs had been finished, the *Jupiter* reversed its wheels and made room for the Union's *No. 119* to cross the rail junction. Then *No. 119* backed up and let the *Jupiter* do the same, with a merry whistle blast signaling that America's first transcontinental railroad was ready to do business. ³³⁰

The literature dealing with the events of that day is massive, and the "eyewitness" accounts are almost as numerous and varied as the writings themselves. It was reported that more than twenty newspapers had at least one reporter at the scene; three people at the site wrote diaries; and at least four wrote stories or gave interviews about the event, which was described more graphically than accurately as the "driving of the last spike."³³¹

In the final analysis, it is uncertain how many golden spikes were present, how many states presented ceremonial spikes of their own, what became of all the spikes

³²⁹David Hewes, "Hewes, An Autobiography," ²²⁵—²⁶⁴ of Eben Putnam, *Lieutenant Joshua Hewes*, ²⁵². For the story of the Hewes gift, see Carol Margot Osborne, *Museum Builders of the West: The Stanfords as Collectors and Patrons of Art 1870–1906* (Stanford: SUMA, 1986), 66.

³³⁰Brown, *Hear that Lonesome Whistle Blow*, 133.

³³¹In 1954 the Calif. governor's office sent an inquiry to the CSA regarding the number of gold spikes used. The best and also one of the shortest reconstructions of the day's activities is a result of the study that followed. It is found in Jacob Bowman, "Driving the Last Spike at Promontory, 1869," cited above, quotation from 36 (2): 97; and 36 (3): 263–274; repr. in *UHQ* 1969 37 (1): 76–101. The story has been retold by scores if not hundreds of writers, among them Sabin, *Pacific Railway*; John Patterson Davis, *The Union Pacific Railway, A Study in Railway Politics, History, and Economics* (Chicago: SCGC, 1894), 152–156; and Best, "Rendezvous at Promontory: The 'Jupiter' and No. 119," 69–75. For an early account, see *FLIN*, Jun 5, 1869.



DAVID HEWES' GOLDEN SPIKE

The spike Hewes had made for the occasion was 5^{5} 8 inches long and 1^{7} 32 inches square. It weighed 14.13 ounces, having a specific gravity of 14.292, with 13.3777 ounces of 17.6-carat gold. Hewes' spike—manufactured by Schulz, Fischer & Mohrig of San Francisco—was valued at about \$350, plus the \$25.24 he paid to have it engraved for the occasion. Attached to the pointed end was a cylindrical piece of gold about five inches long, which was removed before the ceremony and used for making souvenirs.

The engraving on David Hewes' Golden Spike can still be seen by anyone gaining access to the Stanford Museum vault. It was engraved on all four sides:

[On the end]:

The Last Spike

[Side under overhanging nail head]:

The Pacific Railroad ground broken Jany. 8th 1863, and completed May 8th, 1869

[Side under blunt side of nail head]:

Directors of the C.P.R.R. of Cal.

Honr Leland Stanford.

C.P. Huntington.

E.B. Crocker.

Mark Hopkins.

A.P. Stanford.

E.H. Miller, Jr.

[Side with head lip]: [Side opposite head lip]:

Officers May

Hon. Leland Stanford, Presdt God continue the
C.P. Huntington, Vice Presdt Unity of our Country,
E.B. Crocker, Atty. As this Railroad
Mark Hopkins, Tresr Unites the two great
Chas Crocker, Gen Supdt Oceans of the world.

E.H. Miller, Jr., Secty
S.S. Montague, Chief Eng'r
David Hewes
San Francisco.

[All in script except the head end]

[&]quot;List of names on the spike was provided by Diana Strazdes, SUM, curator of American Art, Feb 19, 1997. Friis, David Hewes, 27, publishes engravings on all four sides of the spike that do not correspond to the actual engravings. Eben Putnam, ed. and comp., Lieutenant Joshua Hewes, A New England Pioneer and Some of His Descendants ([n.c.]: privately printed, 1913), "[David] Hewes, An Autobiography," 249–250.



that were supposed to have been there, how the "last tie" fit into the event, or how the wires were connected to send a telegram proclaiming that the linking of the railroads had been made. ³³²

^aFriis, David Hewes, 26; Bowman, "Driving the Last Spike at Promontory, 1869," passim.

^bThe bill of sale and the work order are in the SUA; see *SFAlta California*, May 5, 1869.



Hewes' Personal Mementos

included a ring he gave his wife, another ring bearing the legend "LAST SPIKE P.R.R.[sic] DRIVEN MAY 10, 1869." (This ring later passed into the hands of Mrs. Hewes' great-granddaughter, Mrs. Franklina Moore of Newport Beach, California.)

A similar ring was inscribed "Last Spike P.R.R. driven May 10, 1869 [sic] from D. Hewes to R. Abbott." R. Abbott was Mrs. Hewes' favorite sister, Ruthe.

A fourth ring, inscribed "The Mountain Wedding, May 10, 1869," was presented to John Todd, a Congregational minister who gave the invocation at the Last Spike Ceremony.*

*Friis, David Hewes, 33. It is apparent that souvenir lore has created more souvenirs than a single gold nugget could account for. It was told by his grandson (by adoption) Edward Keating, Jr., in a 1977 inter., that even JHS wore a piece of the nugget on his watch fob chain for the rest of his life. Edson Turner Strobridge to the writer, Jun 13, 2002.



Following his painstaking investigation of the tangled web of the events of May 10, and the inconsistent and contradictory reports of these events, Jacob Bowman wrote the following conclusion:

The gold (Hewes) spike was dropped into an auger hole, it was not driven; it was the first of the 4 "last" ceremonial spikes and was not the last spike driven; it was not wired for the broadcast; and the markings on its head were not made by the silver sledge or any sledge but by the tangs of the military sword hilts. There was a second gold spike from California, but what became of it after its presentation to Dodge is unknown. All the ceremonial spikes were dropped into prepared holes, none were driven. The markings on the head of the Nevada silver spike could not have been made by a sledge and what made the present pinpricks on its head is unknown. The silver sledge is silver plated and was used only for ceremonial purposes—perhaps only to touch with token blows 1 [sic], several, or all of the ceremonial spikes; it was not wired for broadcasting and shows no evidence of blows struck. The Lemon spike did not make the hole for the gold spike and was not redriven into the laurel tie; it no doubt was one of the 4 spikes driven in the tie which replaced the laurel tie, and

³³²The literature on a second gold spike has become voluminous. According to Bowman's account, Frank Marriott, the proprietor of the *SF News-Letter*, handed LS a second golden spike, inscribed, "With this Spike the San Francisco News-Letter offers its homage to the great work which has joined the Atlantic and Pacific Oceans. This month—May, 1869." Unfortunately Bowman added that since no copies of the May 1969 *News-Letter* were known to be in existence, all info. about the episode had to be based on other newspaper reports. In Bowman, "Driving the Last Spike," *CHSQ* 1957 36 (2): 99. As a matter of fact, the *News-Letter* from May 1869 is intact; one bound set is at the Sutro Branch of the CSL in SF. There, one finds a photo of the spike with two slight changes in the inscription from what Bowman reported. The word *Spike* is in upper case, the inscription ends, "Oceans this Month May 1869," and the entire inscription is in italics. Transcontinental Railroad Postscript, *SF News-Letter*, May 15, 1869. The full title is *SF News-Letter and California Advertiser*. When the week's news was long, a *Postscript* was appended. In this work it is abbreviated henceforth as *SF News-Letter* (and *Postscript*).

probably occupied in it the same position that the gold spike occupied in the laurel tie. Stanford and Durant did not "drive home" the last spike; they gave the first and second, perhaps also the third and fourth blows which actually touched the last spike; the blow for "done" of the broadcast was given by either Strobridge or Reed. The last spike driven was of iron and was wired to the Union Pacific telegraph line, as the regular sledge used by Stanford was wired to the Central Pacific wire. The laurel tie with the ceremonial spikes was removed after the crossing by the engines and was replaced by a standard tie with regular iron spikes. Who drove the last of the replacement spikes is not known but probably it was one of the Chinese workmen. 333

THE ENTIRE NATION CELEBRATES

The tenth of May 1869 was a joyous day, with festivities and celebrations taking place everywhere in the nation, from coast to coast and from Canada to Mexico. It is estimated that between twelve and fifteen hundred people were at the Promontory site. 334

The entire country went mad over the long-awaited event.³³⁵ In Chicago a parade seven miles long jammed the city streets. In New York a 100-gun salute was fired in City Hall Park, and Wall Street suspended operations for a day. Flags were hoisted all over Philadelphia and bells pealed in Independence Hall. In Sacramento thirty bedecked railroad engines were lined up to blast their whistles in unison.

San Francisco got the jump on the rest of the nation by beginning its festivities on May 8, the originally planned day of the joining of the two railroads. ³³⁶ It was bedlam there throughout the nights of the eighth, ninth, and tenth of May.

On May 7, 1869, the California State Assembly building in Sacramento was furnished and decorated to hold eight hundred outstanding social, political, and military guests for a celebration the next day of the completion of the transcontinental railroad. 337

The spirit on May 8 was one of hilarity and relief after years of grinding work. The first of a number of speakers was Edwin B. Crocker. The Judge did not forget the debt owed the Chinese laborers who had worked on the Central Pacific Railroad for the past four years. In his touching praise of the Chinese workforce, he said: "I wish to call to your minds that the early completion of this railroad we have built has been in a great measure due to that poor, despised class of laborers called the Chinese—to the fidelity and industry they have shown." 338

³³³Bowman, "Driving the Last Spike," 36 (3): 272.

³³⁴Kraus, High Road to Promontory, 272.

³³⁵Brown, Hear that Lonesome Whistle Blow, 133.

³³⁶Grenville Dodge, How We Built the Union Pacific Railway, and other Railway Addresses ([n.c.]: Maj. Gen. Grenville M. Dodge, chief engineer, Union Pacific Railway, 1866–1870), 69–70. There is a brief description of the SF festivities in "Transcontinental Railroad Postscript" to the Supplement to SFNLCA, May 15, 1869, 3.

³³⁷ Sac Union, May 8, 1869.

³³⁸Ibid., May 10, 1869.



Poets competed with vintners in the celebration that followed the insertion of the last spike; verses and champagne poured forth with equal vigor. It is appropriate to repeat the oft-quoted and almost always abridged words of the displaced New Yorker, Bret Harte—born Francis Brett Harte and known to family and friends as Frank. He was inspired by the august scene at Promontory to compose:

What the Engines Said. Opening of the Pacific Railroad

What was it the Engines said, Pilots touching,—head to head Facing on the single track, Half a world behind each back?

This is what the Engines said, Unreported and unread!

With a prefatory screech In a florid Western speech, Said the Engine from the West: "I am from Sierra's crest; And, if altitude's a test, Why, I reckon, it's confessed, That I've done my level best."

Said the Engine from the EAST:
"They who work best talk the least.
S'pose you whistle down your brakes;
What you've done is no great shakes,—
Pretty fair—but let our meeting
Be a different kind of greeting.
Let those folks with champagne stuffing,
Not their Engines, do the puffing."

"Listen! Where Atlantic beats Shores of snow and summer heats; Where the Indian autumn skies Paint the woods with wampum dyes, I have chased the flying sun, Seeing all he looked upon, Blessing all that he has blest, Nursing in my iron breast All his vivifying heat, All his clouds about my crest; And before my flying feet Every shadow must retreat."

Said the Western Engine, "Phew!"
And a long low whistle blew.
"Come now, really that's the oddest
Talk for one so very modest—
You brag of your East! You do?
Why, I bring the East to you!

All the Orient, all Cathay,
Find through me the shortest way,
And the sun you follow here
Rises in my hemisphere.
Really—if one must be rude,—
Length, my friend, ain't longitude."
Said the Union, "Don't reflect, or
I'll run over some Director."
Said the Central, "I'm Pacific,
But, when riled, I'm quite terrific.
Yet to-day we shall not quarrel,
Just to show these folks this moral,
How two Engines—in their vision—
Once have met without collision."

That is what the Engines said, Unreported and unread; Spoken slightly through the nose, With a whistle at the close.^b

^aJust one year earlier Harte had been made the first ed. of the *Overland Monthly*. George Stewart, Jr., "Francis Brett Harte," *DAB*, IV, Part 2, 362–365.

^bBret Harte, *The Complete Poetical Works of Bret Harte* (Cabinet Ed., Boston: HMC, 1901, c.1870), 24–26; see Zoeth Eldredge, ed., *History of California* (5 vols., NY: CHC, 1915), IV, 298.



The Judge was followed by brother Charley. After chiding those who ridiculed Stanford's turning of the first shovel of dirt six years earlier, symbolizing the beginning of the mighty project of building the railroad, and ridiculing—to the cheers of the crowd—those who had dubbed the whole undertaking the "Dutch Flat Swindle," he accepted a three-cheer salute, followed by a similar salute for Stanford, another for Hopkins, and a fourth for Huntington.

Crocker closed his remarks by saying that no man had done more to see the rail-road through to completion than Huntington.

Hopkins, like the Crocker brothers, remained in Sacramento during the ceremonies at Promontory. 339



SAN FRANCISCO'S GRAND CELEBRATION IN HONOR OF THE EVENT

The dispatch from Leland Stanford at Promontory Summit announcing that the Union Pacific could not make the connection until May 10 "created great disappointment among all classes" in San Francisco. Grand Marshal Phil Stanford at once convened the executive committee to discuss what was to be done. For a variety of reasons, among them the feeling that they could not guarantee the closing of banks and shops on Monday, May 10, and the readiness of units of mechanics and military men who had planned the celebration for May 8, Stanford argued that they should proceed with festivities as planned.

The executive committee decided against this, but representatives from various organizations and military companies objected to this decision. After hearing from a number of these representatives, the executive committee reconsidered its earlier vote, reaching a unanimous decision to proceed on May 8.

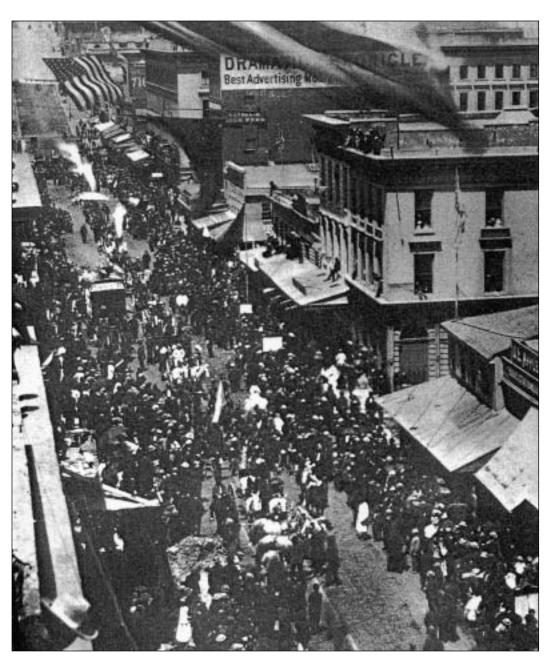
By 10 A.M. on May 10, "every principal street in the city was thronged with people." The massive parade that followed included the San José Cornet Band, scores of private and public bands and decorated wagons, the Pacific Brass Band, Mounted Police, mounted trumpeters, the Second Artillery Band, the Ninth Infantry Band, San Francisco Hussars, the San Francisco Fire Department—to name but a few, literally.*

*SF Bulletin, May 8, 1869.



Thomas Hill, a noted landscape artist, painted the linking of the rails. Hill was commissioned by Stanford to paint the scene at Promontory, but Hill's original idea of painting a historical event soon gave way to his depicting the scene as symbolic of the passing of the pre-transcontinental railroad era and the birth of the new. Before he was finished, Hill had included a wagon-load of immigrants crossing the plains, a mustang race, a game of poker, and—what was undoubtedly the last straw that dissuaded Stanford from buying the painting—Hill added seventy

³³⁹Ibid.; Sac Bee, May 8 and 10, 1869; Sac State Capital Reporter, May 8, 10, and 11, 1869; Sac Daily Record, May 8, 1869; MH telegram to CPH, May 7, 1869.



57. Celebration in San Francisco, May 8, 1869. Union Pacific Collection.

prominent Union and Central Pacific officials and public figures who were *not* at Promontory—including Theodore Judah, who had died six years earlier. When Hill presented the painting to Stanford in expectation of an easy sale, the Governor refused to buy it. ³⁴⁰ The unwanted painting now hangs in the California State Railroad Museum in Old Sacramento.



STROBRIDGE PLAYS HOST TO CHINESE WORK CREW

A Chinese camp, built about six miles into the ten and one-quarter record-setting miles of April 28, 1869, was called Victory Station, or Camp Victory, or just plain Victory.^a (Victory has since been renamed Rozel, Utah.) Strobridge took a Chinese work crew with him to build a railroad siding at Promontory Summit, and after their work was done, the boss and the work crew dined together at his invitation:

Honors to John Chinaman.

Mr. Strowbridge [sic], when work was all over, invited the Chinamen who had been brought over from Victory for the purpose, to dine in his boarding car. When they entered all the guests and officers present cheered them as the chosen representatives of the race which have greatly helped to build the road—a tribute they well deserved, and which evidently gave them much pleasure. b

^aAuthor inter. with Edson Turner Strobridge, Aug 25, 2001.

bit Transcontinental Railroad Postscript" to the Supplement to the SFNLCA, May 15, 1869, 4. This deed and scores of testimonies over the years by railroad officials have put the lie to the charge by writers like Connie Young Yu, who penned in an editorial titled "The Golden Spike's Unsung Heroes" the words: "Neither praise nor recognition was given that day at Promontory to the nameless thousands, those anonymous Chinese workers who braved the elements and risked their lives to get the railroad through the High Sierra." SF Examiner, May 10, 1969.



A report submitted by the Commissioner of the General Land Office to the Secretary of the Interior lacked the enthusiastic outpouring expressed by those at the site, but his sober assessment of the mighty work completed at Promontory Summit said it all:

The operations of the Union Pacific, Central Pacific, and Kansas Pacific Companies . . . exhibit a combination of skill and energy that is one of the marvels of the age. . . . The most striking achievement, however, in the difficult portions of the enterprise, was by the Central Pacific Company on the west end of the line. The passage of the Sierra Nevada is regarded by professional authorities as a masterpiece of engineering and executive energy and skill. To cross the maximum summit seven thousand and forty-two feet above sea-level, within one hundred miles of the tidal waters of the

³⁴⁰For Hill's account of this matter, and how LS may have been influenced by CC in his rejection of the painting, see Thomas Hill, History of the "Spike Picture," and why it is still in my Possession ([SF]: R.R. Hill, [1905?]), passim.

Pacific, required a scientific distribution of the ascent in order to render it practicable to ordinary locomotives, and an expensive construction, which are but imperfectly realized even by intelligent and careful readers. . . . While the summit was being perforated with a tunnel seventeen hundred feet long, the iron rails were dragged over for the simultaneous construction of the sections beyond. A unique feature in the construction of this route is a range of sheds of heavy timber, forty miles long, for protection against the snow. 341

Veritable hymns were written to express the paeans of joy over the engineering miracle performed by the builders of the Central Pacific Railroad. A writer for the *California Mail Bag* exulted:

Many engineers examined the proposed road, and declared it impossible to construct, and Governor Stanford himself once having climbed to the top of one of the snow-capped Sierras [sic], exclaimed, with a sigh, "Is it possible a railroad can be built here?" But his depression was only momentary, for his penetrating eye quickly saw that those lofty piles of clay and granite when cut up could be made available in filling the chasms and precipices that yawned between. Besides, his was a faith that could, as it literally did, "remove mountains," and he never allowed himself to doubt afterward. And so armed, with shovel and pick, powder and steel, did his army of workingmen go forth to battle with the everlasting hills that towered to the clouds above them. Greater than the army with which Caesar,

"The Foremost Man in the World"

achieved his most brilliant victories, was that which for four long years, incessantly by night and by day laid siege to the Sierras [sic], until they were bound in irons. During this time sides of whole mountains were torn off, and many a granite hill of vast proportions blown to ten thousand pieces. 342

From Washington, a skeptical Gen. William T. Sherman was happy to telegraph his congratulations to Grenville Dodge on the day following the celebrations. 343

The 15-mile-long Albany and Schenectady Railroad, built with the help of Leland's father, Josiah Stanford, was in a sense a section of the 3,000-mile transcontinental completed in 1869. Now, by several interesting twists of fate, the young man who had spent many a day watching that construction became governor of California, shoveled the first dirt beginning the symbolic construction of the nation's first transcontinental railroad, and, still later, as president of the Central Pacific, saw the completion of the project. This incomparable undertaking did not end in 1869, nor did it begin in 1863: decades of dreams, plans, and frustrations shared by California railroad enthusiasts made possible the triumphant success at Promontory Summit.

³⁴¹HED 1, Part 3, 41st Cong., 2nd Sess. (Dec 6, 1869– Jul 15, 1870), Report of the Commissioner of the General Land Office, Nov 1, 1869, 71 of 406-p. Report of the Sec. of the Int. SSN 1414.

^{342&}quot;Leland Stanford," CMB 1874 5 (4): viii.

³⁴³Dodge, How We Built the Union Pacific Railway, 70–71.



Theodore Dehone Judah

in the Railroad Celebration at Promontory Summit, Utah Territory

One of the most colorful descriptions of any city's festivities on May 10, 1869, celebrating the tapping into place of the "Last Spike" in commemoration of the unification of the nation by wooden ties and rolled-iron rails, is found in the pages of the *Sacramento Union*. Perhaps this account is more significant for its public-relations statements and its recognition of the role of Theodore D. Judah in the building of the transcontinental railroad than for its account of the festivities themselves:

This State drew from all the States in the early days of her golden adventures, their boldest, bravest and most adventurous citizens. The incomparable climate, fruitful soil, magnificent harbor of San Francisco bay, and great variety and wealth of resources found here soon fastened their affections to the State inseparably, as before they were fastened to the common country. Patriotism, interest, enterprise, courage and pride, all combined to make our people more anxious than any others for such a connection with the East as a railway would secure; but the bravest and boldest might be pardoned for a lack of faith in complete success. The roads built or projected in India, across the maritime Alps from Pesth to Trieste, across the Alleghanies [sic] from Philadelphia to Pittsburg [sic], or from Virginia to Chattanooga, were great undertakings testing engineering dash and skill; but what were all these, in comparison with a railway of tolerable grades and curvatures over the almost perpendicular Sierra Nevada, across hundreds of miles of waterless and treeless desert, and through hundreds of other miles of the frozen region of the Rocky mountains? So thought nearly everybody. The scheme was well underway toward actual realization long before the incredulous East had ceased to regard it as anything more than an idle boast. The Californians—especially the Sacramentans, whose mining, packing, staging, grading and teaming experience, whose brave triumphs over Nature and accident had qualified them for any undertaking—did not think so. From the start the intelligent men of the city counted with confidence on the success of their adventure. They had with good judgment singled out an engineer as bold and as confident as themselves. T.D. Judah is justly entitled to the lion's share of praise for the early completion of the railway. It was his genius that planned and overcame the early obstacles presented to engineering science, and when the croakers were clearly demonstrating in theory the impossibility of passing the mountains, he had passed them; and when the financiers of New York and San Francisco were perfectly confident that the money could not be raised, he, laboring in the humble capacity of a committee clerk in Congress, was rapidly solving the impossible problem on the basis of the nation's credit and the nation's interest. As early as July, 1862, the theory of Judah and the Sacramentans had demonstrated the practicability of the work, and secured from Congress a promise of liberal aid.

On February 25, 1931, a fourteen-square-foot, forty-ton bronze-on-stone monument was unveiled in Judah's memory in the Sacramento city park facing the railroad passenger station.^b

^b"Judah Monument Dedicated in Sacramento," SPB 1930 18 (5): 15–16, 18 (11–12): 15, and 1931 19 (3–4): 11.



^aSac Union, May 10, 1869.

There was one melancholy celebration of the completion of the transcontinental: Anna Ferona Judah, widow of the man who in a sense had initiated the transcontinental railroad from the western end, deliberately turned away all callers from her home in Greenfield, Massachusetts, on that day. Saddened, too, that the tenth day of May would have been their wedding anniversary, she wrote: "It seemed as though the spirit of my brave husband descended upon me, and together we were there unseen, unheard of men."³⁴⁴

On July 19 the Lick House Hotel in San Francisco set out its finest finery for a spectacular dinner-gathering of Midwestern and Eastern merchants, bankers, and public men, in what was called "The Chicago Banquet" to celebrate the completion of the transcontinental railroad. Speeches filled the air. Judge (and U.S. senator) Lyman Trumbull was greeted with applause and three cheers as he arose to deliver an oration in which he praised San Francisco as the coming "city of the world." Leland Stanford underscored Trumbull's prediction and closed his own speech with the words: "As Judge Trumbull of Chicago has prophesied that San Francisco will be the great city of the world, I will do my best to make it a reality."

Congressman Norman B. Judd of Chicago followed with a speech "that stirred the enthusiasm of the guests till the glasses rattled."³⁴⁵

An invitation from more than 150 of Sacramento's outstanding citizens and businessmen was sent to the directors of the Central Pacific, inviting them to a public dinner in their honor to be held in the capital city on September 28. 346 The feast came off as planned with the directors in their places. As expected, Stanford was called upon to make a speech and honored the guests with a short message; Huntington, who was also invited to speak, declined. Thus with champagne, celebrations, and joyful speeches, the completion of the transcontinental line was heralded; one era had passed, another was on the horizon.

³⁴⁴Anna Judah Ms. BL.

³⁴⁵SF Alta California, Jul 20, 1869.

³⁴⁶ Sac State Capital Reporter, Sep 27, 1869.