

(From *Portraits of Pride II*, p. v)

## Prologue

Railroad magnate Charles Crocker recalled the courage and integrity of the Chinese railroad worker, declaring “Without Chinese labor we would be thrown back in all branches of industries, farming, mining, reclaiming lands and everything else.” (*The Asian American Almanac*: “Who are the Chinese?” p. 47.)

### *Skillful, Daring and Hardworking Railroad Workers*

Chinese immigrants worked on the most difficult and dangerous western section of the Transcontinental Railroad when few others would take on the risk. It is estimated 2,000 died on the job. Their work was a pivotal part of the most important infrastructure project in the United States at that time. At the Promontory Point ceremony when the east coast and the west coast were connected in 1869, the work of Chinese immigrants was not mentioned and no Chinese immigrant was present.

The east/west railroad connection made many people exceedingly rich with money and land grants. Among them were the Big Four railroad magnates: Charles Crocker, Mark Hopkins, Collis Huntington and Leland Stanford.

# Transportation: Iron Rail to Golden Spike

~

## The Blood and Sweat of the Nameless Railroad Builders

By William F. Chew

“Without them (the Chinese railroad workers) it would be impossible to complete the Western portion of this great national enterprise within the time required by the Acts of Congress.”

*~Governor Leland Stanford of California reporting to President Andrew Johnson,  
October 10, 1865*

“D–O–N–E” tapped the telegraphed message to cheering dignitaries and guests who had gathered in Washington, DC, to herald completion of the first Transcontinental Railroad. The date was May 10, 1869.<sup>1</sup>

Chinese immigrants played a key role in the building of railroads in America:

*Transcontinental Railroad:* from Sacramento to Promontory Summit in Utah. It is estimated that more than 30,000 Chinese laborers worked in the western section of the railroad, suffering an estimated 1200 to 1300 casualties. In 1869, the East Coast of the United States was joined with the West with the opening of the Transcontinental Railroad. Trains began to bring settlers and goods from the East; the Transcontinental Railroad would bring 142,000 people West in its first year.

*Northern Pacific Railroad:* joining Seattle with Duluth, Minnesota. Many thousands of Chinese worked on building the tracks.

*Southern Pacific Railroad:* from Los Angeles to New Orleans. The Chinese worked to complete the final tracks.

*Canadian Transcontinental Railroad:* the seasoned Chinese workers contributed to the building of this railroad from 1881 to 1885.

In the South, Chinese immigrants were hired to build railroads in Alabama and Tennessee.

### *Building the Transcontinental Railroad*

From its inception, building a Transcontinental Railroad had a few elite and influential supporters including President Abraham Lincoln.

The eastern cities were overcrowded with Europeans and Irish immigrants.

Pioneers were moving west to new territories, traveling by horse and wagon for as long as a year. The Mormons walked and moved their possessions westward by pushing handcarts. People of means sailed around Cape Horn, South America, to reach San Francisco, requiring six months at sea. Others would disembark at the Isthmus of Panama; travel overland to the shores of the Pacific, and risk malaria and

death, before reaching their final destination. The country, in dire need of expansion, was ready for a western railroad linking the East with the West, but finding the best route would take years.

Theodore Judah, a young Eastern civil engineer and surveyor with proven expertise in railroad building, did a survey as early as 1854, but it was not accepted by the Senate and the House. In 1860, Daniel Strong of Dutch Flat pointed out an easier passage through the Sierra Nevada Mountains. Having received financing from seven men, four of whom represented the Central Pacific Railroad Company,



© Bettman/CORBIS

*Chinese laborers on a hand car.*

Judah drew new plans and maps for a Pacific railroad, which were incorporated into the Pacific Railroad Act and signed into law by President Abraham Lincoln on July 1, 1862.<sup>2</sup>

The established and experienced Union Pacific Railroad Company would build the eastern route starting from Omaha, Nebraska. The upstart Central Pacific Railroad Company (CPRR), headed by the “Big Four”, Charles Crocker, Leland Stanford, Mark Hopkins, and Collis Huntington, would build the western route from Sacramento, both linking up in Utah.

On January 8, 1863, at 54 “K” Street, in front of the Huntington and Hopkins Hardware Store, the official groundbreaking of the Central Pacific Railroad took place.<sup>3</sup>

A year later, only 18 miles of tract had been laid. Lack of manpower was becoming critical. It was back breaking labor, too grueling to stay on. Men would work a short time and move on to other, hopefully, more profitable and less arduous projects.

Charles Crocker needed dependable workers. He had hired a small group of local Chinese miners to clear the Dutch-Flat-Donner Lake Wagon Road. Impressed by their discipline and efficiency, he proposed to Supt. James Strobbridge to hire these Chinese workers. Strobbridge, however, strongly objected because he believed that “the Chinese were too small and inexperienced”. He was soon silenced when Crocker supposedly rebutted: “They built the Great Wall, didn’t they?”<sup>4</sup>

#### *Employment Date of the First Chinese Railroad Workers*

The Central Pacific Payroll sheets No. 26 and No. 34, respectively dated January and February 1864, record the first Chinese railroad workers.<sup>5</sup> Ah Toy is listed as railroad foreman, and Hung Wah as supervisor of a crew of 23 unnamed workers. Hung Wah later became the largest labor contractor known as The Hung Wah Company. It is be-

lieved that Hung Wah may have been among the few workers who remained to the completion of the Transcontinental Railroad.

These two payroll sheets are undisputed proof that the Chinese started to work for the Central Pacific Railroad as early as January 1864, and not in spring 1865, as previously published by several well-known authors.<sup>6</sup>

Only the names of Chinese Gang Bosses or Headmen, and labor contractors are listed on the payroll sheets. A few other independent workers, not assigned to specific crews, such as cooks, waiters, water boys and blacksmiths are also named. Crewmembers’ names were too numerous to list. Tragically we will never know the names of the thousands of workers.

A meticulous accounting of the total man-days paid to each gang boss or headman helped with estimating the total number of Chinese railroad workers employed by the Central Pacific, between January 1864 and December 1867, to be 30,000. The critical loss of 29 months of payroll records from this period, as well as all the payroll records from January 1868 through May 1869 would have changed this total dramatically. An explanation for the large number of workers is that the average tenure of the Chinese crews consisting of about 28 workers, was 1.6 months. A rapid turnover was experienced because of the grueling task. New immigrants and families replaced the workers.<sup>7</sup>

Fortunately, it appears that all 12 months of 1866 payroll sheets are complete. This is particularly important because April 1866 recorded the peak monthly employment of 6,191 Chinese workers. This was the time when the workers were digging thirteen tunnels through solid granite at a rate of a foot per day, working three shifts, six days a week.

The premise that some of these workers may have been counted more than once, by switching from one Gang Boss to another, incorrectly inflating the total count, is doubtful.

When Gang Bosses selected crewmembers, they would pick men who came from the same village and spoke the same dialect, ensuring clear communications and cooperation with one another. Men from different villages followed an established cultural division and would not intermingle. The Gang Bosses kept a running account of payroll deductions for transportation debts incurred by their crew workers. Crossovers would sabotage the orderly accounting system they were responsible for; therefore, it was not practiced.

These historical payroll records also reveal no less than sixteen different, skilled trade jobs -- not just "coolies" of the pick-and-shovel type labor. Chinese worked as blacksmiths, lumberjacks, carpenters, teamsters, masons, etc. Their wages varied from a low \$0.63/day for a waiter, to \$1.34/day for a blacksmith.<sup>8</sup>

#### *Naming the First Chinese Railroad Workers*

Railroad history documents that some Chinese workers were hired from the Dutch Flat area. The 1860 Dutch Flat census, fortuitously provided by local historian Douglas Ferrier, demonstrates that many Chinese names, listed as miners, were also listed on the early payroll records of the Central Pacific Railroad as Gang Bosses. A further study of the 1870 Dutch Flat census reveals some of the same Chinese residents, now listed as railroad workers, leading to the logical conclusion that the following men, entered in the payroll sheets of January and February 1864, were the first Chinese workers of the Central Pacific and members of Hung Wah's crew:

Ah Chung, Ah Wong, Ah Kung, Ah Chin, Ah Fong, Ah Quong, Ah Chow, Ah Lim, Ah You, Ah Henge (Ah Hen Gee), Ah Wah, Ah Ming, Gee Tong, Ah Jim, Ah Hing, Ah Tou, and Ah Low.<sup>9</sup>

#### *Bloomers Cut*

In 1865, at Bloomers Cut in Auburn, the workers literally had to remove a mountain of dirt by hand, pick and shovel and one-horse-dump wagons. They opened a trapezoid shape cut sixty feet deep by eight hundred feet long. This is the place where the Chinese established themselves as men of unyielding tenacity, replacing other white workers who would leave after a day or two of exhausting labor.<sup>10</sup>

A plaque placed at the entry of Bloomer's Ranch commemorates this achievement declaring:

*"Bloomer Cut" so named because of its location on the Bloomer Ranch remains virtually unchanged since its original construction in 1864. The overwhelming task of construction was undertaken by the diligent hard-working efforts of a small band of Chinese laborers. Using picks, shovels, and black powder,*



*they inched their way through the conglomerate rock cemented together with rock-hard clay. At the time of its completion, Bloomer Cut was considered the Eighth Wonder of the World. The first Central Pacific train rolled into Auburn on May 11, 1865. Dedicated by the Native Sons of the Golden West, October 12, 1991, Thomas W. Perazzo, Grand President.*

Secret Town Trestle Project

© Corbis/Bettman

That the Chinese worked and completed Bloomers Cut, had many local detractors, who believed that no Chinese were employed on the Railroad until the spring of 1865. But the undisputed evidence inked on the Payroll sheets of January and February 1864, has now convinced them of the truth.

### *Cape Horn*

Half a mile out of Colfax, Cape Horn, named after Cape Horn, South America, because of the similar difficulty in circumventing the landmass, is another landmark where the Chinese workers distinguished themselves with their ingenuity.

The roadbed required the laying of three miles of track around a promontory, at a slope of seventy-five degrees, starting at 1,400 feet above the American River. Without even a goat trail to lead the way, a grade had to be dug and sculpted from the sheer cliffs.

Cape Horn became one of the most romanticized and publicized accomplishments, as well as the most disputed. It has been written that the Chinese foremen, eager to reinforce their crews' exceptional skills approached Strobridge and assured him that their workers were up to this challenge, because they were familiar with similar work done along the Yangtze River by their ancestors. To further convince Strobridge, the Chinese foremen started to detail a plan.



*Bloomers Cut*

Courtesy William F. Chew

They would weave reeds into baskets, which would be used to lower the men over the cliffs. The men would chisel holes in the mountain, stuff them with black powder and blast a roadbed.

Having no other option, a reluctant Strobridge approved the plan and the Chinese workers did as promised. After pounding black powder in the mountain and lighting the fuse, the men above would furiously pull up the suspended workers - hopefully out of harms way. Many reached safety. Others were injured or killed by falling rocks or were caught in the explosions blasting the mountain and worker. This event may be the origin of the saying: "you don't have a Chinaman's chance" to describe a hopeless situation.

That the Chinese were lowered in baskets over Cape Horn has been romantically depicted in many artistic drawings. Because no photographs of this feat have been found, there are many individuals who claim that this, in fact, has no truth.

These detractors support their denials by stating that the seventy-five degree slope would preclude the use of (round) baskets, because they would be uncontrollable during the descent and ascent. Could the baskets be of rectangular shape to prevent rolling? Or were Bosons chairs used as some historians believe?

In the spring of 1866, the grading and tracking of Cape Horn

was completed.<sup>11</sup> Because of its much-publicized controversy, this is one of the most talked about achievement of Chinese labor. Today, overlooking the American River, another stone monument with a bronze plaque designates Cape Horn as a California Historical Site with these words:

*View of Cape Horn Promontory, North Fork American River Canyon. Dedicated to the memory of thousands of Chinese who worked for Charles Crocker on the Central Pacific Railroad. They were lowered over the face of Cape Horn Promontory in Bosun's chairs to a point 1332 feet above the canyon floor. The ledge created for this rail bed was completed May 1866. They are honored for their work ethic, and timely completion of the transcontinental rails ending in Promontory, Utah, May 1869. Dedicated May 8, 1999, Colfax Area Historical Society, Inc.*

About thirty guests and members of the Chinese Historical Society of Southern California attended this dedication.

#### *Thirteen Tunnels*

Nineteen tunnels dot the transcontinental route between the Union Pacific terminus at Omaha, and the Central Pacific terminus in Sacramento. The Central Pacific workers built thirteen tunnels through the Sierra-Nevada Mountains. The first tunnel was called Grizzly Hill, west of Cisco, 77 miles from Sacramento.

The most impervious and longest tunnel of the Transcontinental was Summit Tunnel #6, measuring 1659 feet long, 26 feet wide, 20 feet high, and 120 feet below the surface. Progress was painfully slow—six to twelve inches per day—

because of the solid granite material. Hoping that it would be more efficient, nitroglycerine was briefly used, but the inexperienced handling of it was killing many needed workers and injuring others. Blasting continued with black powder.

A central vertical shaft was made to penetrate deep into the earth to allow the excavation from four locations. The digging started from both entrances from the west and east directions, and two diggings from the center out in opposite directions toward each entrance.

By August 1867, Summit Tunnel #6 was pierced from opposite sides with almost perfect alignment. The majority Chinese labor force, under white supervision, completed the grading and tracking on November 30, 1867.<sup>12</sup>

#### *Snow Sheds*

Records show that the winters of 1866 and 1867 were the most inclement in history. Snow drifts as high as forty feet were recorded. The work force was at the mercy of unforgiving weather. Avalanches

were frequent, burying workers alive. Many bodies were never recovered. To keep the tracks cleared, an engine was converted into a giant snowplow with three more engines pushing it along the snow-covered tracks. But frequent derailments demanded a more effective solution: build thirty-seven miles of timber snow sheds covering the tracks. Chinese and Irish workers joined forces in order to finish this construction as quickly as possible.

#### *Ten Miles a Day*

The Chinese endured years of backbreaking labor, in both freezing and torrid temperature. As the terrain leveled and

*A study of major projects reveals that the Chinese builders of the Transcontinental Railroad suffered the largest number of accidental deaths.*

<b>Project</b>	<b>Year</b>	<b>Number of accidental fatalities</b>
Transcontinental Railroad <sup>14</sup>	1869	1,346
Panama Canal	1905	8
Moffet Tunnel	1913	28
Hoover Dam	1936	336 (112 recorded)
Golden Gate Bridge	1937	11
Mount Rushmore	1941	0
<b>Total:</b>		<b>1,729</b>

work became easier, many workers were laid off. Fewer workers were needed to lay track across the flat Nevada-Utah desert on the approach to the Utah promontory.

With the worst behind them and the completion of the Railroad in sight, a relieved Charles Crocker of the Central Pacific Railroad and vice-president Durant of the Union Pacific Railroad each boasting of their crew's superior abilities, challenged each other to a race over whose side could lay the most tracks in one day. Spurred on by a wager of \$10,000 to the winner, on April 28, 1869, the Chinese and Irish crews of the Central Pacific feverishly pounded twenty-seven tons of spikes, and laid down a record breaking 10 miles of track in one day.<sup>13</sup>

Today, a primitive wooden sign in the small community of Rozel, Utah, near the linking site of the Transcontinental in Promontory, marks the spot where this frenzied competition came to rest.

#### *The Insignificance of Life*

The Chinese who died while building the Transcontinental died in relative anonymity. Their deaths were not reported nor memorialized nor mourned. In general, there was little, if any, news of the Chinese workers who perished – as if their life had been insignificant. If the headman knew the deceased, he would tag the body with his name and village of origin for later shipment of the bones back to China.

Deaths were caused by blasting accidents, avalanches, land slides, falling trees, rail accidents, falls, pneumonia, and freezing to death. Most of these workers came from a semi tropical region unprepared for the freezing weather. In contrast, with these circumstances under their control, not a single death from sun or heat stroke was reported, because of the protection of their wide-brimmed straw hats, nor were there any deaths caused by dysentery, as many of their white counterparts had suffered, because of the Chinese custom of boiling water to make tea while white workers drank water directly from the ground.

Allowing for the span of time and technological progress between these projects, the number of deaths of the Chinese workers is staggering. The Transcontinental Railroad accounts for approximately 78% of the total fatalities; these numbers, however, do not include the hundreds lost from avalanches, and landslides whose bodies were never found, nor counted.

A newspaper article in the Sacramento Reporter dated June 30, 1870, under the headline "Bones in Transit", accounts for this single largest number of deaths.

*The accumulated bones of perhaps 1,200 Chinamen came in by the eastern train yesterday from along the line of the Central Pacific railroad. The lot comprises about 20,000 pounds. Nearly all of them are the remains of employes (sic) of the company, who were engaged in building the road. The customs of the Celestial Empire require that, wherever possible, the bodies of its subjects shall be interred upon its own soil, and the strictness with which this custom is observed is something remarkable.*

A second article appeared in the Elko Independent newspaper on January 5, 1870, entitled

*Dead Chinamen – Six cars are strung along the road between here and Toano, and are being loaded with dead Celestials for transportation to the Flowery Kingdom. We understand that the Chinese companies pay the Railroad Company \$10 dollars for carrying to San Francisco each dead Chinaman. Six cars, well stuffed with this kind of freight, will be a good day's work. The remains of the females are left to rot in shallow graves, while every defunct male is carefully preserved for return to his homeland.*

It is uncertain that this trainload is the same train as reported in the Sacramento Reporter in June, 1870, six months later. An article by J.P. Marden from the Book Club of California may explain the time delay. He writes

*In March 1870 the Chinese funeral car was working in Winnemucca on a siding near Bridge Street grade crossing preparing the deceased for their final trip home. Two carloads of bones, prepared and boxed in the most approved manner, and labeled with the appropriate Chinese characters, which gave the name, date of death, and tong to which they belonged, were shipped from Winnemucca to San Francisco at that time.*

It is believed that both these articles refer to the one and same train, because if it were an additional train, the poundage of the bones and the number of bodies would be doubled.

Some critics attribute the majority of these deaths to an as yet undocumented story of a smallpox epidemic in 1868-1870. Medical statistics reveal that the mortality rate from smallpox is approximately 30 % of those infected. If the majority of the 1200 Chinese died from smallpox, it would mean that about 4,000 workers were infected during this period. It seems doubtful that these many workers were still active, because after the work on the Sierra Nevada was completed, many workers were laid off. In addition, the last payroll record of December 1867 shows only 428 workers remaining. The December payroll records, however, may be incomplete since the adjusted total would approach the estimated 4,000 workers.

### *The Completion*

At Promontory Summit, Utah, as the official ceremony was being photographed for posterity, Leland Stanford, President of the Central Pacific Railroad Company and former Governor of California, was handed a ceremonial

golden spike engraved with the words "May God continue the unity of our country, as this Railroad unites the two great oceans of the world".<sup>15</sup>

Chinese railroad workers then laid the last rail and drove the last spike uniting the rails of the Transcontinental Railroad. Three of the eight workers, Ging Cui, Wonk Fook, and Lee Shao, brought up the last rail at Promontory Summit on May 10, 1869.



*Iron Road Pioneers statue in San Luis Obispo's Railroad Square*

These Chinese adventurers came to "Gum San" to work unaware of the daunting undertaking or life-threatening dangers they would face. They accepted employment hoping to earn enough money to return to their homeland with newly attained riches and live the rest of their lives in relative comfort.

Even though the building of the western route of the Transcontinental has been somewhat romanticized and some episodes have become legendary, it does not diminish the magnitude of the human effort spent by a majority of non-citizens.

### *Beyond the Central Pacific The Southern Pacific Railroad*

Following the "Marriage of the Rails" of the Transcontinental Railroad in May 1869, the economic depression caused by the massive layoff of workers from both the Union Pacific and the Central Pacific railroads, was fueling the already hostile discrimination and prejudice against the Chinese. Hostilities increased continuously for ten years culminating with the passage of the anti-Chinese exclusionary laws of the 1880's.

Fines and special taxes were levied on the working Chinese. Hiring was virtually nonexistent, except for the now experienced rail workers who migrated throughout the United States to lend their expertise to build many of the nation's railroads.

The majority of workers returned to China, but those who stayed continued to contribute to the development of a country that largely rebuked them. They pioneered the canning industry in California; reclaimed the swamps and bogs of the Sacramento Delta by building levees and irrigation canals, and changed hardpan soil into fertile land.

With overdue appreciation and gratitude, various types of commemoratives have been erected and continue to be built that describe the actions which took place at each site, such as Bloomers Cut, Cape Horn and Golden Spike National Historic Site, a site, which is totally dedicated to the preservation and dissemination of this period's history.

More tributes have been placed at Lang Station following the completion of the rail line to Los Angeles, in September 1876.<sup>16</sup> Another plaque location is at the entry of Port Harford Wharf in Avila Beach, near San Luis Obispo, praising the completion of the Pacific Coast Railway in 1882.

**PORT HARFORD WHARF  
& PACIFIC COAST RAILWAY  
COMMEMORATION: July 19, 1986**

**John Harford Wharf & Horse Drawn/Gravity Railroad 1873  
Pacific Coast Steamship Company Organized 1876  
Pacific Coast Railway (PCRR, SLO & SMVRR) 1882**

**VISION & ENTERPRISE OF THE NARROW GAUGE RAILROAD  
EXPANDED TRADE & SETTLEMENT ON THE CALIFORNIA  
CENTRAL COAST BETWEEN AVILA; SAN LUIS OBISPO,  
ARROYO GRANDE, NIPOMO, SANTA MARIA, ORCUTT,  
LOS ALAMOS & LOS OLIVOS. AH LOUIS, SUPERVISOR OF HIS  
CHINESE LABOR CREW, BUILT THE ROADBED AND LAID THE RAIL.**

**PORT SAN LUIS HARBOR DISTRICT  
FRIENDS OF THE PACIFIC COAST RAILWAY  
SOUTH COUNTY HISTORICAL SOCIETY,  
RAILWAY CENTENNIAL COMMITTEE**

*Inscription on a plaque posted at the entrance of Avila Beach pier*

A life size bronze sculpture depicting two Chinese railroad workers has been erected, with considerable backing from local civic leaders, Caucasians and Chinese, in Railroad Square, San Luis Obispo. Among these supporters is the esteemed Chinese-American citizen of San Luis Obispo, Howard Louis.

A table top bronze mockette, dedicated to the Chinese rail workers, can be seen at the Sacramento State Library and at Union Station Museum in Ogden, Utah. Here one can also see a diorama of trains traversing the Sierra Nevada Mountains and Summit Tunnel #6. In addition, in the grand lobby of this Museum, on the east wall, a mural 40 feet long and 20 feet high depicts the Chinese workers of the Central Pacific. The California State Railroad Museum, besides preserving the timeline and mementos of this period, has added a large exhibit illustrating the Chinese scaling the cliffs of Cape Horn.

Out of the many needs of the transplanted Chinese, a few simple acts of leadership have brought some credit to Chinese individuals.

*Lee Chew* a sixteen year old from Hong Kong immigrated to America in 1860 on a steamer and worked as a houseboy for a San Francisco family. A few years later he worked for the CPRR for three years and saved enough money to return to China wealthy and help build railroads in China.

*Moy Jin Mun* came to California in 1860 from a small village in Toishan and worked as a gold miner eking out gold dust from the tailings of abandoned mines.<sup>17</sup> He later organized a volunteer Chinese railroad crew who had agreed to work for free to build a Chinese mining railroad. The project failed for lack of financial backing.

*Howard Louis* was the youngest of eight children of Ah Louis. In 1873, Capt Harford contracted Ah Louis to build a narrow gage railroad from Avila to his operation at Port Harford. A plaque posted at the entrance of Avila Beach pier recognizes this accomplishment by stating (below):

In 1884 Ah Louis, a labor contractor, was asked by the Pacific Coast Railroad Company to build the Cuesta Ridge roadbed and tunnels connecting the north and south route in California going through San Luis Obispo. His 2,000 Chinese workers completed the job in 1886, creating a land boom in the area. The Cuesta Ridge grade was so steep that the roadbed had to be stretched into a horseshoe shape road making it one of the few tracks where a traveler situated in the front of the train can see the end of the train as it loops around the track.

In 1885 the Central Pacific and Pacific Coast Railroad companies merged to become the Southern Pacific Railroad Company.<sup>18</sup> The Company continued to built links and new lines in Tucson, Yuma, and Casa Grande in the southwest, giving birth to Chinatowns in these areas.

Howard Louis honors his father by continuing the pioneering civic leadership for the development of the City of San Luis Obispo. He spearheaded the successful "Art in Public Places" program, raising donated funds for the first life-size bronze statue depicting two Chinese railroad workers. This sculpture can be seen at the center of Railroad Square in San Luis Obispo.<sup>19</sup>

Another unsung achievement of the Chinese railroad workers is the building of the third longest tunnel in the United States at 6,940 feet, the San Fernando Tunnel in Santa Clarita. A second golden spike was driven at Lang Station in September, 1876, completing the rail line to Los Angeles.

Today, the legacy of our Chinese pioneers is carved in stone. Bloomers Cut, Cape Horn, thirteen tunnels, deep cuts and fills, forty miles of snow sheds, the record laying of ten miles of railroad track in one day, and the completion of 690 miles of the most treacherous roadbed of its time, each standing as a monument to their quiet but invincible spirit.

Our pioneers left a legacy beyond their achievements: their keen ability to adapt and assimilate to a new culture, maintain scrupulous work ethics under duress; establish a reputation for astute observation, and apply constant learning and commitment. These are the traits left by the Chinese pioneers for present and future generations to nurture and uphold.

*About the author:*

William F. Chew, grandson of a CPRR and SPRR worker, is the author of *Nameless Builders of the Transcontinental Railroad*. He searched the payroll records of the archives of Central Pacific Railroad from 1864 to 1867 to come up with the approximate number of Chinese railroad workers and to reconstruct the progress of the construction. The research, interviews and writing took over five years and the book was published in 2004.

*References*

1. Ambrose, *Nothing Like it in the World* - pgs 363-366
2. Central Pacific Railroad, *Building the Central Pacific: A Narrative History* - [www.learncalifornia.org](http://www.learncalifornia.org).
3. California State Railroad Museum (CSRRM), Commemorative Plaque, Sacramento, Calif.
4. Kraus, *High Road to Promontory* - p-151
5. CSRRM Library, Sacramento, Calif.
6. Ambrose, *Nothing Like it in the World* - p. 149
7. Chew, *Nameless Builders of the Transcontinental Railroad* - Trafford Publishing, 2004
8. CSRRM, Sacramento, Calif., pgs. 49-51.
9. Ibid, Payroll Sheet 102
10. Ambrose, *Nothing Like it in the World* - p.148.
11. Ibid, p.157
12. Ibid, pgs. 244-247.
13. Ibid, pgs. 349-351.
14. Chew, *Nameless Builders of the Transcontinental Railroad* - Trafford Publishing, 2004
15. Kraus, *High Road to Promontory* - p-274
16. *History of the Santa Clarita Valley, its roads, and railroads.*
17. Southern Pacific Railroad, [en.wikipedia.org/wiki/Southern\\_Pacific\\_Railroad](http://en.wikipedia.org/wiki/Southern_Pacific_Railroad)
18. Chew, *Nameless Builders of the Transcontinental Railroad* - Trafford Publishing, 2004, pgs. 92-93

*(From Portraits of Pride II, Appendix B, p. 263)*

1864-1869

Central Pacific Railroad Company recruits Chinese workers from Kwantung (now Guangdong) Province for the first transcontinental railroad. 10,000 workers were hired, of which 9,000 were Chinese—1,000 workers died on the job. Leland Stanford, president of the Central Pacific Railroad, reported that not less than 15,000 Chinese laborers could be procured the next year—enabling the push on the work so as not only to complete it far within the time required by the Acts of Congress, but so as to meet the public impatience.

<http://cpr.org/>

<http://www.nps.gov/gosp/>

<http://cpr.org/Museum/Chinese.html>

[http://us\\_asians.tripod.com/timeline-1600.html](http://us_asians.tripod.com/timeline-1600.html)