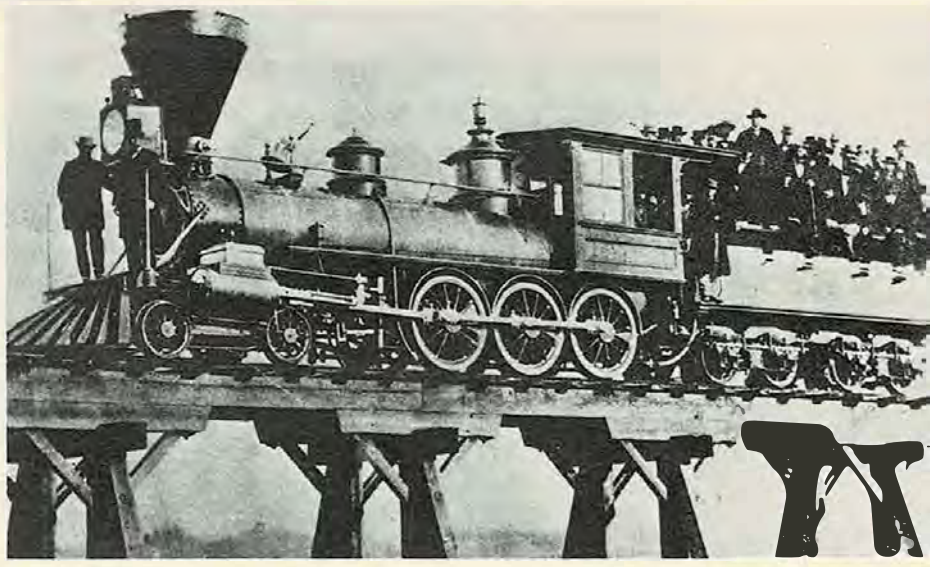


Theodore Judah's map of the Sacramento Valley Railroad.

CENTRAL PACIFIC RAILROAD

A more convenient link to the East than the existing roads was required to supply the needs of the growing California population. Therefore, a transcontinental railroad was conceived, the Central Pacific (CP). Much has been written about this railroad, the parent system of a vast network of rail lines which ultimately became the Southern Pacific Railroad. The original CP was incorporated on June 28, 1861, by four Sacramento merchants, who knew little about railroads, but a bit more about business. In fact, they had only two assets — they were all Yankee traders and businessmen from New England and they had obtained the services of an exceptionally competent Civil Engineer who convinced the financiers that he knew a route through the Sierra adequate for a rail line. In lasting tribute to this engineer, Theodore Judah, his original survey through the Sierra is still in use today as the Southern Pacific's main line to the east. Judah had surveyed many portions of his route long before any thought was given to a railroad. In fact, Judah himself had originally planned his route as a wagon road through the mountains.

The original Central Pacific portion of the line ran from Sacramento eastward to Promontory, Utah, totaling about 690 miles. Ground breaking took place on January 8, 1863, at Front and K streets in Sacramento, and was completed on May 10, 1869 at the historic "gold spike" ceremony at Promontory Point, Utah,



The "John Conness" on the day of its initial trial by the Central Pacific, March 16, 1865.



The Central Pacific's first crossing of the American River was immediately adjacent to its present crossing near Cal Expo.



Construction by the Central Pacific of the predecessor to the I Street Bridge.



Snowshed around Crested Peak, near Donner Summit.

where it met with the Union Pacific. Later that same year, the CP bought an additional 52 miles of track from the Union Pacific Railroad to complete Central Pacific rails into Ogden, Utah. Regular service commenced on the line between Sacramento, and Omaha, Nebraska, on May 13, 1869.

In 1867, experimental snowsheds were built in the Sierra, and by October, 1869, about 37 miles of wooden sheds had been built at a cost of over two million dollars. It was, as one veteran railroader said, "like railroading in a barn." Even with the snowsheds, the record snowfall of 1889-1890 blocked the line over the Sierra for two and one-half weeks. In March, 1902, construction began on the 103 mile Lucin Cutoff, which saved 44 miles of main line length. The cutoff crosses the Great Salt Lake where the lake is 28 miles across, and almost 13 miles of this crossing is on trestle.

Between 1914 and 1925 the line was double tracked, the last obstacle being the 10,332 foot summit tunnel in the Sierra. This tunnel was bored for double track, but it was found that the new westbound grade was too steep for efficient operation, so eastbound trains now roll through a summit tunnel wide enough for two tracks.

Aerial view of Southern Pacific complex taken in 1925.



Central Pacific Railroad Begins Construction in Sacramento

The Central Pacific Railroad broke ground at Front and K Streets in Sacramento on January 8, 1863, the Union Pacific at Omaha on December 2, 1863. Crocker took charge of construction. The Central Pacific laid its first rail on October 26. The Central Pacific's first locomotive, No. 1 *Governor Stanford*, was placed in service on November 10. Most of the rail, supplies and equipment for the Central Pacific had to be shipped around Cape Horn at the tip of South America. It typically took from three to seven months or longer for shipments to arrive from the East.

Progress was slow for both companies during the war years with price of materials high and labor scarce. The Railroad Act of 1864 doubled the resources made available to the railroads by the previous act.

The Central Pacific pushed their rails 18 miles east of Sacramento to Roseville by February 1864 and train service began in April. Track was completed 31 miles to Newcastle and trains began running June 10. Progress slowed as track crews entered the Sierra Nevada foothills. Winter weather and the increasing necessity for tunneling in the mountains began to slow progress further. Railroad service began to Auburn, 36 miles east of Sacramento, on May 13, 1865. The CPRR reached Clipper Gap, 43 miles away, on June 10, 1865, and Colfax, 55 miles away, was reached on September 10, 1865.



The work began with the surveyors who selected the best route. The graders followed behind the surveyors, digging through the hills, blasting tunnels, filling in the valleys and building bridges. All grading and track laying was done by hand, using picks and shovels, black powder for blasting, and mule carts to haul the debris away. Behind the graders followed the track layers, laying down the hand hewn wooden ties and rails. The rails were measured to make sure they were exactly the right distance apart then spiked into place using specially designed hammers.



Silver was discovered in Nevada in 1865. Many able bodied men left for Nevada to search for silver, depleting the work force of the Central Pacific. The Central Pacific had hired only white men (mostly Irish) up to this point in time. Faced with a shortage of white workers willing to work on the railroad, Charles Crocker, amid much dispute, began hiring Chinese workers to fill in for the white labor shortage. Although initially thought to be too weak or fragile to do this type of work, the Chinese workers proved to be very efficient and industrious. The decision was made to hire as many as could be found in California, and others were imported from China. The construction crews worked from sunrise to sunset, six days in the week.

An estimated 6000 Chinese workers faced a formidable challenge blasting rock and cutting a roadbed through the Sierras. The rock was so hard that as little as seven to eight inches of progress were made in a day, although the use of nitroglycerin did speed up the process in 1866.

On December 3, 1866 the Central Pacific opened 92 miles to Cisco, California. The first CPRR locomotive crossed the California - Nevada border on December 13, 1867. The mountain work was soon completed, and the CP was pushing eastward across the Nevada plane. Service opened to Reno, Nevada, 155 miles from Sacramento, on June 19, 1868.

Track construction continued eastward following the Truckee River to Wadsworth, then the *California Trail* and Humbolt River eastward toward Utah. Service to Winnemucca began on October 1, 1868, and Argenta on November 19, 1868. Tracks were completed 10 miles east of Elko, Nevada, 478 miles from Sacramento, at the beginning of 1869.



To reduce conflict with the local Native American groups James Strobridge, the construction superintendent of the Central Pacific, offered the Paiute and Shoshone Indians free rides on the trains. The Central Pacific also employed some Native Americans building the railroad.



MAP
of the
CENTRAL PACIFIC RAILROAD
of CALIFORNIA
and its
Connections

Distances from SAN FRANCISCO	Miles	Minutes
133 miles to SACRAMENTO	50	40
189 do..... CISCO	59	45
243 do..... SUMMIT	70	43
267 do..... TRUCKEE	50	50
327 do..... WADSWORTH	50	45
403 do..... WINNEMUCCA	43	55
568 do..... CARLIN	40	30
699 do..... TOANO	40	50
828 do..... PROMONTORY	40	43
882 do..... OGDEN	43	50

W. MUNT 18 CEDAR ST. N.Y.

American Society of Civil Engineers
Sacramento Section

National Historic Civil Engineering Landmark

Central Pacific Railroad

References

<u>Central Pacific Railroad - Wikipedia</u>	<u>The Central Pacific and Union Pacific Railroads</u>	<u>The Meeting at Promontory Point</u>
<u>HAER No. CA-196</u>	<u>California State Railroad Museum complex</u>	