Promontory, Utah, May 10, 1869, when rails of the Central Pacific and the Union Pacific were joined to complete the first transcontinental railroad. The picture is taken from the U.P. locomotive number 119, looking westward. The four companies of the Twenty-first Infantry in formation are visible, as are the Central Pacific’s locomotive Jupiter and the tent-buildings of Promontory. This image is a copy of Alfred A. Hart’s stereoscopic picture, “The Rival Monarchs.”
The driving of the last spike in the Pacific Railroad at Promontory Summit on May 10, 1869, was the final act in a drama of competing railroad construction that has no parallel in the history of American railroads. Most historians of the Pacific Railroad have dealt with the great railroad race, but none has appreciated the extent to which it focused on the Promontory Mountains, where the last spike was to be driven. The fascinating details of construction activities in these mountains are revealed principally in the voluminous dispatches sent to their editors by reporters covering the final stages of the race. Much of this history remains buried today in the files of the San Francisco and Salt Lake City newspapers.

The national legislators who framed the Pacific Railroad acts of 1862 and 1864 made possible the great railroad race, for they failed, through accident or design, to fix the point where the Union Pacific and Central Pacific should unite to form one continuous line from the Missouri River to Sacramento. But practical considerations far removed from the halls of Congress motivated the race. Every mile of track, of course, brought its reward in subsidy bonds and land grants. There were, however, other compelling reasons for speed. Above all, both companies aimed for Ogden and Salt Lake City, for the railroad that captured these Mormon cities would control the traffic of the Great Basin. If the Central Pacific won, it would carry the trade of the Great Basin over its tracks to San Francisco; if the Union Pacific won, this commerce would flow east to the Mississippi. Each contender, therefore, bent its energies towards reaching Ogden and shutting the other out of the Great Basin. Each company, moreover, bore a constantly mounting interest on the government loan and on its own securities. Although the act of 1864 gave them until 1875 to finish the road, every day that tied up capital in construction without the offsetting returns of operation made the burden of interest
heavier. The Central Pacific faced the hard reality that the line over the Sierra Nevada had been expensive to build and would be expensive to maintain and operate. Without compensating mileage in the level country of Nevada and Utah, the railroad would be unprofitable. Finally, the surge of public interest that focused on the Pacific Railroad provided a less tangible but no less powerful incentive. Both companies were convinced that the one that built the greatest length of railroad would enjoy the greatest prestige in the eyes of the nation.¹

During 1868 and 1869, the decisive years of rivalry, both companies put grading crews far ahead of track, the Central Pacific in the Wasatch Mountains, the Union Pacific at Humboldt Wells, Nevada. In June, 1868, Leland Stanford, president of the Central Pacific, took the stage to Salt Lake City. During the next few months he contracted with Brigham Young and other prominent Mormons to grade his line from Monument Point, on the northwest shore of Great Salt Lake, to Echo Summit in the Wasatch Mountains.² The Union Pacific had already let a two million dollar grading contract to Brigham Young for work between Echo Summit and Promontory Summit.³

Thus, during the last half of 1868 Mormon crews worked on parallel grades in Weber Canyon, thereby deriving considerable profit from the rivalry and perhaps a measure of satisfaction at the discomfiture of the companies that had bypassed Salt Lake City. In the final reckoning, the Union Pacific and Central Pacific spent about one million dollars on 200 miles of grade that was never used. Also, since the Union Pacific in the end could meet only half of its financial obligation to the Mormons, Brigham Young obtained one million dollars in Union Pacific rolling stock to equip his own Utah Central Railroad, which was to link Salt Lake City with the main line at Ogden.⁴

By the end of 1868 the Union Pacific had finished grading to the mouth of Weber Canyon and was laying rails down Echo Canyon. The Central Pacific, its track still in eastern Nevada, had made good progress in grading between Monument Point and Ogden but had accomplished much less in Weber Canyon.⁴ Both companies forged ahead regardless of expense.

In October the Central Pacific had worked a clever stratagem that came very near succeeding. It had filed with the Interior Department maps and profiles of its proposed line from Monument Point to Echo Summit. Secretary of the Interior Orville H. Browning accepted the map. Stanford then proceeded on the theory that the Central Pacific line, regardless of the small amount of work done east of Ogden, was the true line of the Pacific Railroad, and the only one on which subsidy bonds could be issued. From his base in Salt Lake City he exerted himself to occupy and defend this line. In Washington, Collis P. Huntington filed application for an advance of two and four-tenths of a million dollars in subsidy bonds, two-thirds of the amount due for this portion of the line. A provision in the act of 1866 made this procedure entirely legal.

The Union Pacific, of course, protested mightily. Chief Engineer Grenville M. Dodge and the Ames brothers, Oakes and Oliver, hurried to Washington and used all their influence to block the move of the Central Pacific. Browning retreated, and in January, 1869, appointed a special commission, headed by Major General G. K. Warren, to go west and determine the best route through the disputed territory. Congressmen friendly to the Union Pacific exacted a pledge from Secretary of the Treasury Hugh McCulloch that he would not issue the bonds until the commission had reported.⁵

As 1868 drew to a close, Leland Stanford, in Salt Lake City, began to see that the Union Pacific would reach Ogden first. Charles Crocker and Construction Superintendent J. H. Strobridge might push their Chinese coolies to the limit, but they could not possibly beat the Union Pacific to Ogden. He still hoped that Huntington’s maneuvers in Washington would checkmate their opponents. But Secretary Browning’s vacillation, culminating in appointment of the Warren Commission in January, 1869, made this hope increasingly bleak. “I tell you Hopkins the thought makes me feel like a dog,” wrote Stanford, looking at the darkening picture. “I have no pleasure in the thought of railroad. It is mortification.”⁶

Stanford had already turned his attention to the country west of Ogden, rather than the Wasatch Mountains, as the area where the
contest would be decided. By occupying and defending the line from Monument Point to Ogden, the Central Pacific might yet gain enough bargaining strength to get into Ogden too, or at least to block the Union Pacific from moving west of Ogden.

The first forty-eight miles west of Ogden offered no construction problems. The line crossed perfectly level sagebrush plain skirting mud flats north of Bear River Bay. But between Blue Creek and Monument Point stood the Promontory Mountains, a rugged hill mass extending thirty-five miles south into Great Salt Lake and ending at Promontory Point. A practicable pass separated the Promontory Mountains from the North Promontory Mountains. The summit of this pass lay in a circular basin at 4,900 feet elevation, about 700 feet above the level of the lake. On the west the ascent could be made in sixteen relatively easy miles; but on the east, where the slope was more abrupt, the ascent required, for an airline distance of five miles from Blue Creek to the Summit, ten tortuous miles of grade with a climb of eighty feet to the mile. Between Monument Point and Blue Creek the Central Pacific and Union Pacific attacked the last stretch of difficult country.

Stanford had turned his attention to the Promontory on November 9, 1868. He had a long talk with Brigham Young, who at length agreed to furnish Mormon labor for grading the Central Pacific line from Monument Point to Ogden. Young also promised, in allocating forces, to give preference to neither the Union Pacific nor the Central Pacific. With backing from the president of the church, Stanford had no difficulty contracting for this work with the firm of Benson, Farr, and West, which was headed by Mormon bishops. Young himself was to receive one-fourth of the profits. The contract called for Mormon gangs to prepare the line for track under the supervision of Central Pacific engineers. The engineers in turn were instructed to work the force compactly and not let it spread out over more of the line than could be completed.

By the end of the year the Central Pacific was well in control of the line from Monument Point to Ogden. Foreseeing a battle with the Union Pacific over right-of-way, Stanford had sent one of his contractors, Bishop West, to buy right-of-way through the Mormon ranches along the line. He had men on the entire line. About two-thirds of the grade in each consecutive twenty miles had been finished. Blasting and filling at the Promontory, however, moved slowly. The contractors gave many excuses, but Stanford “started Brigham after them,” and they began to work faster. Nevertheless, Stanford believed that Strobridge and the Chinese would have to put the finishing touches on the grade.

As late as mid-January the Union Pacific still had no graders west of Ogden, although its surveyors were running lines parallel to the Central Pacific grade. Stanford lamented on January 15 that the Union Pacific had so many lines, “some crossing us and some running within a few feet of us and no work on any, that I cannot tell you exactly how the two lines will be.” In February the Union Pacific finally put crews west of Ogden. By early March its grade had been all but completed to the eastern base of the Promontory. In mid-March the Mormon company of Sharp and Young, under contract to the Union Pacific, began blasting at the Promontory. Stanford complained on March 14, “The U. P. have changed their line so as to cross us five times with unequal grades between Bear River and the Promontory. They have done this purposely as there was no necessity for so doing.” But, he said, “we shall serve notices for them not to interfere with our line and rest there for the present.”

During March, 1869, both companies went to work on the Promontory with a vengeance. The grades snaked up the east slope side by side, blasting through projecting abutments of limestone, and crossing deep ravines on earth fills and trestles. At the crest they broke through a final ledge of rock to enter the basin of Promontory Summit. The last mile, across the level floor of the basin, required little more than scraping.

The rock cuts consumed enormous quantities of black powder and liquid nitroglycerine. At Carmichael’s Cut of the Union Pacific, four men filled a large crevice with black powder, then set about working it down with iron bars. Bar striking rock sparked an explosion that hurled one man high in the air, killing him, and grievously injured the other three.
The Mormon crews of the two roads engaged in friendly rivalry. A correspondent reported that:

The two companies’ blasters work very near each other, and when Sharp & Young’s men first began work the C. P. would give them no warning when they fired their fuse. Jim Livingston, Sharp’s able foreman, said nothing but went to work and loaded a point of rock with nitro-glycerine, and without saying anything to the C. P. “let her rip.” The explosion was terrific . . . and the foreman of the C. P. came down to confer with Mr. Livingston about the necessity of each party notifying the other when ready for a blast. The matter was speedily arranged to the satisfaction of both parties.10

At another point the Union Pacific graders took a four-foot cut out of the Central Pacific grade to fill their own. Their rivals later had to repair the damage.11

Of unfailing interest to observers were the Central Pacific’s “Big Fill” and the Union Pacific’s “Big Trestle,” which crossed a deep gorge about half way up the east slope. Farr and West began work on the Big Fill, which Stanford had predicted would require 10,000 yards of dirt, early in February, 1869, and were almost finished when a reporter visited the scene in mid-April:

A marked feature of this work . . . is the fill on Messrs. Farr and West’s . . . contract. Within its light-colored sand face of 170 feet depth, eastern slope, by some 500 feet length of grade, reposes the labor of 250 teams and 500 men for nearly the past two months. On this work are a great many of the sturdy yeomanry of Cache County. Messrs. William Fisher and William C. Lewis, of Richmond, are the present supervisors. Our esteemed friend, Bishop Merrill, preceded them. On either side of this immense fill the blasters are at work in the hardest of black lime-rock, opening cuts of from 20 to 30 feet depth. The proximity of the earth-work and blasting to each other, at these and other points along the Promontory line, requires the utmost care and vigilance on the part of all concerned, else serious if not fatal, consequences would be of frequent occurrence. Three mules were recently killed by a single blast.12

The Big Trestle was of even greater interest than the Big Fill. The Union Pacific lacked the time to fill in the deep gorge as the Central Pacific had done. Construction Superintendent Sam Reed and Consulting Engineer Silas Seymour therefore decided to bridge the defile with a temporary trestle. On March 28, with the Big Fill still under construction, they ordered their bridge engineer, Leonard Eicholtz, to start the Big Trestle.13 About 150 feet east of and parallel to the Big Fill, it too required deep cuts at each end.

Finally completed on May 5, the Big Trestle was about 400 feet long and 85 feet high. To one reporter, nothing he could write “would convey an idea of the flimsy character of that structure. The cross pieces are jointed in the most clumsy manner. It looks rather like the ‘false work’ which has to be put up during the construction of such works. . . . The Central Pacific have a fine, solid embankment alongside it, which ought to be used as the track.14 Another correspondent predicted that it “will shake the nerves of the stoutest hearts of railroad travellers when they see what a few feet of round timbers and seven-inch spikes are expected to uphold a train in motion.”15

Meanwhile, the rails came forward steadily and rapidly. The Union Pacific entered Ogden on March 8, 1869. By March 15 it was at Hot Springs, by March 23 at Willard City. On April 7 the first train steamed across the newly completed Bear River bridge and entered Corinne. At the same time the Central Pacific was still about fifteen miles west of Monument Point.

As the construction gangs tore at the Promontory, the contest continued on another front. Dodge and the Ames brothers thought that Huntington had been checkmated by the Secretary of the Treasury’s promise to withhold subsidy payment on the uncompleted Central Pacific line until the Warren Commission had turned in its report. They failed, however, to
take account of Huntington’s powers of persuasion. As the administration of Andrew Johnson drew to a close, the Treasury Department prepared the bonds for issue. By March 4, 1869, when Ulysses S. Grant took office, it had turned over nearly a million and a half dollars to Huntington. When the Warren Commission reached Utah, it found that the Union Pacific was almost to Ogden and had obviously won the race. The commissioners therefore confined their investigation to the line between the two railheads.  

But the issue was to be resolved in Washington, where Dodge and several others interested in the Union Pacific met with Huntington on April 9, 1869. They drew up an agreement “for the purpose of settling all existing controversies between the Central Pacific and Union Pacific Railroad Companies.” Each got half of the pie, for both were to have access to the Great Basin. The terminus was to be located at a point to be agreed upon by both companies within eight miles west of Ogden. The Union Pacific, however, was to build west from Ogden to Promontory Summit and there unite with the Central Pacific. Then it was to sell this segment of the line to the Central Pacific. Subsidy bonds were

Each got half of the pie, for both were to have access to the Great Basin.

Devil’s Gate bridge in Utah during the construction of the Union Pacific Railroad. Photograph by William H. Jackson.
to be issued to the Union Pacific as far as the terminus west of Ogden, and to the Central Pacific from the terminus to Promontory Summit. The following day, April 10, Congress by joint resolution put its stamp of approval on the agreement.

Union Pacific grading crews received orders on April 11 to stop all work west of Promontory Summit, where they had laid grade parallel to the Central's grade all the way to Monument Point.17 Three days later Stanford ordered all work halted on the Central Pacific east of Blue Creek, i.e., the eastern base of the Promontory.18

The Dodge-Huntington agreement removed all cause for further competition in grading and tracking. But competition had become a habit, and each company strained to reach Promontory Summit, the agreed meeting place, before the other. The Union Pacific had won the race to Ogden, but the heavy work on the east slope of the Promontory prevented its winning the race to the summit. And now, ironically, the Union Pacific was in effect a contractor for the Central Pacific. Its gangs worked with the knowledge that the line from Ogden to Promontory Summit, according to the agreement, would be turned over to the Central Pacific.

As the two railheads drew closer to each other, an air of excitement pervaded the construction camps. The Central Pacific dismissed its contractors during the first week of April and pushed crews of Chinese forward to finish the grades on the Promontory.19 The Union Pacific rushed Irishmen to the front to help the Mormon contractors finish the heavy work on the east slope.20

By April 16 the Union Pacific and Central Pacific tracks were only fifty miles apart. The Union Pacific, moving west across the desert from Corinne, slowed for want of ties.21 The Central Pacific had reached Monument Point and, one-fourth mile from the lake shore, established a sprawling grading camp. Housing the Chinese workers, it consisted of three separate canvas cities totaling 275 tents.22

As April drew to a close, officials of the two companies fixed Saturday, May 8, as the date of the ceremony uniting the rails.23 By the twenty-seventh the Union Pacific railhead approached Blue Creek, ten miles east of the summit. But rock cuts and three trestles required another twelve to fifteen days of labor, even though Reed, in order to break through by May 8, worked his Mormons and Irishmen night and day.24 Blasters tore at Carmichael’s Cut, one and three-fourths miles above the Big Trestle, while other workers built another trestle at the west entrance to Carmichael’s Cut. Below, the Big Trestle remained unfinished. A third trestle spanned Blue Creek. Stanford went to the Union Pacific railhead and offered the Central Pacific’s Big Fill for the Union Pacific track, but found no one with authority to change the line.25

Earlier, the Union Pacific had laid eight miles of track in one day, a feat that the Central Pacific had not accomplished. Crocker vowed to top this record, but he cannily waited until the distance between railheads was so small that the Union Pacific could not retaliate. On April 27, with the Central Pacific sixteen miles from the summit and the Union Pacific nine, Crocker set out to lay ten miles of rail in one day. But a work train jumped the track after two miles had been completed, and he decided to wait until the next day.26

On April 28, with men and supplies carefully massed, and with Jack Casement, Sam Reed, and other Union Pacific officials as witnesses, Crocker gave the signal. Eight Irish tracklayers supported by an army of Chinese coolies not only laid ten miles of track, thus topping the Union Pacific record, but set a record of their own that has yet to be equalled. At 1:30 P.M. the track had advanced six miles in six hours and fifteen minutes. The remaining four miles could easily be laid. The Central crews knew that victory had been won, and Crocker stopped the work for lunch. The site was named Camp Victory, and later became the station of Rozel. After an hour of rest the workers returned to the task. By 7:00 P.M. they had completed a little more than ten miles of track, and a locomotive ran the entire distance in forty minutes to prove to the Union’s observers that the work was well done.27

April 28 carried the Central Pacific railhead to within four miles of the summit. With the Union Pacific still at Blue Creek, Eicholtz ordered iron and ties hauled to the summit. On May 1 Union Pacific crews began putting in a
side track at the summit, where tents and board shanties already announced the birth of the town of Promontory.28 This same day the Central Pacific brought its rails to the summit, 690 miles from Sacramento.29

During the first few days of May the population at the Promontory reached its maximum. Central Pacific camps stretched all the way from Promontory to Monument Point, while Union Pacific camps dotted the valley of the summit and cluttered the plain at the foot of the east slope. They bore such names as Deadfall, Murder Gulch, Last Chance, and Painted Post. They rocked with the riotous living that had characterized their predecessors all the way from Omaha. Noted a reporter from San Francisco:

The loose population that has followed up the tracklayers of the Union Pacific is turbulent and rascally. Several shooting scraps have occurred among them lately. Last night [April 27] a whiskey-seller and a gambler had a fracas, in which the “sport” shot the gambler. Nobody knows what will become of these riff-raff when the tracks meet, but they are lively enough now and carry off their share of plunder from the working men.30

Asked what his people thought of such behavior, one of the Mormon graders replied, “Ah, we don’t care, so long as they keep to themselves.”31

Nor was all peace and quiet in the Central Pacific camps, although the California papers delighted in emphasizing the low moral tone of the Union Pacific. At Camp Victory on May 6 the Chinese clans of See Yup and Yung Wo, whose rivalry stemmed from political differences in the old country, got into an altercation over $15.00 due one group from the other. The dispute grew heated and soon involved several hundred laborers. “At a given signal,” reported a correspondent, “both parties sailed in, armed with every conceivable weapon. Spades were handled, and crowbars, spikes, picks, and infernal machines were hurled between the ranks of the contestants.” When shooting broke out, Strobridge and his foremen intervened to halt the proceedings. The score, aside from a multiplicity of cuts, bruises, and sore heads, totaled one Yung Wo combatant mortally wounded.32

Irish graders of the Union Pacific, on the other side of the Promontory, heard about the battle between the Chinese clans. They decided to have some fun themselves. Next day a gang of them showed up at the summit, where a Chinese camp had been laid out, and announced their intention “to clean out the Chinese.” Fortunately, the inhabitants of this camp were absent on a gravel train, and the Irishmen left without accomplishing their purpose.33

Both companies had already recognized that they had more men on the Promontory than the amount of remaining work could keep occupied. Beginning on May 3, therefore, they began discharging large numbers of men and sending others to the rear to work on portions of track that had been hastily laid. “The two opposing armies . . . are melting away,” reported the Alta California, “and the white camps which dotted every brown hillside and every shady glen . . . are being broken up and abandoned.”34 Riding out from Salt Lake City, photographer Charles R. Savage saw this breakup in progress, and wrote in his diary: “At Blue River [Creek] the returning ‘democrats’ so-called were being piled upon the cars in every stage of drunkenness. Every ranch or tent has whiskey for sale. Verily, men earn their money like horses and spend it like asses.”35

On May 5 the Union Pacific finally achieved the breakthrough. The last spike went into the Big Trestle and the rails moved out on to the frightening span. A train loaded with iron steamed across it. That evening the final blast exploded in Carmichael’s Cut. On May 6 the trestle between Carmichael’s Cut and Clark’s Cut was finished. The graders went through both cuts, made a swing around the head of a ravine, and passed through a final cut to link up with grade already laid in the basin of the summit. Here rails and ties had been arranged for rapid tracklaying and, at the summit itself, a 2,500-foot side track installed.36

The Central Pacific waited patiently—May 8 was still the date for joining the rails—as the Union Pacific tracklayers followed closely on the heels of the graders. Late in the afternoon of May 7 the tracklayers came within 2,500 feet of the Central Pacific’s end of track at the summit. Here they connected, by a switch, with the side track placed earlier. Using this side track,
the Union Pacific’s No. 60, with Jack Casement aboard, came to a halt opposite the Central Pacific railhead, about 100 feet to the southeast of it, and let off steam. The Central’s “Whirlwind,” No. 66, rested on its own track. The engineer greeted the Union’s locomotive with a sharp whistle, and “thus the first meeting of locomotives from the Atlantic and Pacific Coasts took place.”

This afternoon of May 7 was sultry and the sky heavy with rain clouds, which annoyed the photographers trying to capture the climactic scenes of construction. The Stanford Special arrived loaded with an array of dignitaries from California and Nevada headed by Leland Stanford and including U.S. Commissioners J. W. Haines, F. A. Tritle, and William Sherman; Chief Justice S. W. Sanderson of California; and A. P. K. Safford, newly appointed territorial governor of Arizona.

Also on board were the ceremonial trappings to be used in uniting the rails. There was a gold spike presented by David Hewes, San Francisco construction magnate. Intrinsically worth $350.00, it was engraved with the names of the Central Pacific directors, sentiments appropriate to the occasion, and, on the head, “The Last Spike.” There was another gold spike, presented by the San Francisco News Letter; a silver spike brought by Commissioner Haines as Nevada's contribution; and a spike of iron, silver, and gold brought by Governor Safford to represent Arizona. Finally, there was a silver-plated sledge presented by the Pacific Union Express Company, and a polished laurel tie presented by West Evans, the Central Pacific’s tie contractor.

The festive mood of the Stanford Special noticeably dampened when Jack Casement broke the news that the Union Pacific could not hold the ceremony on May 8, as planned, and would not be ready until May 10. The Stanford party faced the prospect of spending the weekend on the bleak Promontory. To make matters worse, rain began to fall. It rained for two days, turning the Promontory into a sea of mud. Stanford wired the unwelcome news to San Francisco, but too late. The citizens there had already started celebrating. Undismayed, they celebrated for three days.

Casement’s explanation was that the trains bringing the dignitaries from the East had been held up by heavy rains in Weber Canyon. But this was only part of the story. The special carrying Vice-President Thomas C. Durant, Sidney Dillon, and other Union Pacific officials
had reached Piedmont on May 6. A gang of five hundred workers surrounded Durant’s private car shouting demands for back wages. When the conductor tried to move the train out of the station, the men uncoupled Durant’s car, shunted it on a siding, and chained the wheels to the rails. Here he would stay, they said, until $253,000 was forthcoming. To make sure, they also took possession of the telegraph office. Durant submitted, wired Oliver Ames in Boston for the money, and paid off the strikers. He was released and managed to be at Promontory Summit on May 10, although the severe headache from which he suffered on that day may well have owed its origins to the experience at Piedmont. 59

Left in the role of host at Promontory Summit, Casement made up an excursion train, stocked with “a bountiful collation and oceans of champagne,” to take the Stanford party sight-seeing. The train left Promontory Saturday morning. At Taylor’s Mill the Union Pacific staged a “splendid luncheon.” “The most cordial harmony and good feeling marked their entertainment and all the toasts were drunk with loud applause.” From here the party went to Ogden, rode a short distance up Weber Canyon, and spent the night in Ogden. Next day, Sunday, they returned to Promontory, boarded the Stanford Special, and pulled back to Monument Point to enjoy a repast of plover killed by Stanford’s steward. 40

This same day, May 9, Casement’s workers at Promontory kept busy. As the rain continued, they laid the final 2,500 feet of track, leaving a length of one rail to separate their track from that of the Central Pacific. They also installed a “Y” for the locomotives to use in turning around. 41

Rain quit falling during the night, and May 10 dawned bright, clear, and a bit chilly. During the morning two trains from the East and two from the West arrived at Promontory bearing railroad officials, guests, and spectators. With the construction workers and assorted denizens of Promontory, the crowd totaled, according to the best estimates, 500 to 600 people, far short of the 30,000 that had been predicted. 42

Representing the Central Pacific were Stanford, Strobridge, Chief Engineer Samuel Montague, and others; for the Union Pacific, Durant, Dillow, Duff, Dodge, Reed, the Casement brothers, and many more. Important guests had come from Nevada, California, Utah, and Wyoming. Huntington, Hopkins, and Crocker, of the Central Pacific, did not attend; nor did the Union Pacific’s Oakes and Oliver Ames. Brigham Young sent Bishop John Sharp to represent the church. About fifteen reporters covered the proceedings. A battalion of the 21st U.S. Infantry (probably three companies) under Major Milton Cogswell, en route to the Presidio of San Francisco, were opportunely on hand to lend a military air, as was Brigadier General Patrick Edward Conner, district commander. The military band from Fort Douglas and the Tenth Ward Band from Salt Lake City supplied the music. 43

Officials of both roads had been unable to agree on details of the program. Stanford had come equipped with spikes and other ceremonial trappings, but Dodge wanted the Union Pacific to stage its own last spike ceremony. Only two preparations, therefore, had been made in advance. The speeches had been written and handed to newsmen in Ogden on Sunday. And the telegraphers had devised an apparatus for transmitting the blows on the last spike by telegraph to the waiting nation. An ordinary sledge (not the silver-plated one) had been connected by wire to the Union Pacific telegraph line, and an ordinary spike had been similarly connected to the Central Pacific wire. Five minutes before noon, when the proceedings were to begin, Stanford and Durant agreed on a joint program.

The crowd had grown loud and unmanageable, which interfered with the ceremony and made it impossible for most people to see what was happening. J. H. Beadle wrote that “it is to be regretted that no arrangements were made for surrounding the work with a line of some sort, in which case all might have witnessed the work without difficulty. As it was, the crowd pushed upon the workmen so closely that less than twenty persons saw the affair entirely, while none of the reporters were able to hear all that was said.” 44 This explains the confusion that has surrounded the history of the event ever since.

At noon the infantrymen lined up on the west side of the tracks, and Casement tried, with little success, to get the crowd to move back so
that everyone could see. The Union Pacific’s “Rogers 119,” Engineer Sam Bradford, and the Central Pacific’s “Jupiter” No. 60, Engineer George Booth, steamed up and stopped, facing each other across the gap in the rails. Spectators swarmed over both locomotives trying to obtain a better view. At 12:20 P.M. Strobridge and Reed carried the polished laurel tie and placed it in position. Auger holes had been carefully bored in the proper places for seating the ceremonial spikes. Officials and prominent guests formed a semicircle facing east on the east side of the tracks.

Edgar Mills, Sacramento businessman, served as master of ceremonies and introduced the Rev. Dr. John Todd of Pittsfield, Massachusetts, correspondent for the Boston Congregationalist and the New York Evangelist. Dr. Todd opened the ceremony with a two-minute prayer, while telegraph operators from Atlantic to Pacific cleared the wires for the momentous clicks from Promontory. After the prayer, Haines, Tritle, and President W. H. Nottingham of the Michigan Southern and Lake Shore Railroad drove the last save one of the iron spikes. At 12:40 P.M. W. N. Shilling, a telegraph key on a small table in front of him, tapped out, “We have got done praying. The spike is about to be presented.”

Next, Dr. W. H. Harkness of Sacramento presented to Durant, with appropriate remarks, the two gold spikes. Durant slid them into the holes in the laurel tie, and Dodge made the response, substituting for Durant whose headache sent him to his car immediately after the ceremony. Tritle and Safford presented the Nevada and Arizona spikes, and these Stanford slid into the holes prepared. L. W. Coe, president of Pacific Union Express Company, presented Stanford with the silver sledge, which
was then used symbolically to “drive” the precious spikes, although the blows, if indeed there were any, were not sharp enough to leave marks on the spikes.

Finally came the actual driving of the last spike—an ordinary iron spike driven with an ordinary sledge into an ordinary tie. Using the wired sledge, Stanford and Durant both swung at the wired spike. Both missed—to the delight of the crowd. Shilling, however, clicked three dots over the wires at exactly 12:47 P.M., triggering celebrations at every major city in the country. With an unwired sledge, Strobridge and Reed divided the task of actually driving the last spike in the Pacific Railroad.

Amid cheers, the two engineers advanced the pilots of their locomotives over the junction. Men on the pilots joined hands and a bottle of champagne was broken over the laurel tie as christening. The chief engineers of the railroads shook hands as photographers exposed wet plates. The military officers and their wives gave the precious spikes ceremonial taps with the tangs of their sword hilts, thus producing the only marks to be seen today on the gold spike. The Central Pacific’s “Jupiter” backed up and the Union Pacific’s No. 119 crossed the junction. Then No. 119 backed up and let “Jupiter” cross the junction, thus symbolizing inauguration of transcontinental rail travel.

Shilling sent off two telegrams: “General U.S. Grant, President of the U.S. Washington, D.C. Sir: We have the honor to report the last rail laid and the last spike driven. The Pacific Railroad is finished.” “To the Associated Press: The last rail is laid, the last spike driven, the Pacific railroad is completed. Point of junction, ten hundred eighty-six miles west of the Missouri River and six hundred ninety miles east of Sacramento.—Leland Stanford, Thomas C. Durant.”

The ceremony over, the precious spikes and the tie were removed. Even so, souvenir hunters made necessary numerous replacements of the “last spike” and the “last tie.”

J. H. Beadle briefly summed up what happened next:

Ceremony was then at an end, and general hilarity took place. The western train soon set out for Sacramento, but that of the Union Pacific remained on the ground till evening, presenting a scene of merriment in which Officers, Directors, Track Superintendents and Editors joined with the utmost enthusiasm. . . . At a late hour the excursionists returned to Corinne. 

Promontory had enjoyed its hour of glory.

POSTSCRIPT: THE GOLDEN SPIKE AND ME

By Robert M. Utley

“The Dash to Promontory” represents one of my first efforts to see my name in print. In 1960 I was thirty years old, lacking the sacred “terminal degree,” without a single book in print, but determined to make my career merging the National Park Service with the writing of western American history. For three years, I had been the lone historian in the regional office of the Park Service in Santa Fe, New Mexico. My most interesting task was collecting historical and other data to support the inclusion in the National Park System of worthy historic sites in the southwestern states. Golden Spike was one of these.

The little Golden Spike monument and plaque in the barren basin atop the Promontory Summit hardly fit what my colleagues conceived as a national park, although it had been declared a National Historic Site in non-federal ownership in 1957. One of my co-workers insisted that if the last spike in the transcontinental railroad had been driven a hundred miles to the east, in the Wasatch forests, he would favor such a park. In other words, history worthy of commemoration had to be surrounded by trees and scenery. Such attitudes raised bureaucratic resistance that blocked my attempt to launch a study.
Enter Bernice Gibbs Anderson. This matronly, acutely verbose resident of Brigham City had an obsession with the Golden Spike site. It consumed much of her life—at least if judged by the blizzard of prolix letters fired at members of Congress, the secretary of the Interior, the National Park Service, and finally President Dwight Eisenhower himself. In page after page of ornate prose, she kept up the crusade year after year. “This is sacred soil,” she wrote in one, “dedicated to the sacrifices of the thousands who labored in the great race to build the first transcontinental railway; will it take its rightful place in the heritage and traditions of America, preserved and protected by a grateful government, or will it remain desolate and forgotten to sink into oblivion?” All this paper, including one reprimanding the president, found its way to the Park Service and, ultimately, to my desk. That mass of letters caused the Park Service to authorize me to prepare a study establishing the national significance of the golden spike site, to be used in supporting its addition to the National Park System by an act of Congress. I embarked on this study in 1959.

Enter Bernice Gibbs Anderson.

In Salt Lake City, I found a sympathetic, helpful, and politically astute director of the Utah State Historical Society. Russ Mortensen not only pointed me toward research possibilities but aided in the quiet, undercover task of promoting Bernice Anderson’s dream. Russ opened the way for me to work in the Southern Pacific collections in San Francisco. There and at Stanford University, I made further progress. The best sources turned out to be the flood of newspaper correspondents that inundated the country where the dash to Promontory occurred.

In January 1960, returning from research in San Francisco, I stopped in Salt Lake City, obtained from the government motor pool a jeep pickup truck of uncertain reliability, and set forth in a snowstorm to connect with Bernice Gibbs Anderson. Snow covered the Promontory, but the two of us still examined all the historic attractions: the abandoned grades; the fills, cuts, trestle sites; and finally the basin itself. We compared to these historic remains the stacks of newspaper accounts I had brought from San Francisco.

West of the summit, however, the truck slid off the road into a snow-clogged ditch. Help was far too distant to call on. I worked and worked with the four-wheel drive to get out, but only succeeded in digging deeper. Finally, I turned to Bernice and told her the only solution was for her to hoist her ample proportions into the truck bed, over the rear wheels. She happily complied and indeed proved the solution.

Thanks to the persistence of Bernice Gibbs Anderson, and to the quality of the work that I fashioned into the 1961 article, and to the hard work of the Utah congressional delegation, the Golden Spike National Historic Site entered the National Park System in 1965.

As a prominent footnote, I need to plead guilty to using the highly improper term “Chinese coolies” to describe the Chinese construction workers. That was an offensive term in 1961 and has been ever since.

Notes

4. Stanford’s letters are confused on exactly how much grade was prepared. The evidence suggests that Mormons laid substantially complete grade for the Central Pacific from Monument Point to Ogden, and considerably less than complete grade from Ogden up Weber Canyon to the mouth of Echo Canyon.
7 Stanford to Hopkins, November 9 and 21, December 1 and 3, 1868, in ibid., 250–55.
8 Stanford to Hopkins, December 13, 1868, January 15 and March 14, 1869, in ibid., 257, 262–63, 266–67; Deseret Evening News (Salt Lake City), March 25, 1869; Salt Lake Daily Reporter (Salt Lake City), March 13, 1869.
9 Deseret Evening News, March 30, 1869.
10 Ibid.
11 Ibid.
12 Salt Lake City Daily Telegraph, April 14, 1869.
14 Daily Alta California (San Francisco), May 1, 1869.
15 Daily Morning Call (San Francisco), April 30, 1869 (quoting Evening Bulletin, April 29).
17 Eicholtz Diary, April 11, 1869.
18 E. B. Ryan to Butler Ives, Ogden, April 14, 1869, Mark Hopkins Papers, Stanford University.
19 Salt Lake City Daily Telegraph, April 9, 1869.
20 Years later General Dodge (How We Built the Union Pacific Railroad, Senate Executive Document No. 447, 61 Cong., 2 sess., 24) recalled that the Union Pacific’s Irishmen, contemptuous of the Orientals working on the grade above them, fired charges without warning in hope of blowing up some Chinamen. When the Central Pacific’s protests failed to bring results, the coolies quietly set a “grave” of their own and sent several Irishmen to their reward. Although repeated by most railroad historians, this episode needs considerably more verification. No mention of it has been found in the contemporary press, and it is unlikely that the swarms of reporters on the Promontory would have let such a good story pass unchronicled. Moreover, the Central Pacific did not replace the Mormons with Chinese until about April 7. By this same date the Union Pacific had finished its grading west of the summit and on April 11 pulled its graders back. On April 9 the Dodge-Huntington agreement fixed Promontory Summit as the junction. Thereafter there was no need for further parallel competitive construction, and there appears to have been none.
21 Daily Alta California, April 23, 1869.
22 Ibid., April 26, 1869.
24 Daily Morning Call, April 29, 1869.
25 Ibid., April 30, 1869. When the Central Pacific took over the line from Promontory to Ogden as specified in the Dodge-Huntington agreement, it re-laid track on its own grade from the base to the summit of the Promontory, thus abandoning the Union Pacific trestles.
26 Ibid., April 29, 1869.
27 Most histories of the Pacific Railroad relate this episode. This account is drawn from the contemporary newspapers and from Sabin, Building the Pacific Railway, 202–4.
28 Eicholtz Diary, April 28, May 1, 1869.
29 Daily Alta California, May 2, 1869. Eicholtz recorded in his diary under May 1 that the Central Pacific had reached the summit the day before. The Alta California’s correspondent on May 1 wrote that “the last tie and rail were placed in position to-day.”
30 Ibid., April 30, 1869.
31 Ibid., May 1, 1869.
32 Ibid., May 8, 1869; Daily Morning Chronicle (San Francisco), May 8, 1869.
33 Daily Morning Chronicle, May 9, 1869.
34 May 6, 1869, dispatch from Promontory of May 5.
36 Daily Morning Chronicle, May 8, 1869; Daily Alta California, May 6 and 8, 1869.
37 Daily Alta California, May 8, 1869; Daily Morning Chronicle, May 9, 1869.
38 Daily Morning Chronicle, May 11, 1869.
39 San Francisco Bulletin, May 10, 1869; Perkins, Trails, Rails and War, 237.
40 Daily Morning Chronicle, May 11, 1869; Sabin, Building the Pacific Railway, 211.
41 Daily Morning Chronicle, May 11, 1869. Sidney Dillon later stated in “Driving the Last Spike of the Union Pacific,” Scribner’s Magazine XII (1892), 258, that, during the night of May 9, the Union Pacific pulled a coup by laying a siding on to the summit and thus capturing Promontory as a Union Pacific station. When Central crews arrived early next morning for the same purpose they found that the Union had gained the advantage. This story is repeated in most railroad histories. No report of it, however, appears in contemporary sources, and the installation, at Promontory, of the Union Pacific siding on May 7 and the “Y” on May 9 casts some doubt on the truth of the story.
42 Unless otherwise cited, this account of the ceremony is drawn from J. N. Bowman, “Driving the Last Spike at Promontory, 1869,” California Historical Society Quarterly, XXVI (1957), 97–106, 263–74. This article is a careful reconstruction, based on all available sources, mainly newspapers, of the events of May 10. I have examined most of the papers myself. It differs materially from most of the secondary accounts, but is obviously the most authoritative discussion of the matter that is likely ever to be written.
44 Utah Daily Reporter (Corinne), May 12, 1869.
45 Quoted in Perkins, Trails, Rails and War, 241.
46 The Hewes gold spike and the Nevada silver spike are now in the museum at Stanford University, Palo Alto, California, together with the silver sledge. The whereabouts of the second gold spike, which seems to have been given to Dodge, and the Arizona spike is a mystery. The laurel tie was destroyed in the San Francisco fire of 1906, which also, incidentally, destroyed the records of the Southern Pacific (Central Pacific) Railroad.
47 Utah Daily Reporter, May 12, 1869.