few events in American history are as seemingly well known as the Golden Spike ceremony, yet few events are as clouded by myth, misinformation, and contradictory source material. As the importance of the ceremony is largely symbolic and the sources are daunting, few scholars have had the time or inclination to approach it seriously. Most treatments of it appear in larger works on the transcontinental railroad and consist of uncritical renditions of traditional ideas, sometimes spiced with colorful yet dubious stories from railroad old timers. The exception is a pair of articles originally published in the 1950s by Dr. J. N. Bowman of the California State Archives. Dr. Bowman's research was thorough and wide-ranging, but even he noted the contradictory nature of the historical accounts left by persons present at the event. Many of his conclusions were based on interpretations of conflicting data, and that in itself suggests cause for scrutiny. Almost a half-century later, it seems proper to take

Workers and officials as Union Pacific Engine 119 and the Central Pacific engine “Jupiter” come to celebrate the completion of the transcontinental railroad on May 10, 1869.

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another look at this historic event.\(^1\)

The United States was exuberant as the construction of the Pacific Railroad drew to a close in the spring of 1869. For many Americans, the building of this railway was the enterprise of the age—a sign of the nation's greatness. It touched emotions deep in the American character. Ideas of national union, manifest destiny, mastery of nature, and technical prowess were all embodied in the mammoth undertaking that was reaching completion. Union Pacific Railroad Director Sidney Dillon remembered, "Popular interest . . . had become so universal and absorbing, and the event of completion was awaited with so much anxiety, that a celebration of the occasion with some formal ceremony was not only proper but necessary to meet the public expectation."\(^2\)

For Californians, the completion had special significance. The years of intense isolation from families and countrymen were about to end. Dr. J. D. B. Stillman expressed the feelings of fellow Californians when he wrote:

> When we stood for the first time on the iron-bound shores of the Pacific a generation ago and looked upon their desolate mountains, after a voyage of more than half a year, we thought in our hearts that the last tie that bound us to our native land was broken. We did not dream that the tie that was to reunite us, and make this our native land forever, was then flourishing as a green bay tree in our woods.\(^3\)

Stillman was referring to the highly polished crosstie of California laurel, the ceremonial "Last Tie" used at the completion of the Pacific Railway, an event he was privileged to attend. For him and thousands of Americans in the Far West—people who had journeyed far, endured great hardship, and

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\(^1\) J. N. Bowman, "Driving the Last Spike at Promontory," Utah Historical Quarterly 37 (Winter 1969): 78. Due to the noise and crowding, few people at the ceremony could see and hear everything that occurred. Press reports from correspondents in attendance are often contradictory. Additionally, many accounts left by oldtimers years later are embellished, show the influence of previously published accounts, and contain factual errors. A few may be total fabrication. For a more complete discussion of the sources, see the author's report "The Golden Spike Ceremony Revisited" at Golden Spike National Historic Site.


\(^3\) Dr. J. D. B. Stillman, "The Last Tie," Overland Monthly, 1869 vol. III: 77.
pioneered a new country—the completion of this railroad was the fulfillment of a vision and the beginning of a new and better era.

Citizens of the East were excited by the completion of the transcontinental railroad, but westerners were profoundly affected. It is no wonder that most of the planning and inspiration for the ceremony came from Californians. Indeed, Central Pacific Railroad President Leland Stanford had, years before, turned the project's first shovelful of earth in Sacramento, and there was sentiment in California that he should travel to Promontory to drive the last spike. On the other hand, Sidney Dillon recalled that Union Pacific officials were “so much occupied pushing construction and overcoming pecuniary embarrassments...that there was no opportunity to make arrangements on any adequate scale.”

The completion ceremony of the Pacific Railroad might have been nothing more than a few windy speeches but for the inspiration and generosity of one man. David Hewes was not an official of either railroad and did not attend the event, yet he did more to shape the ceremony than any other. Hewes, who was Mrs. Jane Stanford's brother-in-law, owned steam shovels and had made his fortune as a contractor filling wetlands around San Francisco. A longtime Pacific Railroad booster, he was dismayed that so little was being done to celebrate its completion. Hewes wrote, “There was no proper sentiment being expressed by the people of the Pacific Coast, and especially by the great mining industries of the territories through which this railroad passed, it came to my thought that the Central Pacific and Union Pacific should not be united except by a connecting link of silver rails.”

He dropped the idea of silver rails but instead ordered a beautiful spike of gold to be cast and finished by the San Francisco firm of Schulz, Fischer, and Mohrig. This would be his contribution to the completion of the great railway. Hewes' golden spike was the size of a common railroad spike. It weighed 14.03 troy ounces and was 17.6 carat gold alloyed with copper. The casting sprue, described as a nugget, was left attached to its point. This was eventually broken off and fashioned into souvenirs. On its head was engraved “The Last Spike.” On the four sides of the shaft were engraved the starting and ending dates of construction, the officers and directors of the Central Pacific, and an appropriate sentiment. Before the spike left with California Governor Stanford for Promontory, it was displayed in both San Francisco and Sacramento.

In his reminiscences, Hewes also stated that he presented a polished tie of California laurel to be used in the ceremony. He may have had a role in the creation of the laurel tie, but it was actually presented by Central Pacific

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tie contractor West Evans. This crosstie was made and polished by Strahle & Hughes, a San Francisco manufacturer of billiard tables. A silver plaque on the face of the tie stated, "The last tie laid on completion of the Pacific Railroad, May 1869." Also engraved were the names of the maker, the officers and directors of the Central Pacific, and that of Mr Evans.7

Hewes's idea of precious spikes was soon picked up by others. Frank Marriott, publisher of the San Francisco Newsletter, jumped on the bandwagon and commissioned the creation of a second golden spike. Newspapers described it as about five inches long and about nine and one-half ounces in weight. Its inscription read, "With this spike the San Francisco Newsletter offers its homage to the great work which has joined the Atlantic and Pacific Oceans. This month, May, 1869."8

Anson P. K. Safford, the newly-appointed governor of Arizona, happened to be in California at the time and decided to contribute a ceremonial spike on behalf of his territory. This spike was made of iron and was beautifully embossed with gold and silver decoration. Not to be outdone, Nevadans contributed a solid silver spike to the proceedings. Ordered at the last minute, it was not properly finished or engraved when it was rushed by buggy to rendezvous with Stanford's Promontory-bound train.9

To ceremonially "drive" the spikes, a special silver-plated spike maul was ordered by the Pacific Union Express Company. It was made by Conroy and Conner and plated by Vanderslice and Company, both of San Francisco. This, too, was displayed in Sacramento and San Francisco before the ceremony.10

Having inspired the creation of the precious spikes, Hewes also originated the idea of signaling the driving of the last spike through the telegraph system. In consultation with officers of the Western Union Telegraph Company, he determined that a telegraphic signal from Promontory could be used to fire a heavy cannon at San Francisco's Fort Point. Hewes contacted Governor Stanford and "suggested to him the plan of attaching a wire to throw over the company's telegraph line and thus connecting with the Golden Spike, and have it operate in some way like a telegraph instrument, so that the signals for the firing of heavy guns by electricity could be produced." General Ord supported the idea, and the details were worked out by Central Pacific Telegraph Superintendent F. T. Vandenburg, Western Union personnel, and Major A. W. Preston. The idea grew and other cities were invited to announce the news the same way. The Daily Morning Chronicle of San Francisco enthusiastically reported that "arrangements have also been made to fire signal-guns by similar means at Chicago, New York, St. Louis and other principal Atlantic cities, and it is intended, if possible, to

8 The [Corinne] Utah Daily Reporter, May 12, 1869.
9 Bowman, "Driving the Last Spike," 81-83. Frank Leslie's Illustrated Newspaper reported in its coverage that Montana and Idaho contributed ceremonial spikes, but there is no other evidence to suggest this.
10 The [San Francisco] Daily Morning Examiner, May 6, 1869.
make the stroke of the President’s hammer fire guns in London, Paris, Vienna and St. Petersburg.”

Officials of the two railroads had set Saturday, May 8, to be the date of the completion event. As the trip to Promontory took more than two days, Governor Stanford and his companions left Sacramento the morning of May 5. Their special excursion train, which consisted of the locomotive Antelope, a provision car, and the Central Pacific Commissioners’ car, ran as an “extra” a few minutes behind the regular eastbound passenger train. As the special train departed around 6:45 a.m., Stanford stepped to the rear platform of his car. The crowd gave him “three hearty cheers and a tiger,” and Stanford bowed and removed his hat. Also aboard were government railroad commissioners William Sherman, J. W. Haines, and F. J. Tritle, California Chief Justice Silas W. Sanderson, Governor Anson P.K. Safford of Arizona, Collector G. T. Gage of Nevada, publisher Frederick Macrellish of the San Francisco Daily Alta California, photographer Alfred A. Hart, and prominent Sacramento citizens Edgar Mills, Dr. J. D. B. Stillman, and Dr. H. W. Harkness.

The train gradually climbed toward the crest of the Sierra Nevada, and the excursionists enjoyed striking views of the tall pines and deep canyons. Lunch was served near Donner Lake. As the train began its descent along the Truckee River, one of the travelers was riding up front on the engine’s pilot. It was at this moment that a crew of Chinese lumbermen, who did not know there was an unscheduled train coming, dropped a massive

12 The Daily Alta California, May 6, 1869; Stillman, “The Last Tie,” 77-78.
pine log down onto the track. Dr. Stillman later recalled that “The short turns of the road prevented the threatening danger from being discovered until we were almost upon it.” The quick action of the engineer and “the lightness of the train, saved us from catastrophe.” The heavy log was picked up by the cowcatcher and pushed aside allowing the train to pass.13

The gentleman riding the cowcatcher jumped and was only slightly injured, but the locomotive Antelope was crippled. It limped down the Truckee Canyon, pulling its train into Wadsworth, Nevada, near sunset. There the Antelope was uncoupled and sent to the shops for repair, and Stanford’s special was attached to the regular east-bound passenger train.14

With the Central Pacific engine Jupiter in the lead, the Stanford party continued eastward across the forty-mile desert between the Truckee River and the Sink of the Humboldt. In the days of the gold rush, this was arguably the worst section of the overland journey. The water was poisonous and there was no forage for livestock. Some of the excursionists had been forty-niners and had traversed this country when the going was rough. As they sped along in relative comfort, they pointed out the places where their animals had died, where they had abandoned wagons, and where they had rammed the muzzles of their precious guns into the earth—left behind in a desperate struggle to survive. On this night, they retired to spring beds and slumbered across Nevada.15

The Central Pacific dignitaries reached Elko the following day, May 6, where most of their fellow passengers departed for the mining camp of White Pine. Photographer Alfred A. Hart captured several views of Nevada stations and scenery as the trip progressed. It was an uneventful day for the excursionists, but it was a violent day at Promontory. Hundreds of Chinese workers at Central Pacific’s Camp Victory had been idle for days, and a riot broke out between the rival companies of See Yup and Yung Wo. An eyewitness wrote, “The row began about $15 due from one Company to the other.” Both groups of Chinese workers were “armed with every conceivable weapon.” In the fight that ensued, “Several shots were fired,” none were apparently wounded from the gunfire, and Superintendent Strobridge and several of the foremen stepped in to breakup the fight. In part the fight between the two Chinese factions was a result of “bitter feeling between them growing out of the political troubles in China.”16

Though the situation remained tense between the two Chinese groups, no further violence occurred. Hours later, on the morning of May 7, the

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13 Stillman, “The Last Tie,” 79. The pilot, sometimes called a cowcatcher, was an angled guard on the front of the locomotive whose purpose was to deflect obstacles blocking the track.
16 The Daily Alta California, May 8, 1869. The mid-nineteenth century was a time of civil unrest in many areas of China. Most notable was the Taiping Rebellion in the south, a fourteen-year struggle in which millions perished.
Stanford party arrived at Promontory, fully expecting the completion ceremony would take place the following day.

The California excursionists were soon disappointed. The day was rainy, and the camp of Promontory offered few civilized amusements. According to Dr. Stillman, the place consisted of a few tents and “such neighbors as would make it dangerous to venture away from the car, lest we have our throats cut . . . .” Spirits were dampened further when they visited the Union Pacific telegraph tent. There they received a terse telegram from UP Director Sidney Dillon stating, “Impossible to make connection until Monday noon.”

Though the UP offered no explanation for the delay, rumors surfaced. A telegrapher mentioned overhearing a message that Union Pacific Vice President Thomas C. Durant was being held hostage in Wyoming. The day before, Durant and UP director John Duff traveling eastbound had been waylaid by angry workers at Piedmont in southwestern Wyoming. Hundreds of men, unpaid for months, gathered around the train and demanded money. When their demands were rebuffed, they surreptitiously uncoupled Dr. Durant’s palace car from the train and as the engine moved away the palace car was not in tow. The incensed conductor demanded to know who had pulled the coupling pin, and his reply came from a pair of pistol-toting toughs who advised a rapid departure. Seeing the merit in the suggestion, the conductor signaled his engineer and the train departed without the Union Pacific officials.

Durant’s car was surrounded, moved to a sidetrack, and chained in place. Scouts were posted to raise an alert if troops approached, and the telegrapher was told he would be hanged if he wired for assistance. Leaders of the mob demanded that Durant send for the unpaid wages. If not, he would be taken to the mountains and fed nothing but salt horse and sagebrush. Durant telegraphed for $80,000, and the palace car remained under guard.

The following day, May 7, it appeared that the United States Army might come to the rescue. A troop train loaded with several companies of the Twenty-first U.S. Infantry, en route for duty in California, was approaching. Durant decided to avoid confrontation and arranged for the troop train to
run through without stopping. The hostage standoff continued as the mob waited for its money.22

Out at Promontory, the California excursionists huddled in their cars to escape the bad weather. Union Pacific tracklayers completed track to the summit area in the late afternoon, and UP engine 66 rolled to within about one hundred feet of the Central Pacific rails. Its safety valve popped, sending steam rings high into the still air, and the nearby Central Pacific engine Whirlwind answered with its whistle. Employees of the two roads examined each other’s locomotives, and East and West had finally met.23

If the delay of the ceremony was disagreeable for those at Promontory, it was infuriating for the people in Sacramento and San Francisco. They had planned huge celebrations for May 8, and the cities were decorated and ready to go. Central Pacific director Charles Crocker, in Sacramento, made assurances that as far as the Central Pacific was concerned, the last tie and spike of their road would be laid on schedule. The celebration committees notified the public that, in spite of the rumors, the parades and speeches would go on as planned.24

The morning of May 8, people in San Francisco and Sacramento prepared to celebrate. At Promontory, the Stanford party was greeted by UP track contractor Jack Casement and a special Union Pacific train. They were soon on their way eastward, enjoying dramatic views of the Great Salt Lake and the snowcapped Wasatch Mountains. Photographer Hart captured several views, and lunch was prepared at Taylors Mills near the Weber River. Returning through Ogden, the group walked about a mile into town to a hotel where they were the guests of railroad contractor and Mormon Bishop Chauncey W. West. The locomotive whistled at five o’clock, Stanford’s group returned to its train, and they began the journey back to Promontory. A correspondent accompanying the party wrote, “A more quietly agreeable excursion was never enjoyed anywhere than this, around the green shores of the mountain-girded sea, in the heart of the American continent.”25

It was not so quiet a day in California. Cannon at Fort Point and Alcatraz fired a salvo, steam whistles shrieked, and fire bells rang. A grand procession started around 11:30 a.m. through streets gaily decorated with flags and bunting. Mounted police and trumpeters led the parade, followed by Grand Marshall A. P. Stanford, Leland Stanford’s brother. Nine divisions trailed behind including soldiers, bands, fire engines, ethnic associations, craft workers, and decorated wagons. The seventh division featured David Hewes and fifty men wearing yellow capes bearing the name “S.F. Steam Paddy Company.” In Sacramento, thirty locomotives sounded their

23 Stillman, 82; The Daily Alta California, May 8, 1869.
24 The Daily Alta California, May 8, 1869.
25 Stillman, “The Last Tie,” 82; The Daily Alta California, May 10, 1869.
whistles, and a big parade followed. Orations, an original poem, and singing were offered later, and there was a grand illumination of the city that night.26

Back at Piedmont, Durant and Duff had something to celebrate. Ransom money had been sent to satisfy their kidnappers. An engine was dispatched to pick them up, and they arrived at the company headquarters in Echo City, Utah, at noontime on Saturday. Durant’s palace car was parked alongside President Lincoln’s former private car where Sidney Dillon was entertaining officers and ladies of the Twenty-first Infantry. The party soon moved to Durant’s car where a sumptuous dinner was provided. The guests enjoyed roast beef, ham, oyster pie, two desserts, and champagne. The regimental band provided entertainment through the evening. Before the affair broke up, Durant offered his car to the ladies and suggested they all accompany him to the laying of the last rail on Monday.27

There was still one major obstacle for the UP officials and their guests. Rising spring runoff in the lower end of Weber Canyon had rendered the bridge at Devils Gate impassable. One section of the trestle’s framework was washed out. Crews had been at work reinforcing the structure since the previous Wednesday. It was still not safe on Saturday, and westbound passengers had been forced to leave their cars and walk around the bridge in a driving rain. However, the water began to subside, and progress was made. At 4:00 p.m. Sunday, the bridge was jacked up and cars began to cross.28

Sunday was not a day of rest at Promontory, either. Union Pacific track crews broke ground on a turning wye and laid several hundred feet of track to connect with the Central Pacific. Only a small gap in the rails was left unfinished. At midday, the final stagecoach of the Wells, Fargo & Company’s Eastern Division pulled in with forty bags of mail for the next morning’s westbound train. Samuel V. Geltz, an employee of the company for eight

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years, sat in the driver’s seat of the stage. “The four old nags were worn and jaded, and the coach showed evidence of long service. The mail matter was delivered to the Central Pacific Company, and with that dusty dilapidated old coach and team the old order of things passed away forever.”

Bored with life at end-of-track, the Stanford party decided to back up some thirty miles to a scenic location on the Great Salt Lake. The Jupiter pushed the Stanford special to a siding at Monument Point where the assemblage spent several pleasant hours along the shore of the great inland sea. The steward took his gun and managed to procure a number of game birds for dinner while Alfred Hart took pictures of the train and the landscape from various high points.

Meanwhile, in Weber Canyon, Durant’s special train and the troop train carrying the Twenty-first Infantry slowly made their way toward the rickety but functional Devil’s Gate bridge. Lieutenant J.C. Currier wrote that after leaving the train and walking for about two miles he and the soldiers, “got here at last at the ‘Devil’s Gate’, and a fearful place it is... in this dark night with the black sides lit up by a bonfire at either end and the flickering lights of the workmen hammering away down in the bowels of the bridge seemingly holding on for dear life amid the roaring torrent! It almost makes me shudder to look! The cars were pushed down one by one and every one looked in silence as they were shoved slowly across.”

After watching the Durant car cross the bridge safely, the officers returned to the troop train and crossed about an hour later. By midnight they were in the Valley of the Great Salt Lake approaching Ogden. Sometime in the night, some of the infantry officers transferred to Durant’s train so that they would arrive in time to witness the ceremony. UP engineer Leonard Eicholtz recalled that the Durant excursion reached the construction camp at Blue Creek around daylight. At 7:00 a.m., the African-American cook, clad in a white coat, served a delicious breakfast. It was Monday, May 10, and the long delayed completion ceremony was just a few hours away.

While Durant and his friends enjoyed their meal, a Union Pacific passenger train carrying several sight-seers from Corinne traveled westward. By eight o’clock it was winding its way up the Promontory Mountains through deep cuts and across frightening trestles. The train arrived at the summit some twenty minutes later. A correspondent described the scene. “Two lengths of rail are left for today’s work... A large number of men at work ballasting and straightening out the track, also building a ‘Y’ switch. Fourteen tent houses for the sale of ‘Red Cloud,”

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29 The Daily Bee, May 13, 1869; The Daily Alta California, May 10, 1869. A turning wye is a section of track shaped like the letter “Y.” A train can back down one leg onto the tail, throw a switch, and go forward up the other leg headed in the opposite direction.
30 Stillman, "The Last Tie" 82.
32 "First Train West," 26; "History of the Golden Spike," 39-B.
‘R ed Jacket,’ and ‘Blue R un’ are about evenly distributed on each side of the track. Two engines are here.”

Major Andrew J. Russell of New York, one of three photographers present that day, began work around 9:00 a.m., taking a series of photographs looking southwestward. They show the morning Central Pacific mixed train backed to the gap between the rails where passengers, excursionists, and workers are gathered. Those traveling on had but a short walk from one train to the other. While Russell completed the series of photographs, Stanford’s special train, pulled by the Jupiter, approached the summit and came to rest on a siding behind a string of boarding cars, followed by two short work trains.

Eager to plan the ceremony, the California dignitaries found that their counterparts from the East had not yet arrived. They did not have long to wait. Durant’s special, pulled by Engine 119, steamed into the summit area around ten o’clock. The Californians walked over to the palace car and offered greetings. Durant was a fashion plate in velvet coat and necktie, Dillon and Duff looked like proud fathers about to give away the bride, and Chief Engineer Grenville Dodge was all business. After pleasantries were exchanged, Sacramento banker Edgar Mills and Dodge were delegated the job of working out the program.

Another train soon arrived from the east. This probably brought up the celebrants and invited guests from Ogden and Salt Lake City. From Ogden came Mayor Lorin Farr, Bishop Chauncey W. West, and Apostle Franklin D. Richards. Salt Lake City was represented by William Jennings of the Utah Central Railroad, Bishop John Sharp, Superintendent of Indian Affairs...
Colonel F. H. Head, Ferramorz Little, R. T. Burton, General Patrick E. Connor, and Utah Territorial Governor Charles Durkee. Salt Lake's Tenth Ward Band, with new uniforms and instruments, came to provide music. Conspicuously absent was Mormon President Brigham Young.36

A Chinese crew leveled the gap between the rails shortly before eleven. Then a white crew of Union Pacific workers laid the rail on the north side of the gap, and a cleanly frocked Chinese crew laid the final rail for the Central. A few spikes were left to be driven near the junction point. Western Union Superintendent W. B. Hibbard and Central Pacific Telegraph Superintendent F. T. Vandenburg supervised the men making the telegraphic connections. CP telegraph foreman Amos Bowsher and Western Union employee W. N. Shilling helped run wire to a specially prepared spike maul and iron spike. The operators on duty were Howard Sigler of the Central Pacific and W. E. Fredericks and P. Kearny of Western Union. Except for San Francisco, most cities had dropped the idea of using the telegraph to fire cannon. There had been too many technical obstacles. Instead, they connected their fire alarm systems to the telegraph line so that fire bells would chime as the last spike was driven in Utah.37

Around eleven-fifteen, the locomotive Jupiter pulled the Stanford special forward to the end of the Central Pacific rails. Edgar Mills and General Dodge had reached an impasse, and there was still no plan for the ceremony. The disagreement was over the question of who would drive the last spike. Stanford had turned the first shovelful of earth years before, and Mills felt strongly that he should drive the last spike. Dodge apparently felt that this arrangement would not properly honor the Union Pacific. He threatened UP's withdrawal from the joint ceremony. Mills and Dodge finally resolved the dispute minutes before noon. At the close of the event, there would be a last spike for each railroad, and they would be driven simultaneously.38

There was still much to do before the event began. The telegraph crew completed the wiring of the last iron spike and the maul that would pound it. Other laborers prepared a bed for the laurel tie. Russell captured an image of workers gauging and adjusting the last rails. The crowd of a few hundred was already pressing in, and some nearby wagons were lined up along the north side of the tracks to make an impromptu viewing plat-

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36 Frank Leslie's Illustrated Newspaper, June 5, 1869; The Deseret News, May 12, 1869. The reason for Brigham Young's absence may never be known with certainty, but he had been recently snubbed at end-of-track by Jack Casement and was already at odds with Union Pacific over payment for his construction contract.

37 The Daily Morning Chronicle, May 11, 1869; The Daily Examiner, May 11, 1869; The Chicago Tribune, May 11, 1869; The [Ogden] Standard, 7 May 1919; Heath, "Eye Witness Tells of 'Last Spike' Driving," 5. In the 1919 Ogden Standard, Shilling recounted his role as helping to connect the wires to the spike. He was not one of the three operators listed by The Chicago Tribune. Nevertheless, he claimed to have been at the key during the ceremony in subsequent discussions with historians Edwin Sabin and Levi O. Leonard. These later claims are suspect.

RENDEZVOUS AT PROMONTORY

form. Salt Lake photographer Charles Savage and Major Russell both posed the crowd and captured views of the last rail. Not to be outdone, Alfred Hart rearranged the crowd. Placing his camera in front of the Jupiter, he took two photographs showing the bed prepared for the laurel tie. The formalities were about to begin, and General Jack Casement urged the crowd to move back so that more people might see.39

The noontime sun gleamed overhead as spectators jostled for position and dignitaries took their places. It was sixty-nine degrees on the shady side of the Central Pacific telegraph car. Jupiter, decorated with flags, faced the highly polished 119 to frame the action. A large twenty-star American flag fluttered atop a nearby telegraph pole. South of the rails was a small table where the telegrapher and his instrument were ready to keep the world informed. A few hundred people were present. Most of the spectators were probably Casement’s workers who had ballasted track at Promontory that morning. Others were invited guests and excursionists from California, the East, and northern Utah. Some twenty women, mostly wives of railroad employees and military officers, were in attendance. Anna Reed, young daughter of UP engineer Samuel B. Reed, was one of a handful of children, and more than a dozen correspondents represented some of the nation’s leading newspapers. Few Chinese workers seem to have been present, perhaps due to the recent violence at Camp Victory. There was just a small crew to level the gap between the engines and lay the last rail. It was a diverse group. The reporter from the Chicago Tribune commented: “The day was clear and beautiful, and the little gathering of less than 1,000 people, representing all classes of our people . . . met to enact the last scene in the mighty drama . . . . The Occident and Orient, North and South, Saxon, Celt, Mongolian, each clad in his peculiar costume, met and mingled on common ground.”40

What happened next is not completely certain. While the various primary accounts generally agree on the elements of the ceremony, there is no consensus on the order of events. Fortunately, the press noted the time that reports from Promontory were received in the nation’s capital. At 2:27 p.m., Washington received the message that the invocation was in progress. The next message, received at 2:40, announced that the spike was about to be presented. Seven minutes later at 2:47, Promontory declared the great work “Done.”41

As the text of the speeches is known, perhaps five of the last seven minutes were taken up by oration. With the driving of the last spikes factored

39 The Daily Alta California, May 11, 1869.
41 Frank Leslie’s Illustrated Newspaper, June 5, 1869; The New York Times, May 11, 1869. Standard time did not exist in 1869. Communities operated on their local sun time. The difference between Ogden and Washington, D.C. is seventy-seven degrees of longitude. At four minutes a degree, this makes Promontory sun time approximately two hours and twenty minutes earlier than sun time in the nation’s capital.
in, there seems to be no time for other events in this period. The laying of the laurel tie, which many accounts place after the presentation of spikes, must have occurred earlier. Indeed, most reports of the ceremony go right from the invocation to the presentation of spikes, yet the telegraphic reports indicate thirteen minutes elapsed between these events. The placing of the laurel tie and the ceremonial laying of the last rail must have taken place during these thirteen minutes. This scenario is supported by a New York Times account which begins with the invocation, moves to the laying of the last rail, continues with the presentation of spikes and acceptance speeches, and concludes with the driving of the last spikes. While the order of the ceremony’s events may never be known with absolute certitude, the following interpretation matches the known events with the time sequence recorded in Washington, D.C.  

The ceremony began shortly after noon when master of ceremonies Edgar Mills stepped forward. He read the program of events and was followed by the Reverend Dr. John Todd of Pittsfield, Massachusetts. Todd, a reporter representing the Boston Congregationalist and the New York Evangelist, offered a lengthy opening prayer. The telegrapher sent a message to the waiting nation, “Almost ready. Hats off. Prayer is being offered.” Meanwhile, Russell, Savage and Hart captured views of the assembled crowd, some on foot and a few on horseback, pressing in around the engines on both sides of the track.

The next order of business was to complete the laying of the last rail. A few spikes on the last rail remained to be driven, and a final bolt had to be fastened to make the last rail joint. The task was assigned to United States railroad commissioners J.W. Haines and William Sherman, President Henry Nottingham of the Michigan Central and Lakeshore Railroad, and a few of the other distinguished guests. These gentlemen stepped forward, and to the amusement of the crowd, flailed away in the clumsiest fashion. Haines, track wrench in hand, tightened the last bolt on the final fishplate.

The two superintendents of construction, Central Pacific’s John Strobridge and Union Pacific’s Samuel B. Reed, then brought up the laurel wood tie. With Reed on the south end of the tie and Strobridge on the north, they hefted it to the junction point and slid it into place. Four augur holes had been drilled into it to receive the four precious metal spikes.

It was now time for the presentation of the ceremonial spikes. Dr. H.W. Harkness of Sacramento gave a flowery speech offering California’s
contribution of two golden spikes and the laurel tie. The telegrapher reported, “We have got done praying. The spike is about to be presented.” Stanford seems to have gotten the highly decorated Hewes golden spike while Durant likely received the second golden spike. F. J. Tritle from Nevada presented the silver spike to Stanford. The final ceremonial spike was then offered to Durant by Governor Safford on behalf of the Arizona Territory. The precious spikes were placed in the augur holes of the laurel tie and remained there through the rest of the ceremony.46

Governor Stanford made the first acceptance speech. After gratefully acknowledging the gold and silver gifts that had been presented, his remarks took on a decidedly commercial tone. He looked to the not-too-distant future when, he prognosticated, three tracks would be necessary to handle the flow of freight and passengers across the continent. Engines and cars would be light or heavy according to the speed required and the weight to be transported. He concluded by saying, “we hope to do, ultimately, what is now impossible on long lines—transport coarse, heavy and cheap products for all distances at living rates to the trade.”47

General Dodge responded for the Union Pacific in abbreviated fashion. He recalled that the famous Missouri Senator Thomas Hart Benton had once proposed the building of a giant statue of Columbus on the highest

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46 Heath, “Eyewitness Tells of ‘Last Spike’ Driving,” 5; Stillman, “The Last Tie,” 83; The New York Times, May 11, 1869; The Daily Alta California, May 12, 1869. Stanford returned home with the Hewes golden spike and the silver spike. It is likely he was presented these at the ceremony. The Arizona spike, which ended up with Sidney Dillon, and the second golden spike were likely presented to Durant.

47 The Deseret News, May 12, 1869; The Daily Alta California, May 11, 1869.
peak of the Rocky Mountains. Its outstretched arm would point westward denoting the route across the continent. Dodge exclaimed, “You have made that prophecy today a fact. This is the way to India.”

Edgar Mills added a few words, then L.W. Coe, President of the Pacific Union Express Company, made a final presentation to Governor Stanford. Offering up a silver-plated spike maul, he made a short facetious speech repeatedly using forms of the word express. It was the least memorable of the unmemorable speeches made that day.

The silver-plated maul was set aside, and the telegrapher flashed another message. “All ready now; the spike will soon be driven. The signal will be three dots for the commencement of the blows.” Durant took up a common maul and stepped to the north side of the track. Stanford took up the maul that had been wired to the telegraph line and advanced to the south side of the track. One iron spike, adjacent to the precious spikes and laurel tie, remained to be driven on each side. The Central Pacific spike was the one wired to the telegraph so that Stanford’s blows would be transmitted across the nation. The telegrapher tapped out three dots and signaled “O K” to Stanford and Durant.

Later in life, General Dodge recalled that neither of the two officials “hit the spike the first time, but hit the rail, and were greeted by the lusty cheers of the onlookers.” Stanford then made a few light taps on his spike, and his blows were transmitted across the nation. Anywhere from three to nine hammer blows were reported by different newspapers. In San Francisco the gun at Fort Point fired electrically as planned, and fire bells rang across the nation. Back at Promontory, the wire was disconnected from the CP spike, and several people were allowed to tap it. Construction superintendents Strobridge and Reed may have delivered the final blows. Edgar Mills announced the work done, and the Promontory telegrapher tapped out D-O-N-E.

There was an immediate outpouring of emotion. The crowd roared, and locomotive whistles screamed. The New York Times reported: “The vast multitude cheered lustily, and Dr. Durant and Governor Stanford cordially greeted each other and shook hands. The doctor proposed three cheers for the Central Pacific Company, which was followed by the Governor’s proposing three cheers for the Union Pacific Company.” Dr. Durant then exclaimed, “There is henceforth but one Pacific Railroad [cheers] of the United States.” The large crowd then offered “cheers… for the engineers,

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48 The Deseret News, May 12, 1869; The Daily Alta California, May 12, 1869.
49 The Daily Alta California, May 13, 1869.
50 The New York Times, May 11, 1869, May 12, 1869; Heath, “Eye Witness Tells of ‘Last Spike Driving,’” 5; Frank Leslie’s Illustrated Newspaper, June 5, 1869. The Times of May 11 recounts, “Driving of the last spikes by the two Companies; telegraph to be attached to the spike of the Central Pacific Company.”
51 The Daily Morning Chronicle, May 11, 1869; “History of the Golden Spike,” 29; The Chicago Tribune, May 11, 1869; Heath, “Eye Witness Tells of ‘Last Spike’ Driving,” 6; Bowman, “Driving the Last Spike,” 98. The Chronicle mentions that Mr. Strobridge assisted Stanford to drive the spike. Reed likely did the same for Durant. Dodge once mentioned that the spikes were finally driven home by the chief engineers of the two roads, perhaps meaning the chief construction engineers Reed and Strobridge.
contractors, and the laborers" who toiled building the railroad.\textsuperscript{52}

In the midst of the excitement, the telegrapher sent messages to U. S. President Ulysses S. Grant and the Associated Press announcing the completion of the Pacific Railroad. Edgar Mills took advantage of a momentary lull to read these telegrams to the crowd. Almost immediately, a congratulatory reply was received from prominent Californians in New York. A procession of dignitaries and invited guests were allowed to tap the golden spike. Some of the military officers used their sword hilts, leaving curious small dents on the spike's head. Then, their troop train having recently arrived, five companies and the band of the Twenty-first Infantry marched up to the strains of martial music.\textsuperscript{53}

The railroad officials retired to Durant's palace car to offer champagne toasts and read congratulatory telegrams from across the country. Journalists and military officers adjourned to the CP Commissioner's car. There John Strobridge and Division Superintendent James Campbell hosted a champagne lunch. Strobridge introduced his longtime Chinese foreman and invited him to the table. A reporter for the Alta noted, "This manly and honorable proceeding was hailed with three rousing cheers by the Caucasian guests, military and civilian, who crowded around Strowbridge [sic] to congratulate and assure him of their sympathy."\textsuperscript{54}

The dignitaries having quit the scene, a small crew quickly removed the laurel tie and replaced it with a common tie and iron spikes. The crowd rushed forward for souvenirs. Men slashed at the tie with knives, slicing off mementos. One knife blade broke out of its handle and flew across the tie, striking George Yates on the main artery of his wrist. The cut bled profusely, and Yates passed out. A physician was found to dress the wound, and Yates recovered.\textsuperscript{55}

\textsuperscript{52} New York Times, May 12, 1869.
\textsuperscript{53} "First Train West," 27; The Deseret News, May 12, 1869; Heath, "Eye Witness Tells of 'Last Spike' Driving," 6; Stillman, "The Last Tie," 83.
\textsuperscript{54} The Daily Alta California, May 12, 1869; The Chicago Tribune, May 12, 1869; "First Train West," 27; Stillman, "The Last Tie," 83.
\textsuperscript{55} The Utah Daily Reporter, May 12, 1869.
Perhaps fifteen or twenty minutes had passed since the driving of the spikes when, under the direction of the photographers, the special trains moved together so that the locomotive pilots touched. Engineer George Booth climbed out on the running board of the Jupiter and made his way to the front of the engine. Engineer Sam Bradford of Engine 119 did likewise. While the luminaries enjoyed champagne inside the private cars, workers swarmed over and around the locomotives as Andrew J. Russell posed his most famous image. Bradford and Booth stood on the engine pilots with arms outstretched, wine bottles in hand. The two chief engineers, Samuel Montague and Grenville Dodge, stood in front shaking hands. Both Savage and Russell captured variants of this scene. When the photographers were done, one of the bottles was broken and a "libation" was poured on the last rail. The engineers then backed their trains to their previous locations.  

Merriment continued. Telegrams from around the country were read to the dignitaries in Durant's car. Some were facetious and others whimsical. The two Casement brothers vied with each other in fun making. Souvenir hunters continued to whistle away chunks of the last common tie, and it had to be replaced several times before the day was done. Around 1:30 p.m., the officials emerged from the palace car for another round of photographs. Three of the infantry companies were posed at parade rest between the engines while dignitaries stood in front of Engine 119. The three photographers recorded this scene from different angles, most notably from the cab roofs of the two locomotives.

After this photographic interlude, the invited guests traded railroad cars. The dignitaries moved to the Stanford car, and the journalists and military men moved to Durant's car. Sumptuous dinners were served to both groups. Perhaps to facilitate train movements, the specials moved a bit westward into Central Pacific territory. Here Alfred Hart photographed the military bandsmen on and about the "Jupiter" and "119." Toasts and speeches were offered in the Stanford car where good spirits prevailed until Stanford spoke. In his unpublished autobiography, General Dodge remembered that Governor Stanford attacked the federal government, claiming the government's subsidy was a detriment rather than a benefit. Stanford's negative statement was not favorably received by others in attendance. Dan Casement got on his brother's shoulders and chided the governor. "Mr President of the Central Pacific: If the subsidy of the Central Pacific has been such a detriment to the building of these roads, I move you sir that it be returned to the United States Government with our compliments." Casement's rebuke "brought a great cheer... [and] put a very wet blanket over the rest of the time."  

58 "Personal Biography of Major General Grenville Mellen Dodge, 1831 to 1870," vol. 4 (Grenville M. Dodge Papers, Iowa State Archives), 953-954; Stillman, "The Last Tie," 84; "First Train West," 27.
As the party wound down, a Union Pacific engine brought a special delivery for the Central Pacific. Six beautiful new first class passenger cars, built in Springfield, Massachusetts, were hauled to the summit area. Two were attached to Stanford’s train and would be the first cars to make the entire journey across America. Around five o’clock, the railway officials bid their farewells, and the Jupiter’s train headed toward the sunset. Casement’s track gangs loaded onto work trains for the return to the construction camp at Blue Creek. They would soon be moving back along the line to work at Washatch. Union Pacific officials remained awhile longer but were heading east by six o’clock.

The evening of May 10, the officials of both companies rocked along the rails on their return journeys. For Durant, Dillon, and Duff, the celebration at Promontory had been a brief interlude. Union Pacific was almost out of money, and the headache of dealing with unpaid contractors continued. The Stanford group was likely in higher spirits. Their train averaged twenty-one miles per hour, including stops, on the way west. Aboard the new cars were the first through passengers on the Pacific Railroad. Lew H. Miller of Petaluma and William R. Cranna of San Francisco had left New York at 5:00 p.m. on May 4.

Returning with Stanford was the bulk of the ceremonial booty. In his charge were the silver spike maul, the laurel tie, the silver spike, and the Hewes golden spike. The silver spike, still in its rough original condition, was dropped off along the way so that it could be finished in Virginia City. There it was inscribed with the short speech that Tritle had made in its presentation and “To Leland Stanford President of the Central Pacific Railroad.” This spike was eventually returned to Stanford’s possession. Stanford kept the silver spike and maul but gave the golden spike back to its contributor, David Hewes. From the nugget that had been broken off the spike, Hewes had a number of mementos fashioned. Several small golden spike watch charms were made for various individuals, and a number of gold rings were fashioned. The rings featured a piece of rose quartz representing the Central Pacific and a moss agate for the Union Pacific. Among the recipients were U. S. President Grant, William Seward, Leland Stanford, and Union Pacific President Oliver Ames.

Years later, Leland Stanford gave the silver spike and maul to the university he founded in his son’s memory. The golden spike rejoined these artifacts when Hewes donated his art collection to Stanford University in 1892. All three items remain there to this day. The laurel tie, stored at the Central Pacific’s Sacramento shops for many years, was eventually transferred to Southern Pacific’s San Francisco office building. There it burned in the fire that followed the terrible 1906 earthquake.

59 The Daily Morning Examiner, 12 May 1869.
The Arizona Spike's story remained a mystery for many years. In the 1970s, heirs of Sidney Dillon donated the spike to the City Museum of New York. It had been given to Dillon after the ceremony and had been passed down in his family. Only the fate of the second golden spike is still unknown. Evidence suggests it may have been given to General Dodge or Dr. Durant.\textsuperscript{61}

In its own right, the ceremony at Promontory on May 10, 1869, was not very remarkable. Most would say it was poorly planned and executed. Only a few hundred people attended. As there was no stage or grandstand, few could hear or see what happened. The dignitaries' speeches utterly failed to capture the significance of the event, and the laying of the last rail was fumbled. Yet the ceremony was considered important in its own time, and it continues to have a powerful hold on the American mind.

In its time, the building of the Pacific Railroad was thought to be the grandest industrial accomplishment of the age. Public expectation demanded that its completion be honored and celebrated. That the dignitaries at Promontory were not up to the task mattered little. Private citizens had contributed golden and silver spikes as a tribute, and the clumsy officials and mediocre speeches could not detract from the glory of the accomplishment. What mattered was that the efforts of the builders had been recognized and the railroad completed.

The ceremony succeeded in spite of itself because the completion of the railroad touched Americans deeply. The Golden Spike Ceremony was, first of all, a celebration of what had been accomplished. Nowhere on earth had such a railroad been built. The technical obstacles in crossing the high mountains and vast deserts were enormous. The logistical problems of building a railroad in a wilderness were staggering, and the tasks of funding and administration were nightmarish. That the line was finished years ahead of schedule added to the triumph. In a time when the United States sometimes felt itself inferior to European nations, the completion of the Pacific Railroad signaled the world that the Americans were a great and capable people.

It was also a celebration of national union. Only a few years before, the building of the railroad had begun in the midst of the Civil War. Untold treasure and some 600,000 lives had been spent to reunify the country. The Pacific Railroad was an accomplishment of the entire nation. Reporters at the ceremony remarked how all classes of people and all regions of the country were represented in the great work. The rails were an undeniable expression of the national union recently purchased with so much blood. No longer were the ties between the two coasts distant and tenuous. The states and territories had become in fact a contiguous continental republic. In a sermon at New York's Old Trinity Church, the Reverend Dr. Francis Vinton commented that the greatest blessing to come from the railroad was that: "It will preserve the Union of these States... following the rule that

\textsuperscript{61} The Daily Bee, May 13, 1869; Stillman, "The Last Tie." 83.
pertain in the Old World, there might be a diffusion of interests and separation of governments in that section of country divided from us by the Sierra Nevada and the Rocky Mountains. But this railway counteracts such natural tendency to disunion, and binds the States of the Atlantic and Pacific into one nation.”

Finally, it was a celebration of the future. It was thought that the Pacific Railroad would become the highway of nations, stimulating commerce and advancing civilization. Walt Whitman, in his poem Passage to India, saw it as part of a divine plan, bringing the world closer together and eventually ushering in a utopian age:

Lo, soul! seest thou not God’s purpose from the first?  
The earth to be spanned, connected by net-work,  
The people to become brothers and sisters, . . . .

The railroaders saw a more pragmatic future. In his speech at the ceremony, General Dodge saw the railway as the trade route to Asia sought by Columbus so long ago. Sidney Dillon reminisced, “The five or six hundred men who saw the connection made at Promontory were strongly impressed with the conviction that the event was of historic importance; but as I remember it now, we connected it rather with the notion of transcontinental communication and trade with China and Japan than with internal development.”

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64 Dillon, “Historic Moments,” 254.
The predicted trade with Asia did not materialize. The railroad’s real future lay in its ability to stimulate development of the country it spanned. While the builders could not foresee this, there were those with more vision who did. Reverend Dr. Vinton, in his New York sermon, compared the trains to the caravans of old, noting that where the caravans stopped, cities grew. He predicted that the railroad would populate the country’s vast open spaces.65

On May 11, the nation went back to work, and in just a few months the luster faded from the triumph of the Pacific Railway. The wretched waste and windfall profits associated with the Credit Mobilier scandal tainted public opinion. Stanford and his Central Pacific partners were eventually among the most hated of the Gilded Age robber barons. The Pacific Railway became known more as a grand swindle than a grand accomplishment.

It took decades for the tarnish to wear off. The West developed, and people came to appreciate the importance of that first set of tracks across the continent. Old railroad pioneers like Grenville Dodge and Sidney Dillon were asked to share their reminiscences in print and in public. By the fiftieth anniversary in 1919, the public was again ready to celebrate the completion of the transcontinental railroad. In that year, Edwin Sabin published his excellent history Building the Pacific Railway, and Ogden, Utah, staged a grand parade and commemoration on May 10. With the 1924 release of John Ford’s eleven-reel silent film The Iron Horse, the story of the first transcontinental railroad had resurfaced as an American epic.

Since then, the ceremony has been recreated numerous times in books, articles, and cinema. Congress made the location of the event a national historic site in July 1965, and its centennial re-enactment four years later garnered national attention. It continues as a common subject for authors and filmmakers. Symbolic of greed, nobility, diversity, technical prowess, determination, and hard work, the Golden Spike Ceremony was a quintessentially American event.