HISTORICAL BASE MAP
1869
GOLDEN SPIKE
NATIONAL HISTORIC SITE
UTAH

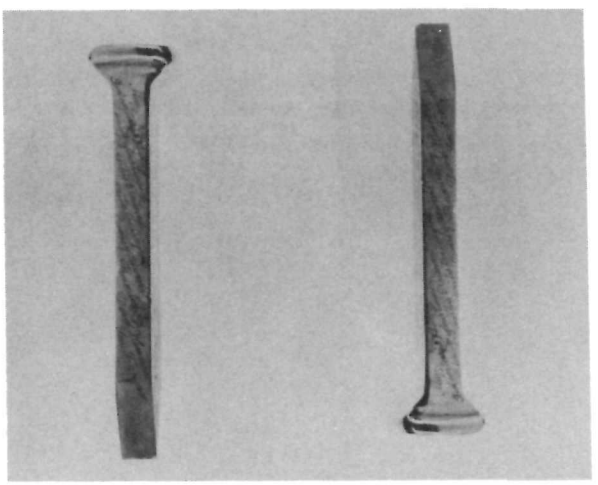
SEPTEMBER 10, 1969

HISTORICAL BASE MAP AND DOCUMENTED NARRATIVE 1869

GOLDEN SPIKE NATIONAL HISTORIC SITE UTAH

BY

F. A. KETTERSON, JR.



OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

SEPTEMBER 10,1969

U.S. DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

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PREFACE

This relatively brief text is intended to supplement and explain the evidence and reasoning for the seven historical maps embodied in this study. The work was carried out pursuant to Historical Resource Study Proposal, Golden Spike National Historic Site, H-1. This information, portrayed graphically, with historic sites and structures identified on the maps, is intended to constitute a reliable guide to the physical conditions that existed at Promontory Summit on May 10, 1869, immediately before that date, and in the several months that followed the driving of the final spike in the first transcontinental railroad.

While no claim is made that the last word is in, that research is completed, and that nothing more will ever be added to our knowledge of the physical and construction features of the Union Pacific and Central Pacific Railroads on the slopes of the Promontory Range and of the Summit area, we believe the series of maps are highly accurate and that the scene has been reconstructed passably well, considering the 100 years that have passed since the event itself.

In our studies of the subject, we have had the generous assistance of Mr. Gerald M. Best of Beverly Hills, California, an acknowledged authority on the first transcontinental railroad.

A continuing study of the railroad grades and the physical remains of the construction features on the slopes of the Promontory Range within the boundaries of the national historic site, and of old photographs and records of the two railroads engaged in the original construction, over a period of several years, lies behind the conclusions set forth in the text and maps of this study.

PROMONTORY SUMMIT, MAY 10, 1869

The primary purpose of this base map is to show the physical scene that existed at Promontory Summit at midday, May 10, 1869. Two other maps, less complete than the primary map, were generated from the material acquired during the study for the primary map. This supporting narrative deals in greatest part with the primary map, and in lesser fashion with the other maps.

The sources consulted for the drawing of these maps are historic photographs taken by Andrew J. Russell, Alfred A. Hart, Chester R. Savage, and William H. Jackson; narrative accounts of the construction of the first transcontinental railroad; physical remains at Golden Spike NHS; an earlier base map study done by Don Rickey of WASO, and sketches by railroad historian Gerald M. Best.

In general, the primary map and the study on which it is based reveal that the physical scene at Promontory Summit at the climatic moment of the joining of the rails was considerably more complicated than merely a single line of railroad and telegraph.

Central Pacific

On May 10, 1869, the Central Pacific track ended, of course, at the junction with the Union Pacific track, the spike site.

At a point roughly 225 feet west of the spike site is the east end of a Central Pacific passing siding[1] that was perhaps 2,000 feet long, and on the south side of the mainline. This 2,000 foot length is a very rough estimate. In addition to this passing siding, Central Pacific had erected a portable gallows turntable perhaps 2,100 feet west of the spike site and north of the mainline by May 10, 1869.[2] This turntable possibly had two storage tracks leading northeast from it on May 10, as indicated on the drawing. It definitely had one, and quite likely two storage tracks by July 1869.[3] There were definitely two storage tracks leading from the turntable by September.[4]

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1. "The Union Pacific Locomotive no. 119 and Central Pacific Locomotive No. 60, 'Jupiter,' at Promontory Summit, Utah, May 10, 1869" by Roy Appleman. Ms., 1966. Part IV, photograph No. 16. (Hereafter photographs used from the Appleman study will be cited as "Appleman photo no." followed by the number of the photograph.)' unnumbered postcard photograph donated by Gerald Best, which is a blow-up of a section of Appleman photo no. 16; non-scale pencil sketch maps no. 1 and 2 by Gerald Best.

2. Conversation with Gerald Best; Appleman photo no. 22. In this photo, the top of the gallows turntable is visible over the top of the stack of the "Jupiter;" Appleman photo no. 30 taken by William H. Jackson in July j869 shows the top of the turntable clearly.

3. Appleman photo no. 30, box cars in background on right border of photograph.

4. Appleman photo no. 56, center background. There is a smaller but clearer postcard size print of this photo donated by Gerald Best. It shows the top of the turntable and the cars on the storage track quite clearly. Best dates this photograph as of September 1869. The basis for this dating has to do with the arrival of the first Union Pacific fruit cars in Sacramento.

By September, these storage tracks extended eastward to a point near the spike site.[5]

As with the length of the passing siding, the figure given for the distance of a turntable from the spike site is the roughest sort of guess. The length of the storage tracks leading from the turntable on May 10, as shown on the map, is pure conjecture.[6]

Central Pacific Telegraph

The Central Pacific telegraph situation on May 10, was much simpler than that of the track. The sawed, square Central

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Best noted in a Sacramento newspaper the arrival of the first cars of this type from UP in Sacramento in September 1869. The cars on the mainline are brand new, consecutively numbered fruit cars. The likelihood that these cars are the ones that are mentioned in the Sacramento newspaper is very great.

5. Appleman photo no. 56.

6. The length of the siding, the distance of the turntable from the spike site, and the number and length of the storage tracks on May 10, are items that will need additional research if they are to be tied down with anything approaching accuracy. None of the photographs examined during the course of this study contained any reference point from which an accurate estimate of distance could be made. None of the photographs showed the storage tracks at all. If this investigation is pursued, the A. J. Russell collection at the Oakland Museum and photograph collections at the Huntington Library, at Stanford University, and at Southern Pacific headquarters in San Francisco should be examined. There may be photographs in these collections that will supply additional information relative to Promontory on May 10.

Pacific poles extended to a point just slightly east of the spike site.[7] The most easterly Central Pacific pole was the one with the flag pole and American flag. This pole was braced on the west side and also had a ladder leaning against it on top of the brace.[8]

The Central Pacific poles were spaced approximately 200 feet apart.[9] The Central Pacific poles were on the south side of the Central Pacific track. By September, but not by July, the main Cental Pacific telegraph poles had been shifted from the south side of the track to the north side.[10] At what point west of the spike site the telegraph was changed from the south side of the track to the north side of the tracks is not known.

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7. Appleman Photo No. 18 shows that the flag pole is slightly east of the spike.

8. Westward to Promontory - Building the Union Pacific Across the Plains and Mountains by Barry B. Combs, American West Publishing Company (Palo Alto 1969), pp. 74-75.

9. This writer found four stumps of Central Pacific poles on the south side on the old Central Pacific grade in the salt flats two or three miles east of Monument Point. The distance between these poles was approximately 200 feet.

10. Appleman photo no. 16 shows Central Pacific telegraph poles on south side of track on May 10; Appleman photo no. 30 shows this is still the case in July 1869; Appleman photo no. 59 (taken on the same day as Appleman photo no. 56) shows clearly that the poles were on the north side of the track.

Union Pacific

The Union Pacific layout at Promontory Summit on May 10 was a bit more complicated to treat than Central Pacific because there was more material available for study. In the Central Pacific portion of this study, a near complete lack of information in some areas resulted in conjecture. In the Union Pacific area, the relative richness of material calls for some interpretation and the treatment of an apparent key conflict.

The area where there is a seeming conflict centers around the question: Where did the Union Pacific tracks cross from the Union Pacific grade to the Central Pacific grade in order to effect the junction of the rails?

Three basic pieces of evidence and other relative information were examined in dealing with this question.

1. At a point one and one-half miles east of the spike site there is an eroding piece of grade that runs between the Union Pacific and Central Pacific grades. This is the first place west of a point about three quarters of a mile east of the Big Fill-Big Trestle area that the crossover could have taken place. Between these two points the grades are too far separated either in elevation and/or distance for a crossover to have been effected. That the crossover did not take place at the more easterly point

is evidenced by the fact, among other things, that Union Pacific made use of the Big Trestle.

2. A second piece of evidence is a photograph made by A. J. Russell from atop the "Jupiter."[11] It would appear from this photograph that the Union Pacific track reached the Central Pacific grade about 100 yards east of the spike site, and that the Union Pacific siding began about 250 yards east of the spike site.[12]

3. A third bit of evidence is what appears to be the remains of the beginning of a grade leading away from the CP grade on the south side at a point approximately 2,500 yards east of the spike site. One study quotes a newspaper as saying UP built a siding prior to May 8 that began 2,500 feet east of the spike site.[13] A photograph taken on May 9 shows a UP locomotive on a siding near the spike site.[14]

One possible interpretation of the evidence presented under 1, 2 and 3, above is as follows:

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11. "The Iron Spine" by Henry Sturgis. American Heritage, Vol. XX, No. 3, April 1969, pp. 56-57.

12. Distance estimates are based on a 200 foot distance between Union Pacific telegraph poles.

13. Golden Spike by Robert M. Utley and Francis A. Ketterson, Jr., Government Printing Office (Washington 1969), p. 44.

14. Appleman photo no. 14.

The crossover of the mainline track from the UP grade took place at a point one and one-half miles east of the spike site on what appears now to be an eroding length of grade between the two grades. At a point approximately 2,500 yards east of the spike site, and just inside the east boundary of the 160 acre visitor center area, UP began and built a 2,500 foot siding that ran a few yards beyond and opposite the spike site. The short bit of what appears to be eroded grade supports the beginning point. UP built mainline track on the CP grade on to the spike site.

The 2,500 foot siding track was laid on what UP had constructed as their mainline grade. This grade was abandoned as mainline grade as a result of the compromise that led to the joining of the CP and UP rails at Promontory Summit. Then, at a point roughly 250 yards east of the spike site, UP began a short, joining spur from their siding, and joined the mainline at at point approximately 100 yards east of the spike site. This left the remaining approximately 300 yards of UP siding as a deadend siding. The end result of this is that UP had constructed a passing siding roughly 500 yards long with a storage siding roughly 300 yards long. This is quite a logical conclusion to reach. However, there is a fly in what otherwise appears to be a very smooth ointment. In viewing the Russell photograph,[15]

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15. "The Iron Spine," American Heritage, April 1969, pp. 56-57.

it appears that a separation of tracks takes place approximately 250 yards east of the spike site, and if this is the case, it can be assumed that there is a switch at that point. What cannot be assumed, and is of utmost importance in supporting the passing siding portion of this interpretation, is the presence of a switch approximately 100 yards east of the site where the spur from the passing siding reached the mainline.

The Russell photograph[16] taken from atop the "Jupiter" shows the locomotive pulling the train immediately behind the No. 119 train coming into the mainline at what appears to be a fairly sharp angle - the angle at which it would come into the mainline from a switch. Another photograph shows what appears to be the same train immediately behind the No. 119 train.[17] In this photo, the train does not appear to be at an angle to the No. 119 train, nor is there any evidence of a switch.

A second possible interpretation of the evidence contained in points 1, 2, and 3 is that the crossover took place and one-half miles east of the spike site. Then UP began their siding 2,500 feet east of the spike site, and no spur back onto the mainline was constructed. In the Russell photograph, it appears that the train following the No. 119 train is coming in at an

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16. Ibid.
17. Appleman photo no. 28.

angle to the mainline. This apparent angle is quite probably just a curve. Three other photographs[18] taken from different positions showing this same situation indicate more a curve than an angle. One[19] of these three photographs was taken at almost the same time as the American Heritage photograph. This is evidenced by the men standing on the front of the No. 119, and one rather disinterested gentleman sitting on a pile of crossties with his back to the proceedings. In this photograph, curve, rather than angle, is indicated.

What appears to be a separation 250 yards east of the spike site can very well be the convergence that appears in any photograph when two parallel lines recede in the background. This effect is accentuated because the two grades were in fact closer together east of the spike site than they are at the spike site itself. At the point where they appear to converge, they quite probably are running parallel, as evidence on the ground indicates.

A third interpretation is based strictly on the evidence presented in the American Heritage photograph, and ignores and/or

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18. Appleman photos no. 20, 24, and 28.
19. Appleman photo no. 20.

counts erroneous the evidence presented under points 1 and 3 and the two interpretations above.

This interpretation contends that Union Pacific laid main-line track on their own grade to within approximately 250 yards of the spike site. At this point, a short grade and track were angled over to reach the CP grade about 100 yards east of the spike site and track was laid up to the junction point. A switch was installed where the short crossover grade and track began and the UP siding began there. The length of the siding may or may not have been 2,500 feet.

Of the three interpretations of the crossover and general Union Pacific track layout, the second, we believe, has the most evidence to support it.

The first and second interpretation are quite similar with the basic difference being the presence of a passing siding. The absence of any evidence of a switch at the west end of what could be a passing siding eliminates the first interpretation.

The third interpretation would have much to commend it if the American Heritage photograph were all of the evidence available. Based on this photograph alone, the interpretation does seem a quite logical one. However, photographic and documentary evidence and points made above eliminate the likelihood of it being a valid interpretation.

Union Pacific Telegraph

The Union Pacific telegraph pole construction in the spike site area is interesting. The line of poles came up to the spike site from the east and continued on out of sight to the west.[20] Wire was strung on these poles only as far as the pole immediately east of the most eastward Central Pacific poles. The wire crossover was affected between these two poles. The unwired poles were still standing and fading into the sunset as late as July 1869.[21] When they disappeared, and just how far west of Promontory Summit Union Pacific erected poles, is not known.

All of the telegraph poles west of the spike site, whose location can be seen, are on the south side of the Central Pacific - Union Pacific mainline, and north side of the Union Pacific mainline, and north side of the Union Pacific grade. This is also true of the most westward wired Union Pacific pole, and the next three poles east of it. However, between the fourth and fifth poles, a crossing of the track was made.[22]

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20. Appleman photos no. 15 & 16.
21. Appleman photo no. 30.
22. "The Iron Spine," American Heritage, April 1969, pp. 56-57. This photograph does not show the most westward wired Union Pacific pole. It is out of the photograph to the right.

This is evidenced by the fact that the fourth pole was on the south side of a train, and the fifth was on the north. The crossarms on these two poles are higher up the poles than on the other telegraph poles.[23] This was done to insure adequate clearance under the wires. These two poles may have been placed closer together than the other poles in the area to lessen the sag in the wires, this also being done for clearance reasons.

Miscellaneous

At midday, May 10, the shanty, tent, and board-fronted tent, "hell on wheels" town of Promontory had not yet sprung into existence. Chances are good that his sinful, but short-lived village began to take shape before nightfall. The speed with which other similar towns took shape during the building of the road makes this supposition quite likely. It was certainly well underway by May 15.[24] However, at the time of the Golden Spike ceremony, the presence of only fourteen tents scattered around the spike site can be identified from historical photographs.[25]

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23. Ibid.

24. "Coast to coast by Railroad: The Journey of Niles Searls - May, 1869." New York History, Vol. I, No. 3, July 1969, p. 311. This article is a series of letters from Searls to his wife written while he was making a round trip rail journey to California between May 8 and early June 1869. On May 15, he wrote from Promontory Point that, "A city is growing up here which dates from day before yesterday."

25. "The Iron Spine," American Heritage, April 1969, pp. 56-57; Appleman photos no. 14, 15, 20, & 22.

Promontory Summit, May-September 1869

Following the Golden Spike ceremony, Promontory began its life as the transhipment point for transcontinental passengers and freight. This period of Promontory's life lasted until early 1870[26] when the changing point was shifted to Ogden, thus effecting the April 9, 1869, agreement between the two companies.[27]

During the period May-September 1869, a number of additions and some changes were made in the area of the spike site. Exactly when these changes were made cannot be determined. Pictures were studied that were made in July and September 1869. Thus it can be said that some changes were made by July, and others by September.

By July, Union Pacific had installed a switch and siding of unknown length on the north side of the mainline. The switch was located about 25 or 30 feet east of the May 10 junction point.[28]

The only apparent change made by Central Pacific by July was the addition of a switch and a short, dead-end siding that ran eastward from near the east end of their passing siding.[29]

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26. Golden Spike by Utley and Ketterson, p. 54.
27. Ibid., p. 30.
28. Appleman photo no. 30.
29. Ibid.

This short siding appears to have been about 50 or 60 feet long. The possibilities for the storage tracks leading from the Central Pacific turntable have been explored above.

Although the July photographs studied did not show any views of the tent town of Promontory, it can safely be assumed that it was well established by July.

By September, Promontory had probably reached its peak as far as track, telegraph, and structures are concerned.

The greatest change in the area of track was the connecting of the Union Pacific siding built before May 10 on the south side of the mainline with the mainline at a point slightly west of the May 10 junction point.[30]

The situation with the storage tracks leading from the Central Pacific turntable has been discussed above.

Sometime between July and September, the Central Pacific Telegraph line was changed from the south side of the mainline to the north side. This, too, has been discussed above.

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30. Sketch map no. 3 and photographs supplied by Gerald Best. The photographs, one quite clear overall scene, the same as Appleman photo no. 56, and a blow-up of a section of the overall scene, show the switch were this connection was made. In his sketch map, and in conversations with Mr. Best, he is of the opinion that this switch is one end of a Union Pacific Y. This writer disagrees with Mr. Best's interpretation of the evidence. In Utley's "Special Report on Promontory Summit, Utah," the basis of the Golden Spike historical handbook, documentary evidence of the construction of a Union Pacific Y

By September, a number of structures had been erected on the north and south side of, and immediately adjacent to, the mainline. These are indicated on the map.[31]

Promontory Summit After September 1869

Information about Promontory Summit between September 1869 and September 1942, when the tracks at Promontory were pulled up, is quite sketchy.

After the terminus was shifted to Ogden, Promontory became a rather unimportant way station. It did serve as a station for helper engines that were used to help heavily-laden trains up the steep east slope of the Promontory mountains. Central Pacific constructed a turntable and, perhaps, storage barns for these helper engines near the point of the May 10, 1869 junction.[32]

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prior to May 10 is cited. Appleman photograph No. 30, taken by William H. Jackson in July 1869, shows clearly cars sitting on the Union Pacific siding south of the mainline. This siding runs nearly parallel with the mainline in the area where Mr. Best places what would have had to be nearly the center of the Y he indicates existed in September. This writer deems it highly unlikely that Union Pacific constructed a Y in this area between July and September. Negotiations for the final settlement of the terminus issue were in progress at this time, and it is unlikely that the Union Pacific management would have invested in a second Y at this time.

31. Appleman photos no. 56 and 59; sketch map no. 3 and photographs supplied by Gerald Best. This writer is much indebted to Mr. Best for his identifications for the buildings and for other assistance.

32. Undated sketch map by Frederick C. Houghton. This map probably shows the layout at Promontory in the period around 1880.

A bunk house, a section house, and a few other structures were built.[33] Just when this turntable was constructed is not known.

With the construction of the Lucin cutoff, Promontory's life as a mainline town came to an end.

The Railroad Within the Park East and West of Promontory Summit

Photographic evidence for the construction layout in May 1869, east and west of Promontory Summit is extremely sparse. The main resource on which to draw is the physical evidence on the ground. And what is on the ground is the end result of 73 years (1869-1942) of working railroad, and 27 years of erosion on the Central Pacific-Southern Pacific grade, and 100 years of erosion of the Union Pacific grade. One other source of information is a set of two Southern Pacific timetables (1905 and 1931) which cover the Promontory area.

In general, it can be said that the railroad scene east and west of Promontory has changed little in general layout since 1869. The Central Pacific-Southern Pacific grade was improved through the years, and at least one relocation of track was made at a point slightly east of the Big Fill. In A. J. Russell's

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33. Ibid.

plate No. 221,[34] a study of the railroad grades shows two parallel grades in the area where physical evidence on the ground seems to indicates that the Union Pacific grade crossed the Central Pacific grade. On the south side of the currently existing grade, this seeming evidence is very clear. On the north side, it is non-existent, and the opinion heretofore has been that the north side evidence eroded away.

The logical conclusion that can be drawn from the Russell photograph and the physical evicence is as follows:

Sometime in 1870, after Central Pacific had taken over the line from Promontory to near Ogden, the tracks were changed from the Union Pacific grade to the Central Pacific grade.[35] However, just east of the Big Fill and for about a mile further east, Central Pacific preferred the Union Pacific grade, and it was used. Thus, where physical evidence and previous maps show two crossings of the Central Pacific grade by Union Pacific, what really occurred is Central Pacific tied in with the Union Pacific grade at the east and west end of this one mile section. This

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34. Same as Appleman photo no. 3, but clearer in that it is a contact print from the original negative.

35. Golden Spike by Utley and Ketterson, p. 54.

conclusion explains the lack of physical evidence of a crossover at the point slightly east of the Big Fill.

One question that this conclusion does leave unanswered is, at what points did the Union Pacific grade cross the Central Pacific grade?[36] The Russell photograph indicates clearly that the point just east of the Big Fill was not one of the places where a crossing occurred.

By 1905, Southern Pacific had constructed three other sidings within the park boundaries.[37] When these sidings were built has not yet been established. The sidings were eliminated before 1931.[38]

The physical remains of construction within the park have been marked on map no. 3, a mark-up version of drawing no. NHS-GS-7000A.

For basic management and development purposes, the maps and narrative should provide adequate information in the spike site area. East and west of this area more information would be quite helpful, especially for interpretive purposes. Historic

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36. Ibid., p. 33 Leland Stanford complained that, "The UP have changed their line so as to cross up five times with unequal grades between Bear River and the Promontory."

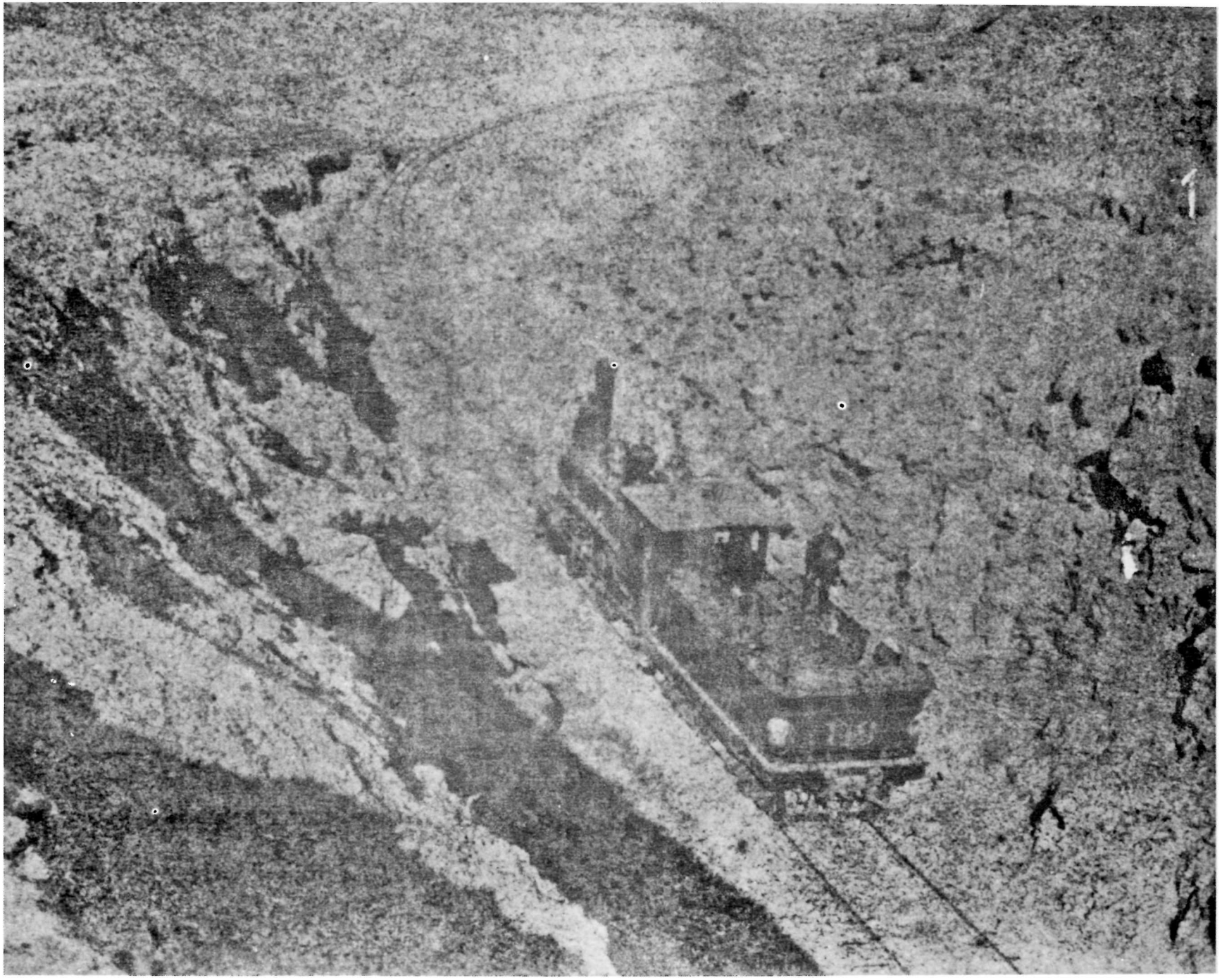
37. 1905 Southern Pacific timetable donated by Gerald Best.

38. 1931 Southern Pacific timetable donated by Gerald Best.

photographs would, of course, be the best source of information. However, with the exception of the Big Fill-Big Trestle area, there was little to catch the photographers' eyes outside the spike site area. The chances of finding many photographs of the park outside the spike site area are probably slim. Interpreters at the park will have to use the currently available evidence and information, and their good judgment to the fullest in interpreting the park east and west of Promontory Summit.

1. This view shows Union Pacific locomotive No. 119 in a rocky cut, possibly Carmichael's Cut on the east slope of the North Promontory Range. The picture was copied from an unidentified stereo view in the Union Pacific Railroad Museum in Omaha, Nebraska. The picture was probably taken by Andrew J. Russell early in May 1869.

Note. Identification of and captions for the pictures were provided by Roy E. Appleman, National Park Service.
The references in the text of this report to numbered pictures on the two locomotives, UP No. 119 and CP No. 60, or Jupiter, and to scenes at the site are to another extended research report of an earlier date and do not refer to the pictures as numbered in this study.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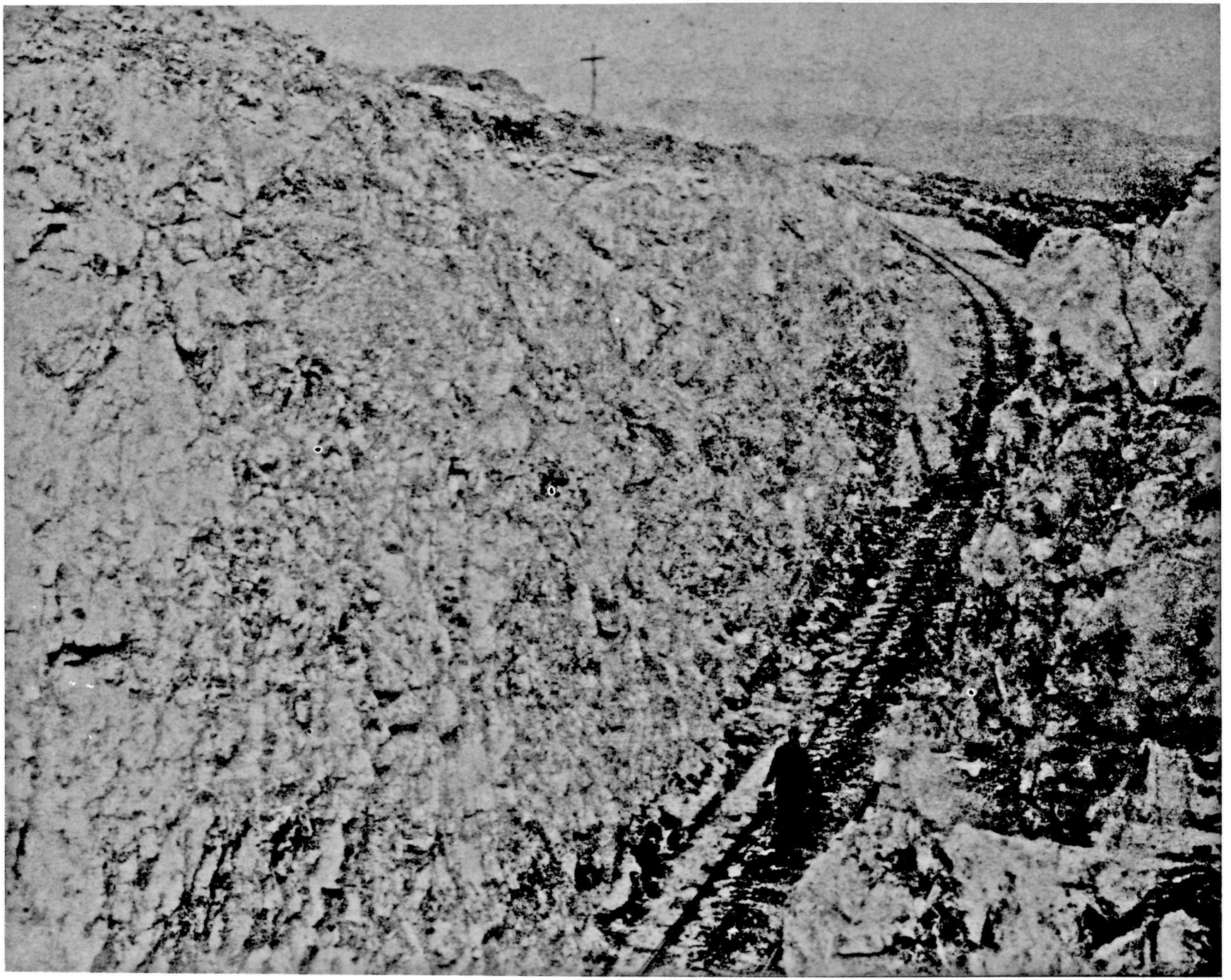
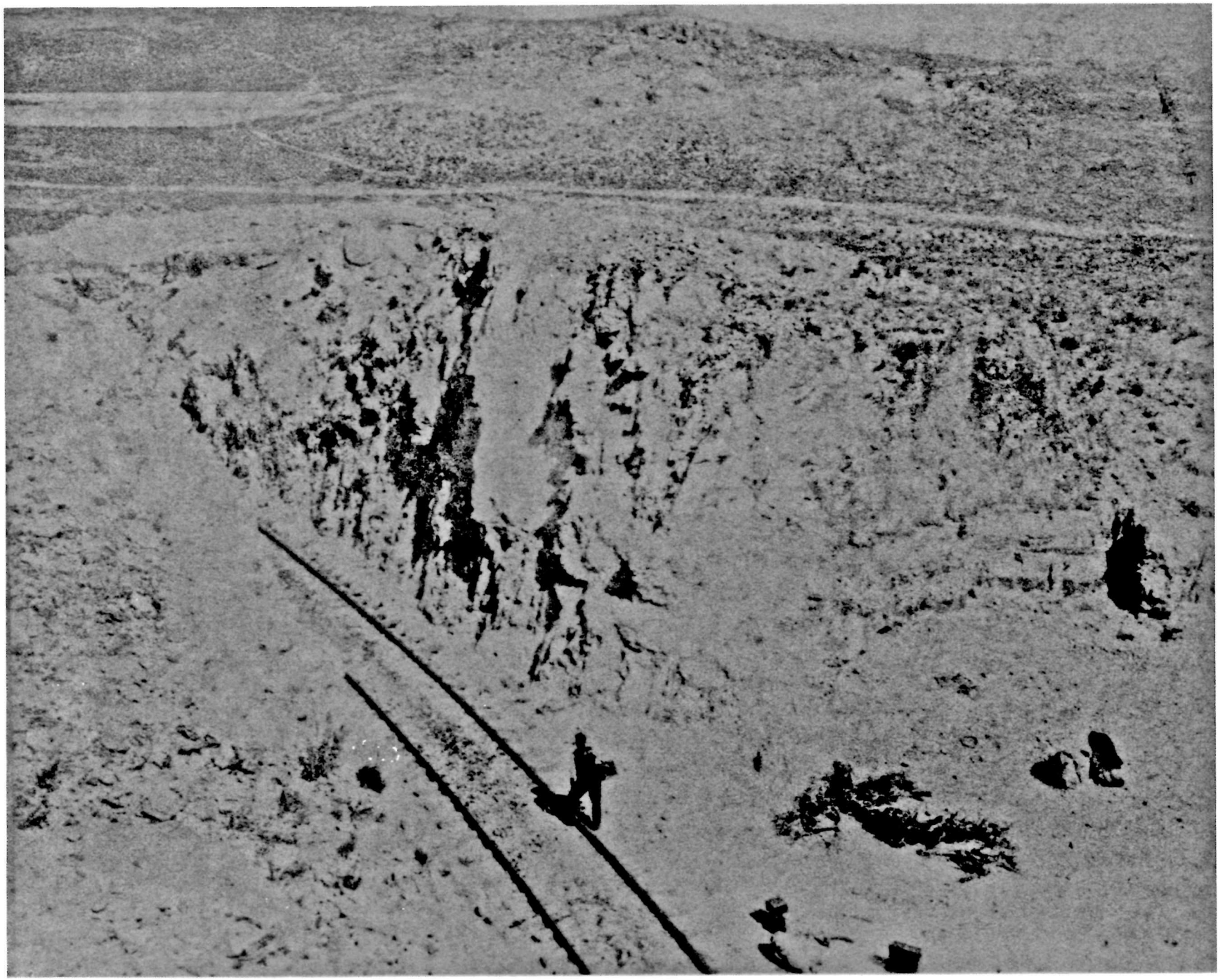
2. This view shows Carmichael's Cut on the east slope of the North Promontory Range. View is toward the east. The picture was copied from an A. J. Russell stereo in the Union Pacific Railroad Museum, Omaha, Nebraska. It was taken in the first part of May 1869.



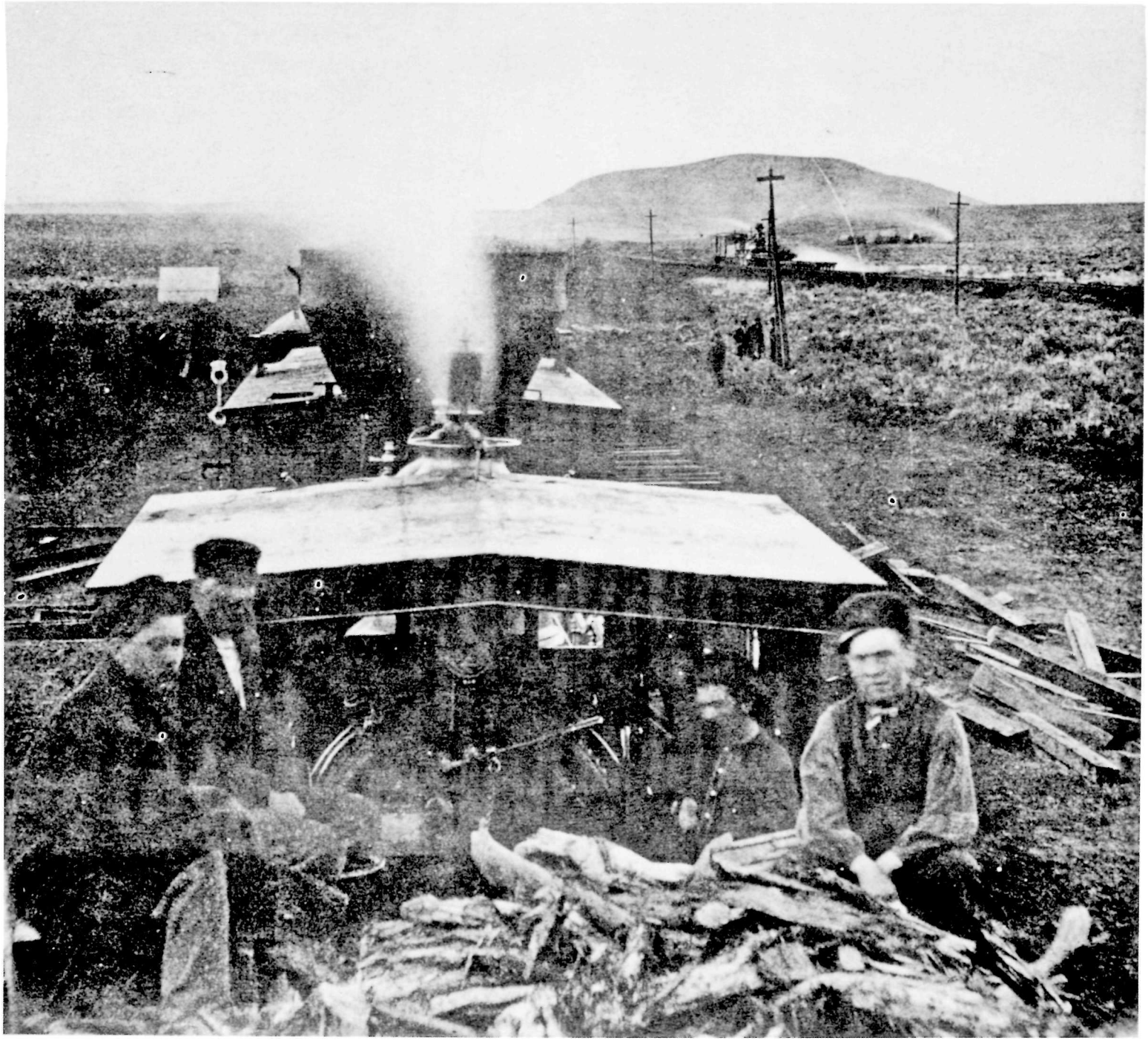
3. This picture was copied from a stereo view, made by Andrew J. Russell, probably a day or two before May 10, 1869, of the Union Pacific Great Trestle on the east slope of the North Promontory Range. The view is to the east. The stereo view is in the Union Pacific Railroad Museum, Omaha, Nebraska.

The Central Pacific grade, paralleling the Union Pacific, can be seen higher up the slope. Off the picture at the left and opposite the Union Pacific trestle the Central Pacific used a great fill to cross this drainage.

4. View looking east from top of Carmichael's Cut showing construction in early May 1869. This picture was copied from a stereo view by Andrew J. Russell, Union Pacific Railroad Museum, Omaha, Nebraska.

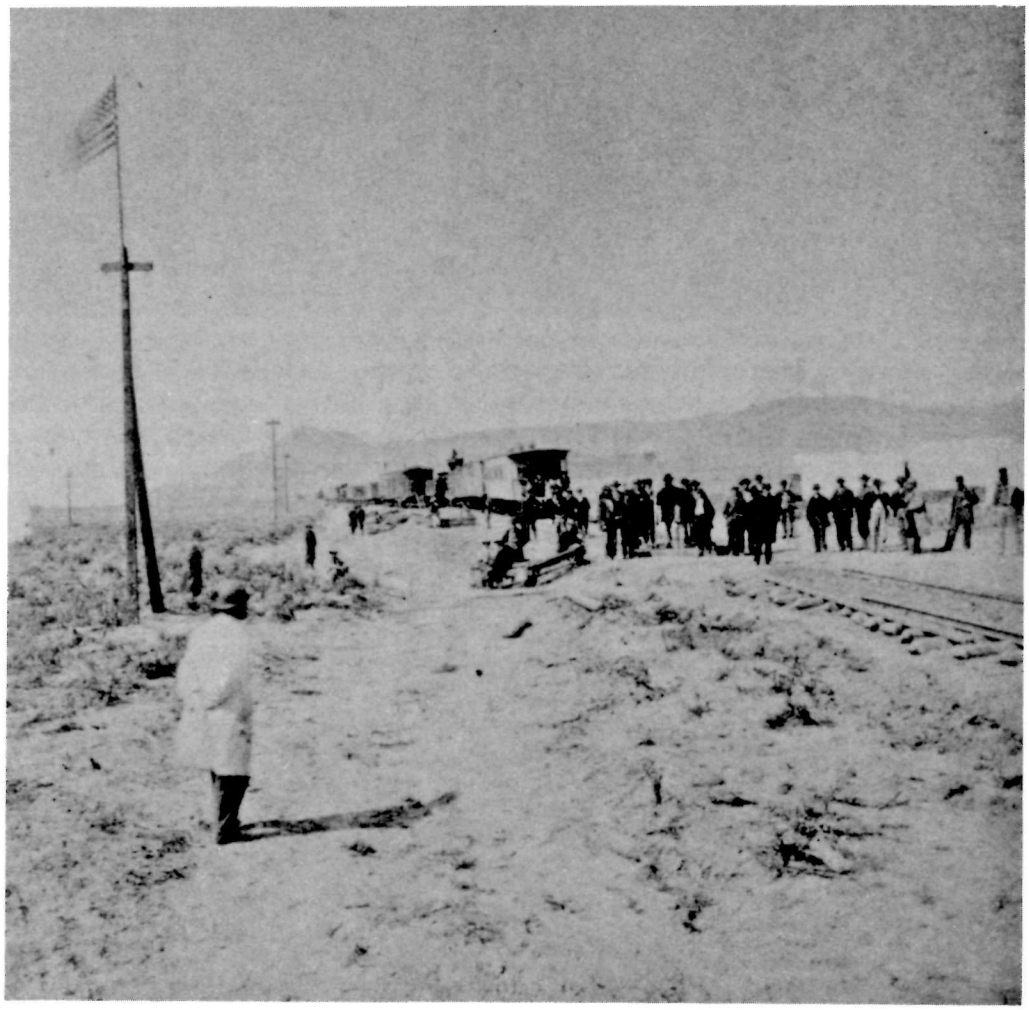


5. This picture was made from a stereo view taken by Alfred A. Hart on May 9, 1869. The view is toward the east at Promontory Summit over the cab and tender of a Central Pacific locomotive of the Jupiter type, and indeed it may even be the Jupiter. Extra square cut Central Pacific railroad ties can be seen at the sides of the track and workmen are at either side of the track. A tent shows on the left or north side of the track (another large one was nearby but does not show in this view). The locomotive to the right center on another track is a Union Pacific locomotive standing on the Union Pacific grade. This view shows how the two grades paralleled each other at Promontory Summit. The next day the east and west parts of the transcontinental railroad were joined just in front of the Central Pacific locomotive. Note the switch stand at the left of the track. The stereo view from which this picture was copied is in the Timothy Hopkins Collection, Main Library, Stanford University.



6. This view shows a construction camp of the Union Pacific Railroad on the east slope of the North Promontory Range. It may have been the camp known as "Deadfall." The background terrain identifies the site as near the base of the North Promontory Range, east slope. A heavy cut can be identified at the top right on the slope above the tents. This view was copied from an unidentified picture in the files of the Union Pacific Railroad headquarters in Omaha, Nebraska. It may have been taken by Charles Savage of Salt Lake City, and probably dates from the first half of 1869 or the winter of 1869-1870.

7. This picture was taken apparently on May 9 or early in the morning of May 10, 1869, because it shows the gap,where the men are standing, still separating the joining of the rails at Promontory Summit. The view is toward the west. The railroad equipment standing on the track is Central Pacific. This view was copied from an unidentified picture in the files of the Union Pacific Railroad headquarters at Omaha, Nebraska. Tents show on both sides of the track. The flag is on the south side of the track. The rough ax cut ties with pointed ends visible at the right are Union Pacific. The Central Pacific ties used at Promontory Summit and elsewhere on their track across the Utah and Nevada desert were cut and milled on the west slope of the Sierra. The milling of the ties from the timber was done at Truckee, California, near the Nevada line.



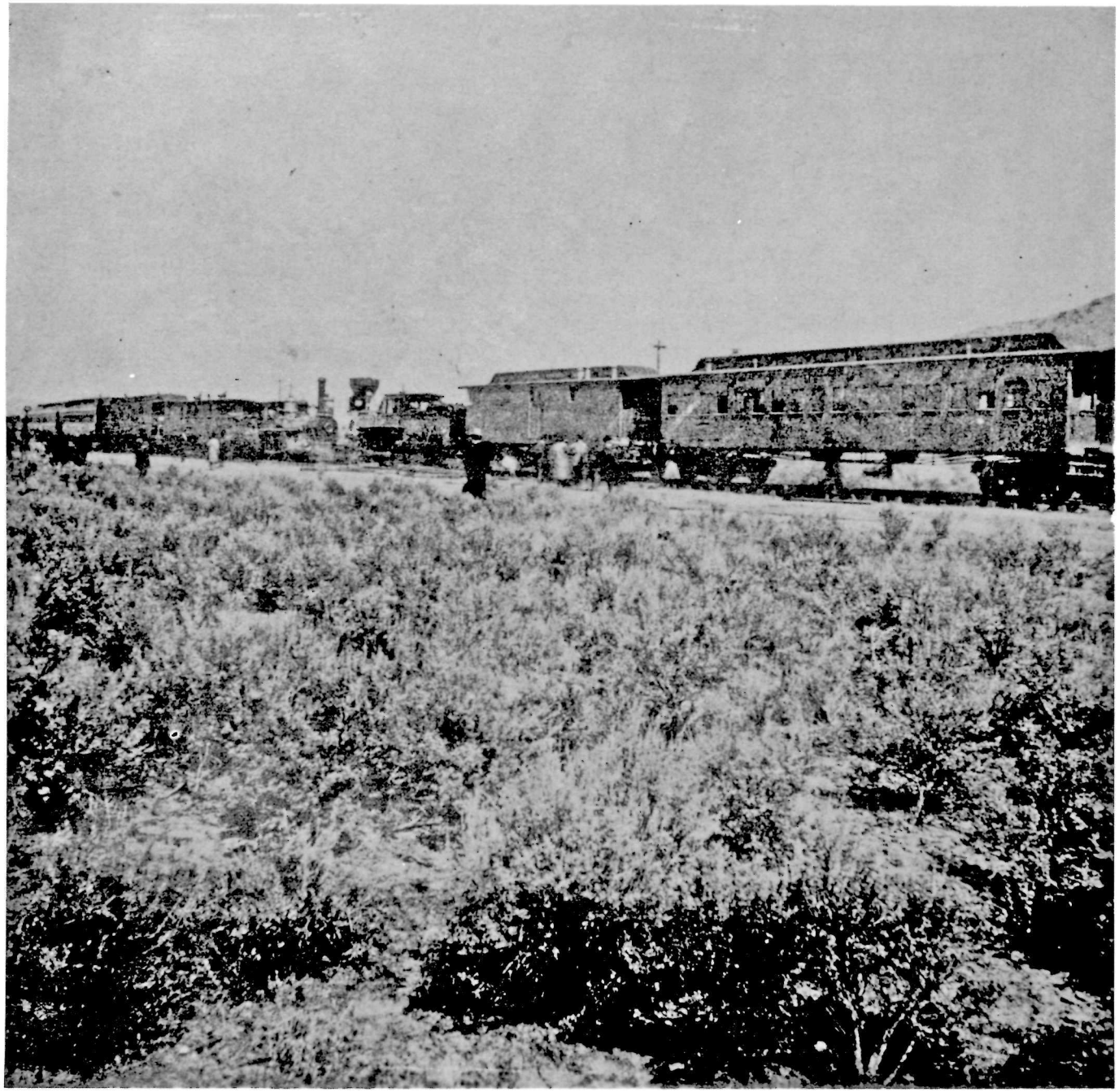
8. This picture shows the situation at Promontory Summit on the morning of May 10, 1869, before the gap in the two rail lines was closed for the ceremony at noon. The view is from east to west. The three tents and the flag staff affixed to one of the telegraph poles are on the south side of the track. The ax-hewn railroad ties with pointed ends are on the Union Pacific track, the sawed and squared ties beyond the gap in the track are on the Central Pacific track. This picture has been reproduced from one in the Utah Historical Society, where it is attributed to C. R. Savage, Photographer. A similar picture in the files of the Union Pacific Railroad Headquarters, Omaha, Nebraska, is unidentified.

Promontory Pt. Utah May, 1869
C. R. Savage Photo.

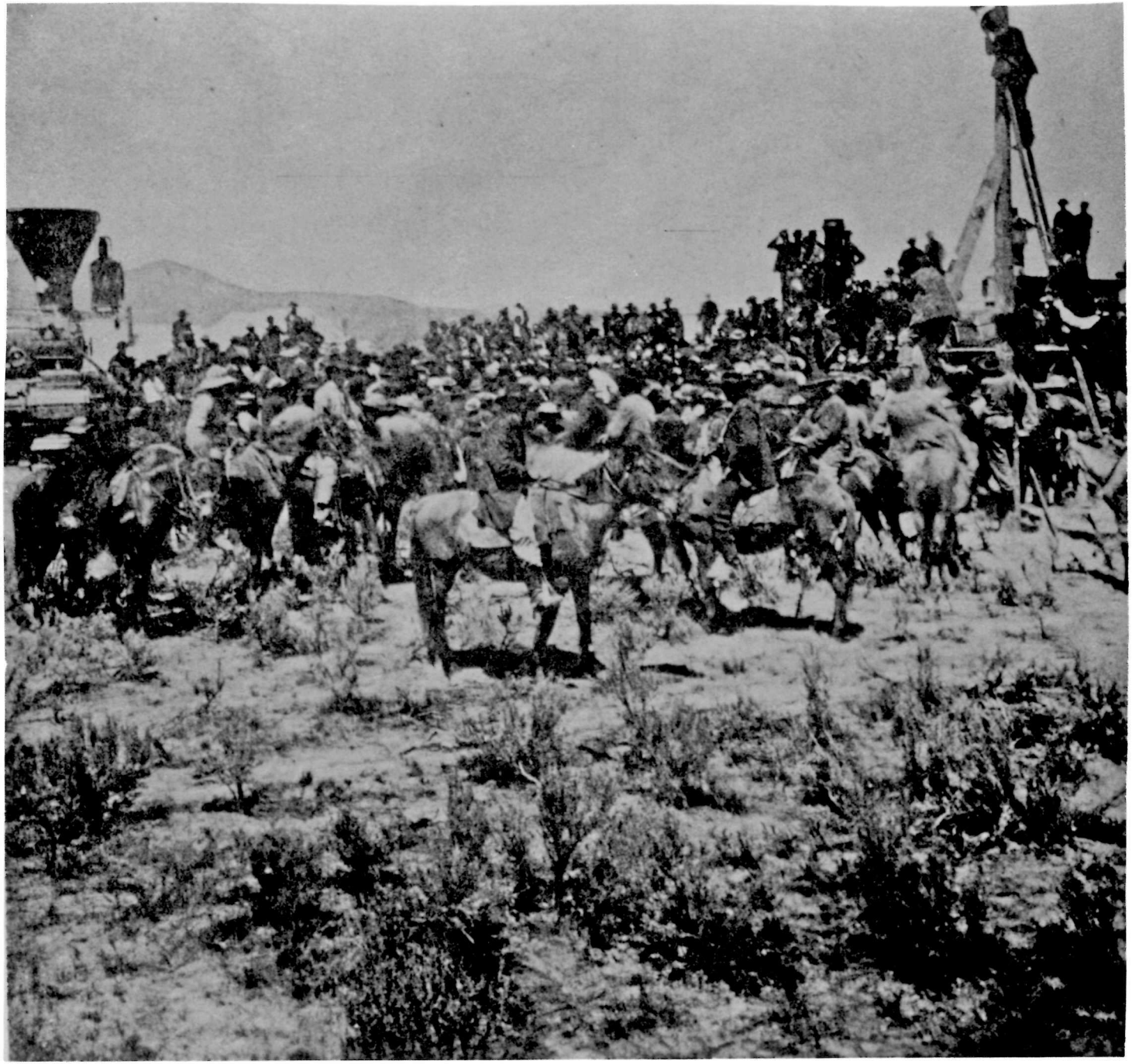
9. This view, from east to west, gives a closeup of the gap in the rails on the morning of May 10, 1869. This picture was taken apparently just before the gap was closed by Central Pacific track layers. The rough cut pine cross ties in the foreground are Union Pacific. At least one tent shows dimly on the north side of the track. This picture is reproduced from one in the Utah Historical Society attributed to C. R. Savage of Salt Lake City. An identical stereo view is in the Union Pacific Railroad Headquarters, Omaha, Nebraska, where the stereo card attributes the picture to Andrew J. Russell. We believe the latter probably is correct.

At the Driving of the Golden Spike Promontory Pt. Utah May 10, 1869

10. This picture was taken by Alfred A. Hart of Sacramento at Promontory Summit on May 10, 1869, following the ceremonies of driving the Golden Spike. The view is from northwest to southeast. The Jupiter and Central Pacific Governor Stanford's special train are at right; Union Pacific #119 and Durant's train are to the left. Sagebrush covered the area except for the track. A tent shows at extreme left. The telephone pole with the flag affixed to it are on the south side of the track. This picture was copied from a stereo view, Hart #360, in the Timothy Hopkins Collection, Main Library, Stanford University.

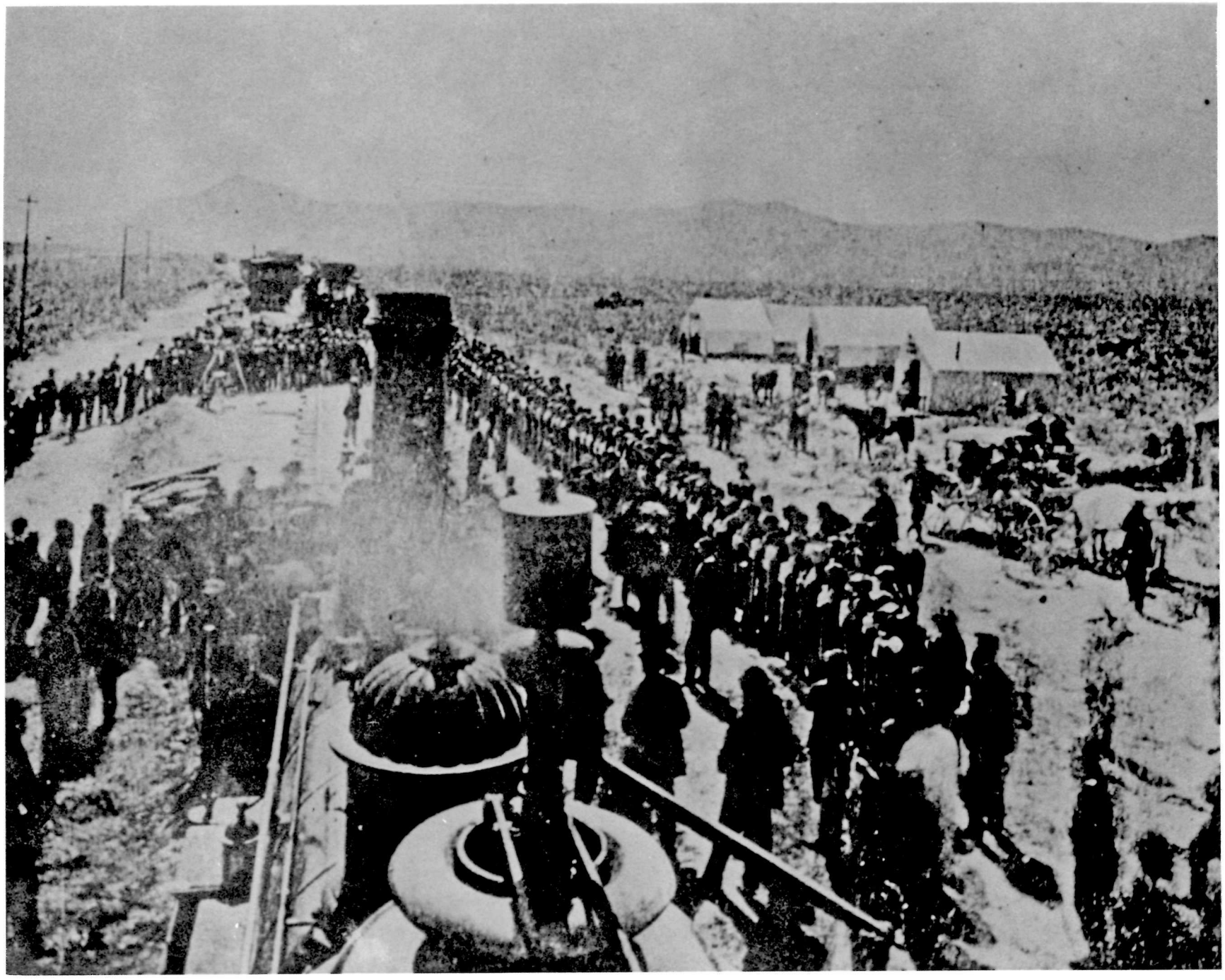


11. This picture was taken by Alfred A. Hart, official photographer for the Central Pacific Railroad, on May 10, 1869, just before the driving of the Golden Spike ceremony began. A workman has mounted the ladder leaning against the telegraph pole at the right to affix a wire to the telegraph line connecting it with the point on the track where the last spike was to be driven. The connection would carry the sound of the blows across the nation and signalize the completion of the first transcontinental railroad. The stack of Jupiter, Central Pacific locomotive, shows at left. Union Pacific locomotive #119 is at the right, almost entirely covered with men who have mounted it for a better vantage point. Three tent tops show in the background beyond the crowd of people. Several horsemen are in the picture. The rider at the extreme left appears to be mounted on a mule. The view is from south to north. The original of this picture is a stereo view, Hart #355, in the Timothy Hopkins Collection, Main Library, Stanford University.



12. This is perhaps the most famous of all photographs taken at the driving of the Golden Spike ceremonies at Promontory Summit on May 10, 1869. It was taken by Andrew J. Russell, official photographer of the Union Pacific Railroad for the occasion. The view is from south to north. The two men in the center of the photograph shaking hands are, on the left, Chief Engineer Montague of the Central Pacific, and on the right, Chief Engineer Dodge of the Union Pacific. This picture was taken after the ceremony of driving the last spike, following which the two locomotives moved together until their pilots touched. Central Pacific locomotive Jupiter, No. 60, is on the left; Union Pacific locomotive #119 is at the right. The former was a wood burner, the latter a coal burner.

13. This picture was taken by Alfred A. Hart just moments before the ceremony of driving the last spike at Promontory Summit on May 10, 1869. The view is from east to west, and was taken from the top of the cab of Union Pacific locomotive #119 looking out over the top of the locomotive to the Central Pacific locomotive Jupiter across the open space of the track where the ceremony was to be enacted. The troops lined up at the north side of the track are a detachment of the 21st Infantry that by accident happened to be on its way to the Presidio in San Francisco from the east. Four tents show on the north side of the track. The line of the Union Pacific grade can be seen dimly as a white line at the upper left of the picture. This is an unusually good picture to give a general view of the physical condition of the Promontory Summit area at or near noon, May 10, 1869. The original stereo view of this picture is in the collection of the Southern Pacific Company's collection at its headquarters in San Francisco, Hart #357.

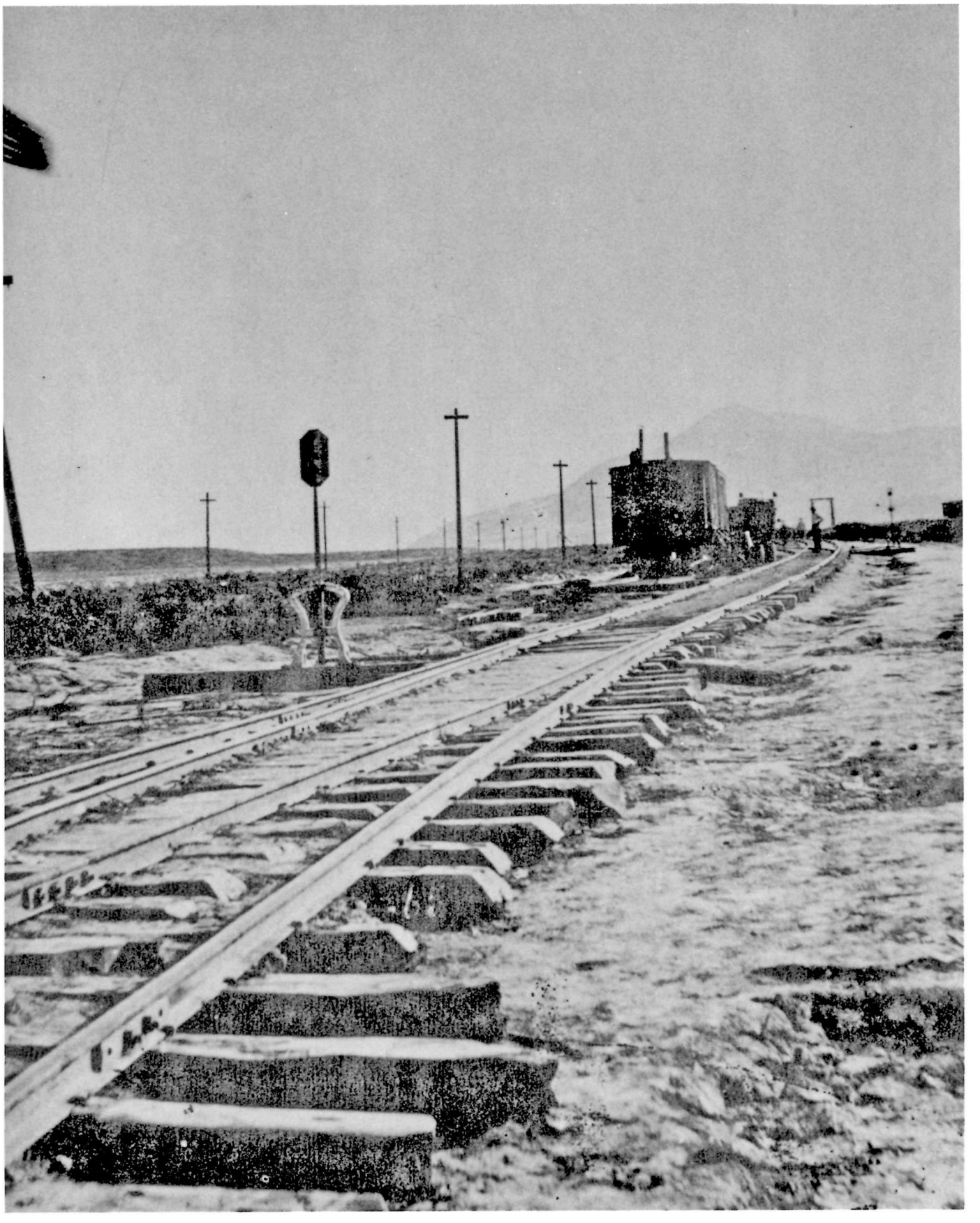


14. This picture was taken by Andrew J. Russell on May 10, 1869, at Promontory Summit, following laying the last rail and driving the last spike. It shows Union Pacific equipment on the Union Pacific track at right foreground. The picture appears to have been taken on the north side of the track looking to the east. The Union Pacific locomotive No. 119 and the Golden Spike and joining of the rails site would appear to be at the right and out of the picture. The coaches shown at right foreground, where the passengers are lined up for the picture, presumably is the equipment used to transport Durant's official Union Pacific party. A few soldiers and one local citizen appear at the left edge of the picture.

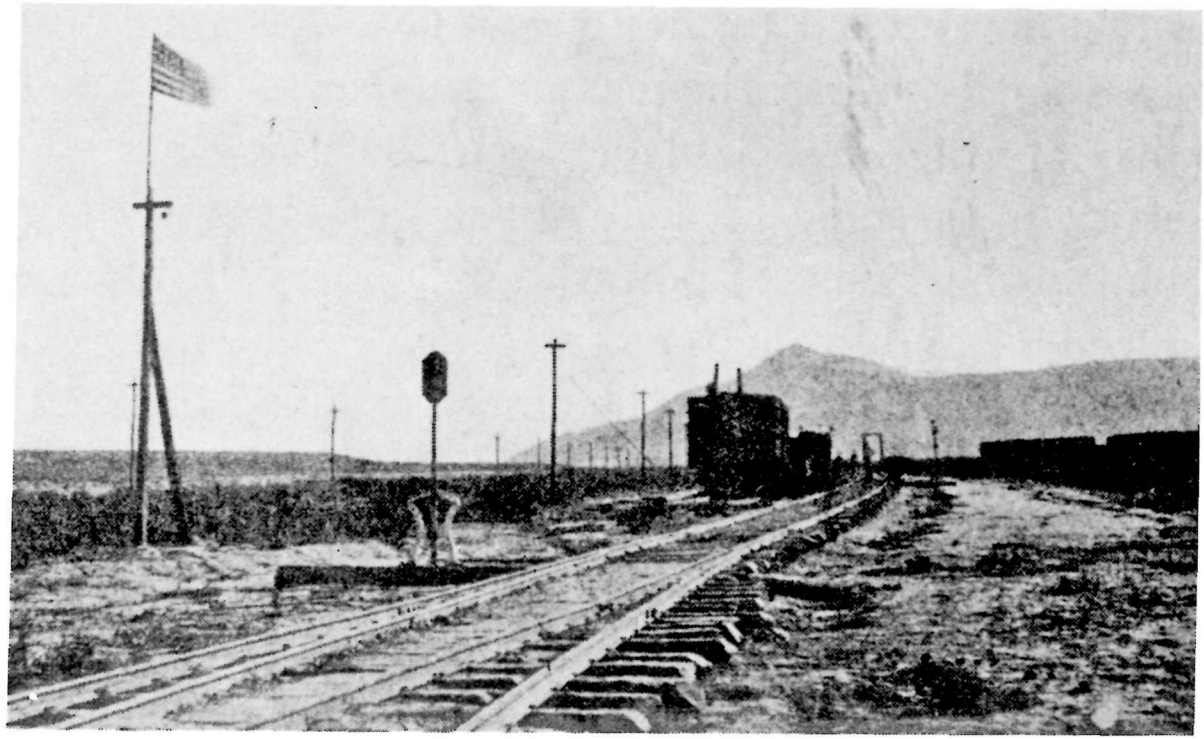
15. This picture was taken by Andrew J. Russell on May 10, 1869, at Promontory Summit, showing the two locomotives pilot to pilot when they moved up to touch each other after the Golden Spike ceremony. This view looks toward the east and is from the south side of the track. This is an unusual picture. The large 10x13 inch glass negative has been broken. It shows clearly many features of construction and decoration of the Central Pacific Jupiter locomotive, the condition of the track of the square-cut Central Pacific railroad ties, and especially of the long series of Union Pacific trains that had pulled up one behind the other stretching away eastward from the juncture point.


C P R
UPITER

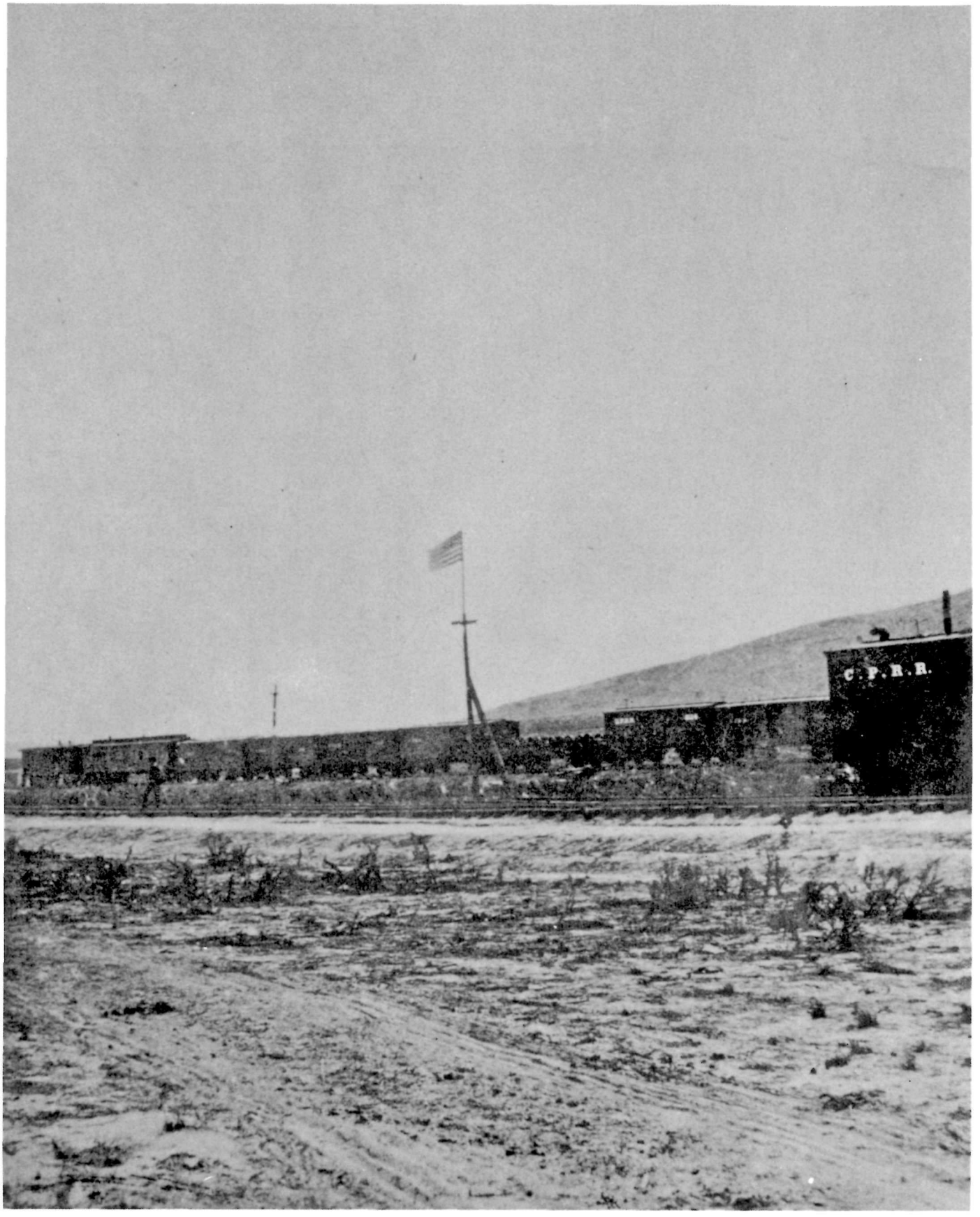
16. This photograph was taken by William Henry Jackson in July 1869, about two months after the Golden Spike ceremony. It is one of two that Jackson took at that time. One can tell from the rough cut nature of the ties in the foregound that they are on the Union Pacific part of the track. The view looks to the west. The square-sawed Central Pacific railroad ties can be seen in the track bed beyond the switch, and this point marks the original Golden Spike site of joining the rails on May 10, 1869. The Union Pacific grade can be seen on the left of the railroad track as a dim gray line embankment. It ran south of and parallel to the Central Pacific line across Promontory Summit. The picture has considerable historical significance since it shows the condition at Promontory Summit about two months after the Golden Spike ceremony. Two switch stands show, there is a siding track apparent in the foreground, and in the distance the end of a railroad car can be seen at the right margin of the picture. This is on a Central Pacific siding that had been built since May 10, 1869.



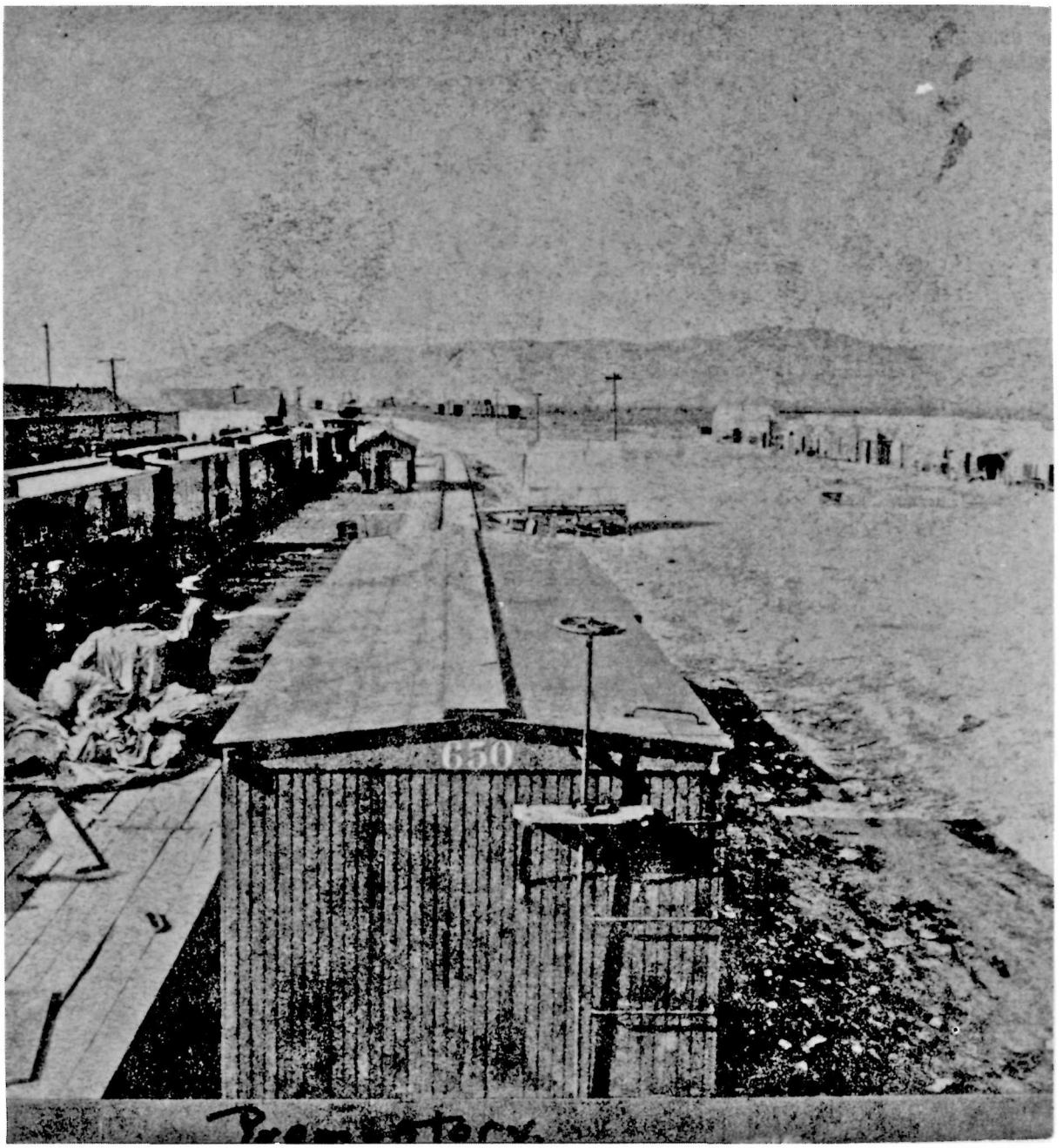
17. This is the whole or nearly full picture taken by William Henry Jackson in July 1869 at Promontory Summit. It is the same picture shown as Number 16, but has not been trimmed as much, shows more, and its axis is horizontal. It shows the flag staff in full at the left. The view is from the north side of the track and looks to the west. It shows a considerable extent of the Central Pacific siding on the north side of the main track and cars standing on it.



18. This is the second picture william Henry Jackson took at Promontory Summit in July 1869. Jackson stood on the north side of the track and pointed his camera southeast. The flag still flies from the same telephone pole to which it was affixed for the Golden Spike ceremony two months earlier. The nearest track is the Central Pacific. The one in view beyond on which boxcars, a flat car, and coach stand is the Union Pacific grade, now apparently used as a siding. The car at right front carries C.P.R.R. marking for Central Pacific Railroad; those on the far track are clearly marked UPRR, for Union Pacific.


C.P.R.R.

19. This is a view, looking west, of Promontory Summit at the Promontory station sometime late in 1869, 1870, or in 1871. It apparently was taken by Andrew J. Russell. This picture was copied from a **stereo** attributed to him in the Union Pacific Railroad Museum at Omaha, Nebraska. This picture is of great interest since it shows the town of Promontory that grew up at the Golden Spike site at what was probably the peak of its development and activity, or nearly so. The front line of stores and buildings of the town show at the right margin of the picture. This is on the north side of the track. The Central Pacific siding west of the town shows in the distance with rail equipment standing on it. The railroad depot, platform, and dining room show in left foreground. The dining facility is immediately adjacent to the track on the south side. Russell probably took this picture on the second trip over the railroad to the Pacific Coast which he made in 1870-1871. This picture discloses that the town grew up on the north side of the tracks, but that the depot facilities were mostly on the south side.

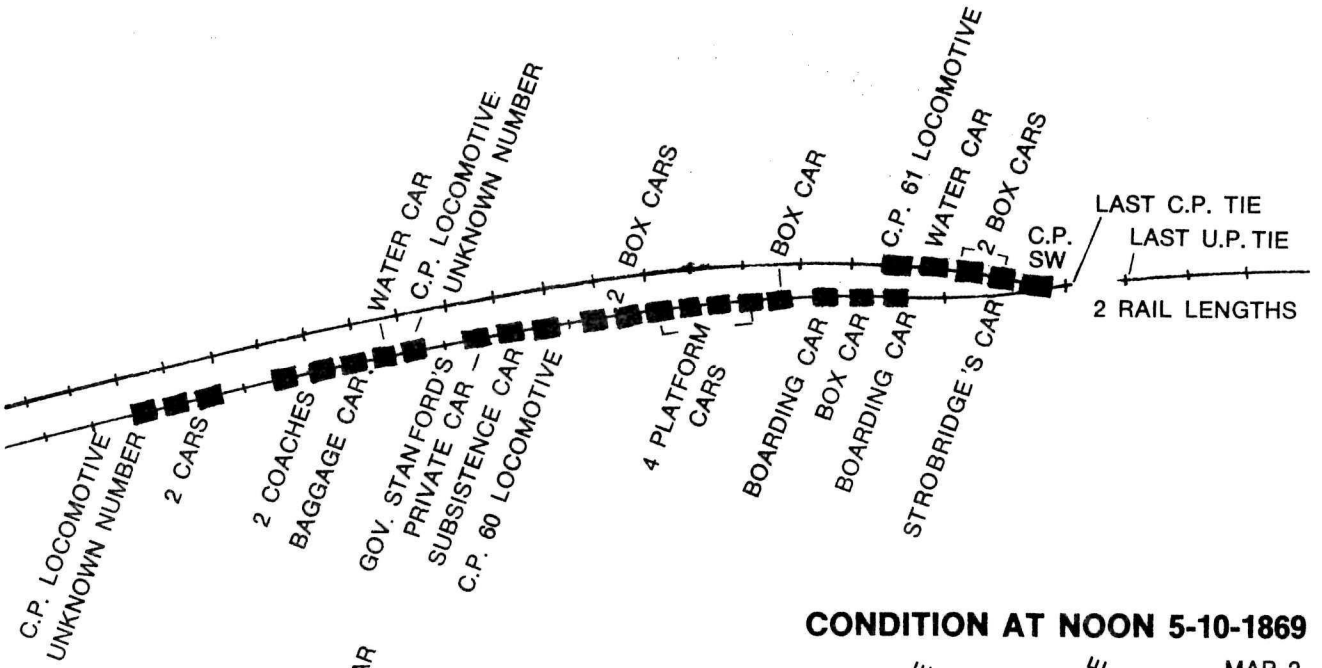


Pressure tank

MAP 1

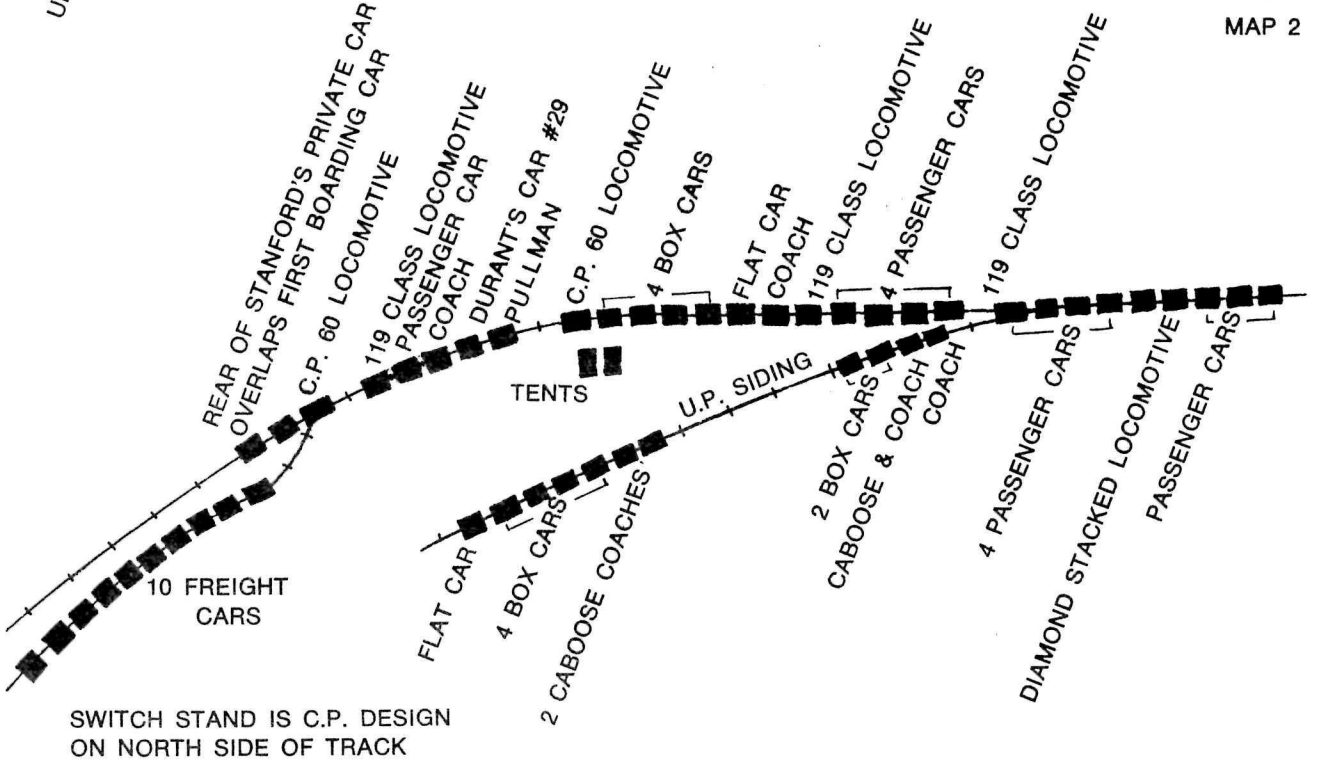
CONDITION EARLY A.M. 5-10-1869

CENTRAL PACIFIC



CONDITION AT NOON 5-10-1869

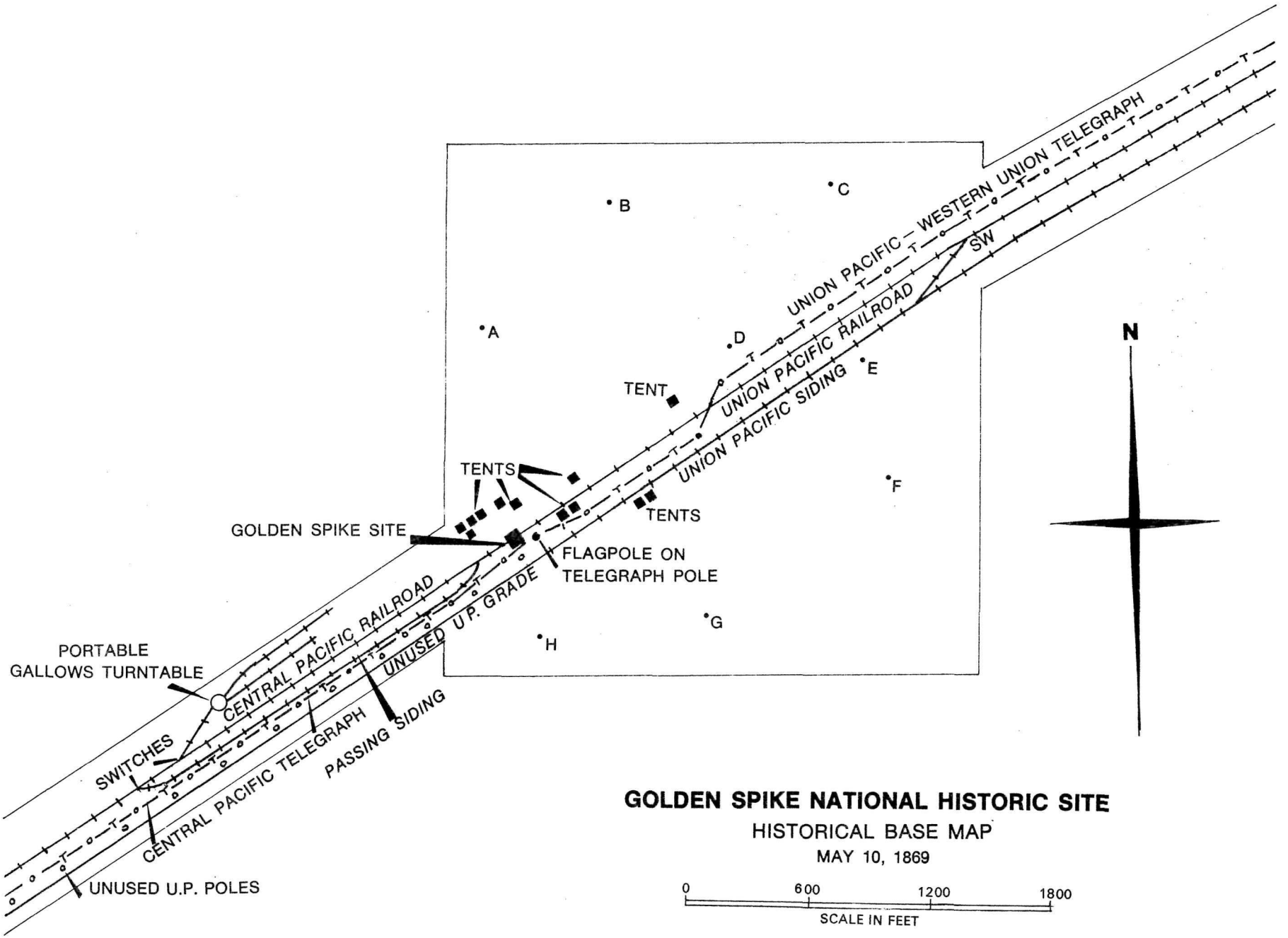
MAP 2



AS RECONSTRUCTED BY GERALD M. BEST

(NOT DRAWN TO SCALE)

C.G.H. 1970



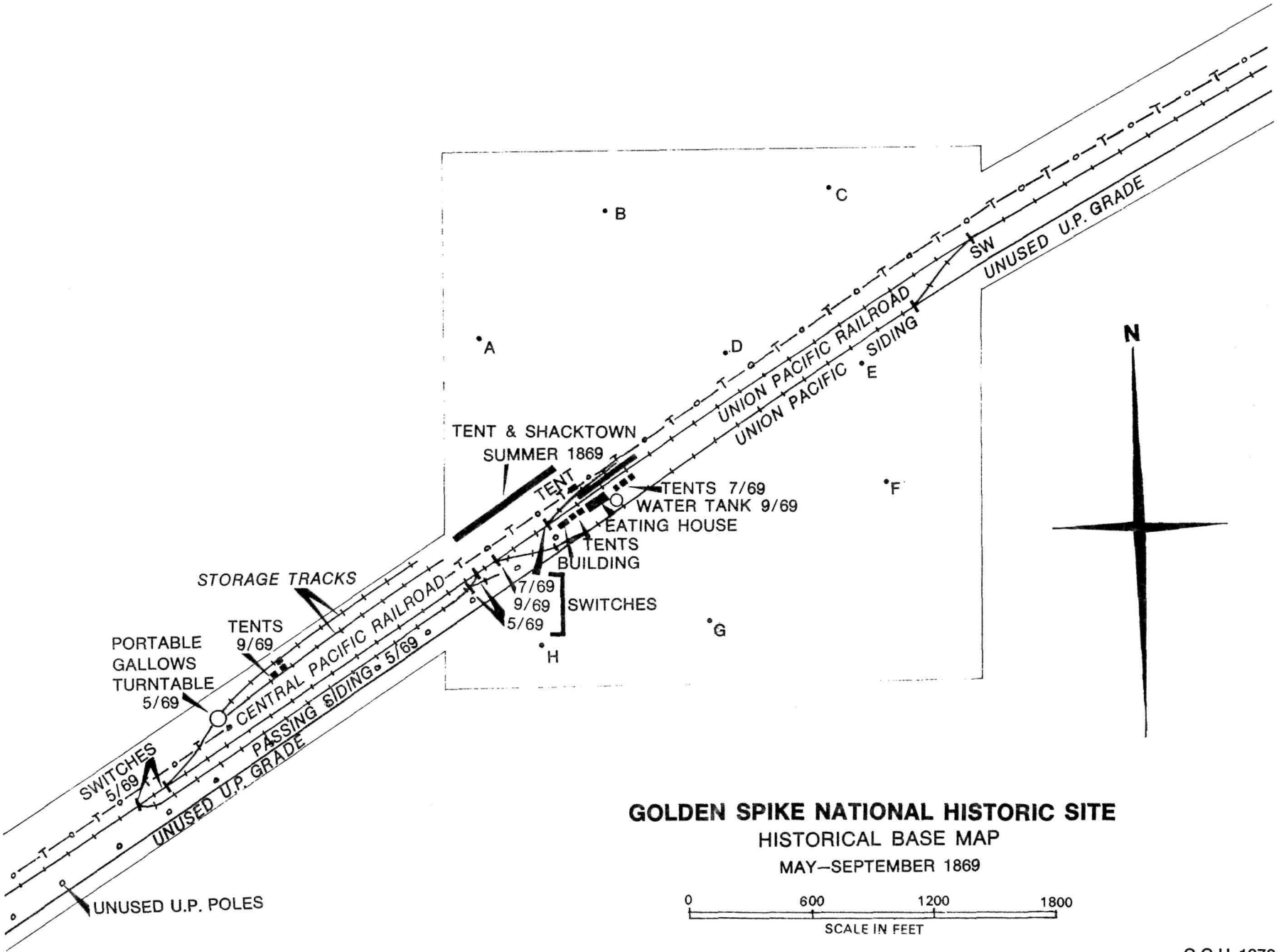
GOLDEN SPIKE NATIONAL HISTORIC SITE

HISTORICAL BASE MAP

MAY 10, 1869

C.G.H. 1970

MAP 3



GOLDEN SPIKE NATIONAL HISTORIC SITE

HISTORICAL BASE MAP

MAY–SEPTEMBER 1869

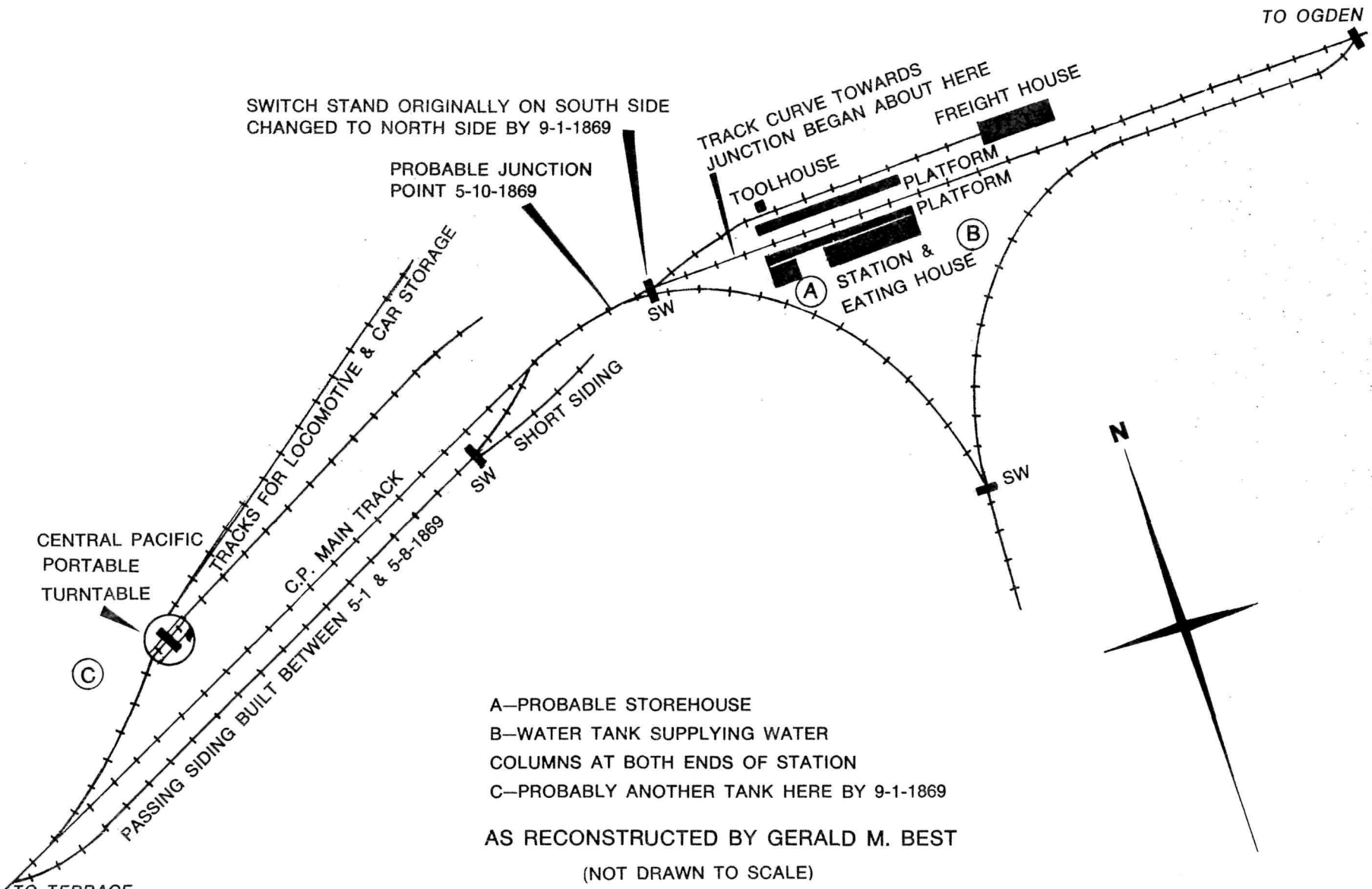
0 600 1200 1800

SCALE IN FEET

C.G.H. 1970

MAP 4

PROMONTORY AS OF 9-1-1869



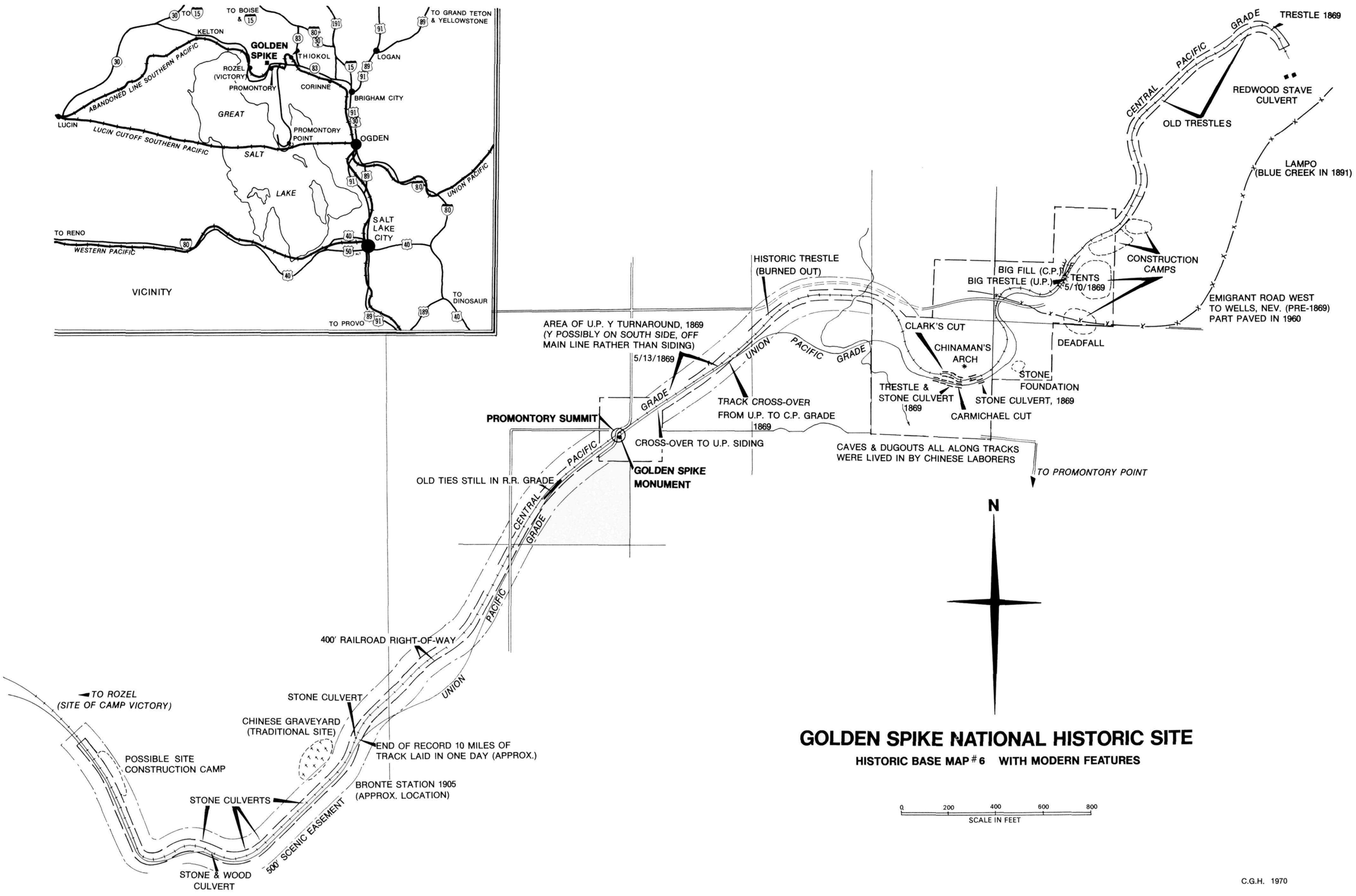
A—PROBABLE STOREHOUSE
B—WATER TANK SUPPLYING WATER
COLUMNS AT BOTH ENDS OF STATION
C—PROBABLY ANOTHER TANK HERE BY 9-1-1869

AS RECONSTRUCTED BY GERALD M. BEST

(NOT DRAWN TO SCALE)

MAP 5

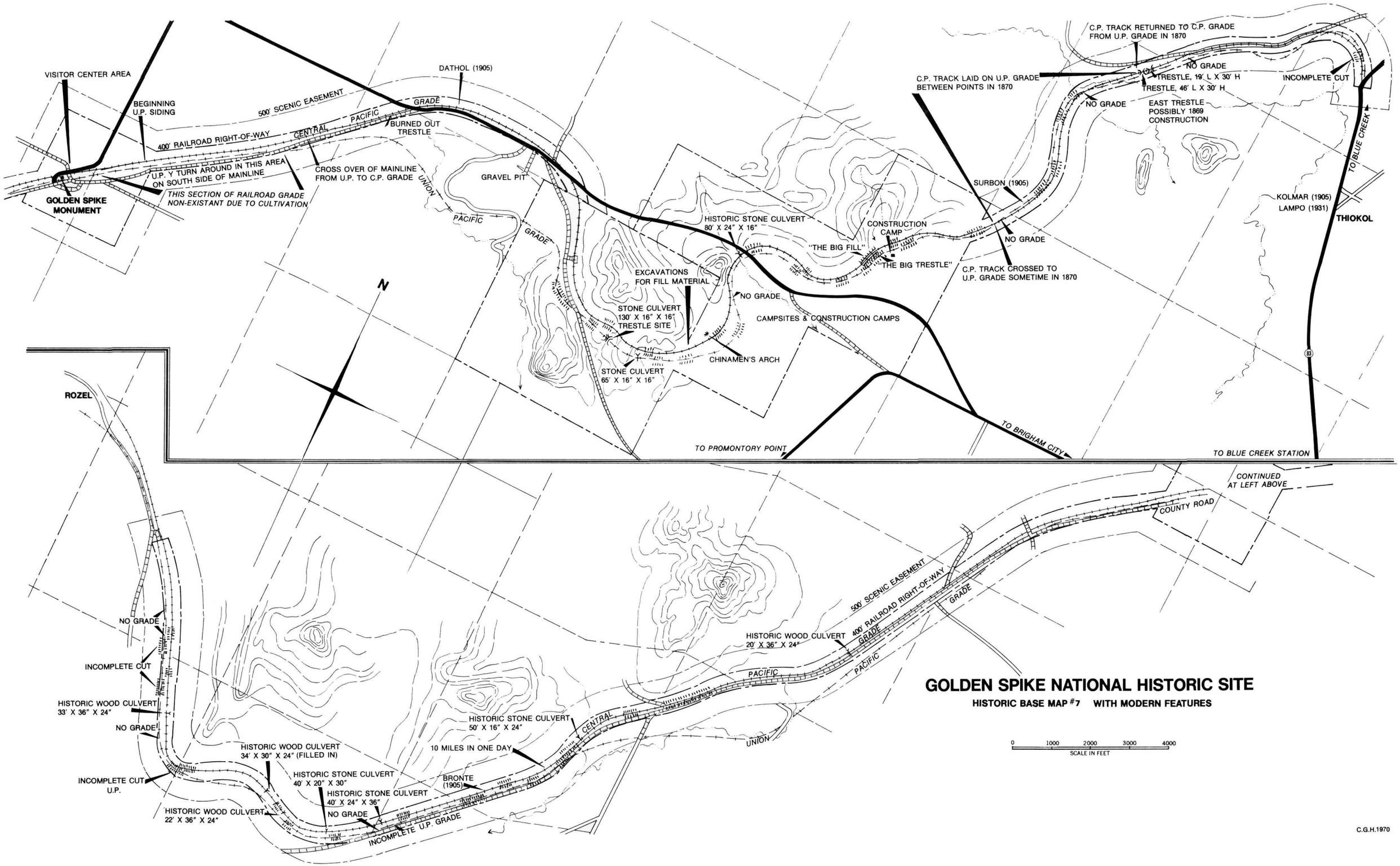
C.G.H. 1970



GOLDEN SPIKE NATIONAL HISTORIC SITE

HISTORIC BASE MAP # 6 WITH MODERN FEATURES

C.G.H. 1970



GOLDEN SPIKE NATIONAL HISTORIC SITE

HISTORIC BASE MAP #7 WITH MODERN FEATURES

GPO 891-665