

The Donner Summit

Heritloom



History and stories of the Donner Summit Historical Society

July, 2012 issue #47

Tunnel 6 - The Building

They were a great army laying siege to Nature in her strongest citadel.

Beyond the Mississippi, 1869 and N.Y. Tribune

As anyone with granite counter tops knows granite is hard. It's harder than glass or steel and has tremendous compressive strength. A small block of granite could "support a 46 ton CPRR locomotive without being crushed" according to Mead Kibby, author of The Railroad Photographs of Alfred A. Hart, Artist.

Tunnel 6 was the longest by far of the 15 tunnels the CPRR bored in the quest to conquer the Sierra Nevada mountains. Looking at it you can think that it was hard work but so what. So there was a lot of digging. The tunnel is more complicated than that, than digging from one end to the other. It was 19 feet high* and 16 feet wide at the bottom with a half circle of an 8' radius at top. It is 1659 feet long. Just in size it was larger than anything that had been attempted of its kind in the United States.

Besides the size and the material the design was complicated. Going west to east there is a 30 foot elevation drop (see last month's newsletter page 6). It also curves over its length. Still, it's just digging from one end to the other to wherever you come out right? Tunnel 6 was dug from four directions and each mini-tunnel had to meet up with the others. After two years of digging, the tunnels did all meet, almost exactly.

It was built inches at a time with the crews making 14 inches of progress a day through the solid granite of Donner Summit. The rock had to be blasted and broken into small pieces so it could be removed from the tunnel and disposed over the side of the railroad
go to page 3



Alfred A. Hart CPRR photographer; titled "laborers and rocks near opening of Summit Tunnel;" one side of a stereopticon slide

*It's now a couple of feet taller since the bottom was excavated to allow for taller trains. There are no tracks in Tunnel 6 today.

THE HERITAGE TRAIL

Placer County Museums Tour

18 Museums from Roseville to Tahoe!

2012

August
11 & 12

The 5th annual Heritage Trail event will be held on August 11-12, 2011. Eighteen participating museums from Roseville to Tahoe are planning fun activities for the entire family. All of the museums will be open from 10:00 am to 4:00 pm on both days and admission is free.

Visitors can grind wheat for biscuits, explore the wonders of a granite quarry, view the world from a 19th century farm wagon, pan for illusive flakes of gold, listen to Native American stories, and watch a blacksmith in action. Many of the museums will also offer fun food and beverages such as hand-churned ice cream, root beer floats, cookies, and lemonade.

All the museums are easy to reach from Interstate 80. Five valley museums are in South Placer. Six Auburn museums are located within one mile of the Historic courthouse. There are eight mountain museums located in Foresthill, Colfax, Dutch Flat, Donner Summit and the North Lake Tahoe areas.

The official Trail Guide is posted online and copies are also available in local museums. To access the most up-to-date information, visit www.theheritagetrail.blogspot.com or call 530-889-6500.

DSHS will display new exhibits about Tunnel 6 and the 20 Mile Museum.

1st Annual

Margie Powell

Memorial History Hike
August 4, 2012 9:30 AM

Margie was one of the founders of the DSHS and when she passed away last summer the community promised to do annual memorial history hikes.

This first hike will hit the historical sites in Donner Pass on Old 40. It will be fascinating as you hear stories right at the history. In the evening there will be a video and presentation about the transcontinental RR to Donner Summit.

It's all free. Get a flyer at the link on the main pages at www.donnersummithistoricalsociety.org or www.exploredonnersummit.com

Sugar Bowl Lake Mary Evening to benefit DSHS July 22

Sugar Bowl's Lake Mary Cabin Dinner Series will return this year with great food by Chef Alan Davis. The Lake Mary facilities sit above Lake Mary and dining is on a deck overlooking the lake. DSHS will be a beneficiary of one of the summer evenings, July 22. Seating is from 5:30 to 9:00. Reservations are a good idea (530) 426-7002.

Besides a varied menu selection of homemade soups, salads, seafood, wild game, vegetarian dishes, pastas, wines and desserts, the DSHS will have its new Tunnel 6 exhibits on display.



editor:
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route. The excavating was done by hand by Chinese workers, many imported specifically to work on the railroad (picture page 1).

Chinese workers were divided into groups of 30-40 at each tunnel bore with one white foreman. 12-15 Chinese would work each face some drilling and the rest removing debris. In drilling one man held the drill bit and two others hit it with sledge hammers. After each hit the bit holder rotated the bit a quarter turn. In this way the flat bit could drill a round hole. Holes were drilled up to two feet deep. 2 ½" holes were made for black powder and 1 ¼ inch holes for nitroglycerine. Then black powder filled 1/3 of the hole. A fuse was added followed by packing of clay, hay or sand. Holes were tamped, fuses lit and workers ran.. The resulting blast's materials were then hauled away from the face by the others in the crew - all by hand.

This went on 24 hours a day, 6 days a week for two years until the tunnel was finally finished. The best day ever, resulted in 27 inches of progress. Up to 300 pounds of black powder could be used in a day.

That all sounds hard though a bit sterile. You can maybe visualize the Chinese workers pounding, stroke after stroke, all day: Bam, Bam, quarter turn, Bam, Bam quarter turn, all day, 24 hours a day, 6 days a week, week after week.

Consider the work further. There were no electric lights. There was no



Alfred A. Hart, titled, "Camp Summit Tunnel, Mt. King in the distance" It looks like Donner Ski Ranch was Mt. King. In the foreground is the Donner Lake Dutch Flat Wagon Rd., essentially the route of the Lincoln Highway.

The Summit Tunnel

The Sacramento Bee has the following remarks on the Summit Tunnel, on the line of the Central Pacific Railway:

“The Pacific Railroad people are making wonderful progress on the Summit Tunnel. Some persons – even engineers – calculated that this great work would require three or four years for its completion, and so it would in other countries, or if it were under the control of laggards, but here, and in the hands of go-ahead Californians, tunnel- time is annihilated. The tunnel is 1,660 feet long. it was begun in September last – at four points – on the east and on the west ends, and two other faces were created by a shaft in the centre. Thus, there are four faces, with three sets of hands to each, or twelve sets in all. Each set works eight hours, and the work goes on night and day! And now, on the 1st of the present month, of all these 1,660 feet, there were but 681 remaining to be cut! The progress last week was sixty feet, and at this rate the tunnel will be completed by the middle of August next. By measurement, on the 1st instant, there were but 346 feet in the east heading and 335 in the west heading, making, as before stated, 681 feet in all to be cut. And so in the space of eleven months from the period of its commencement will this tunnel be finished!

Daily Alta California May 10, 1867

ventilation. The workers worked by lantern or candle light. After each explosion and the dust settled, mostly, the workers were right back at work, first hauling out the broken rock and then pounding at the rock faces, Bam, Bam, quarter turn: Bam, Bam, quarter turn.

Imagine the choking air with rock dust and black powder residue. Imagine working in the dim light, slamming a sledge hammer into a drill bit over and over. There is no record of broken and bruised hands resulting from missed sledge hammer blows. For much of the year, it was cold with all the tunnel entrances surrounded by snow with tunnels leading to the workers' little "huts." After an exhausting day, there was no comfortable rest. In winter workers might go weeks without seeing sunlight. At Tunnel 8 there were snow tunnels leading to the rock face but also down stairs to a blacksmith shop and a complex of rooms, all in the snow.

The progress was excruciatingly slow. According to Samuel Montague, chief engineer in his testimony before the Pacific Railway Commission in 1887, progress on the central shaft was only 85/100 of a foot per day.

Facing granite was not the only obstacle. The workers faced avalanches and heavy snows: 40 feet that first winter. There were dozens of storms one of which dumped six feet of snow. Those storms built up cornices on the ridge tops and when the cornices got too heavy they broke off. Avalanches were common. One story tells of a workman coming along and noting that a house was missing. It had been covered by an avalanche burying fifteen or sixteen men. The men remained buried all day until they were dug out. Only three had died the rest had been protected by their bunk beds. Another story tells of an avalanche sweeping down and burying some workers who were not found until spring melt still with their shovels still in their hands. Those were

... Lake Angela, a lovely little mountain gem. It was like picnicking at the North Pole; for snow lined the higher ravines and icicles hung from the water-tanks on the stage-road. Here during the previous winter [1868] they [workers] were engulfed by a snow-slide. Seeing it approach they stepped behind a tall rock; but it buried them fifty feet deep. In spring their bodies were found standing upright, with shovels in their hands. For several miles the track must be roofed to slide off the snow. There will be less than a mile of tunneling, all near the crest. The cost of the most expensive mile of road is estimated at three hundred and fifty thousand dollars.

Beyond the Mississippi 1869

only a few of the

avalanche stories. James Strobridge was the construction superintendent. Before the Pacific Railroad Commission he said the "snow slides carried away our camps and we lost a good many men in the slides; many of them we did not find until the next season when the snow melted..."

To deal with the snow the workers dug snow tunnels through which they traveled to and from work. The tunnels ranged from fifty to 200 feet long and included excavated rooms. There were windows dug in the sides of some so that the tunnel debris could be thrown out. The tunnels had to be continually maintained because the snow roofs would sag. So the workers were not just excavating the rock, they were also continually digging the snow and sometimes the snow fell faster than it could be removed.

There were labor saving devices. Nitro-glycerine was one. It has a greater explosive power than black powder although it's trickier to deal with. Nitro-glycerine requires only 1 1/4 inch holes rather than 2 inch holes so more holes could be drilled and more blasting could be done in a day. It was used



Chinese worker at Tunnel 6's east portal, Alfred A. Hart #198, CPRR photographer, portal to Tunnel 6; one half of a stereopticon slide.

on Tunnel 6 but that is a story for next month.

There were also steam powered drills in those days but they were never used to build the CPRR. The Big 4 tried to employ the drills but the engineers were resistant to them. Leland Stanford said, supposedly said, "There does not appear a will that they should succeed, and usually where there is no will there is no way." That was the end of the drills.

Chinese Workers

The Chinamen were as steady, hardworking set of men as could be found."

John Gillis, Tunnels of the Pacific Railroad, 1870

When the Transcontinental Railroad was completed in 1869 telegraph lines were connected to the sledges used to drive the last spikes. The entire nation knew exactly when the road was completed. In Sacramento, as elsewhere, a huge celebration began with a large parade. Participants and spectators arrived on 18 separate trains. Ads had been announcing the coming celebration in the newspaper for weeks. There were bands, a contingent of Irish workers, the National Guard and their artillery, school children, politicians, railroad executives, pioneers, and the skilled workers, blacksmiths, boilermakers, and machinists.

There were no Chinese in the parade or the celebrations even though most of the work was done by almost 10,000 Chinese.

Immigrants have been coming to America for centuries, most to better their lives. The Chinese were just one group that came to face difficult new lives. One of the many hardships they faced was the grueling work. Some of the most grueling work was on the Central Pacific Railroad. Even so, almost 10,000 Chinese were eventually employed on the CPRR.

Living in rudimentary huts, they rose each morning to do some of the hardest physical work without the benefit of machinery to help. The building of the railroad was done by hand. Drilling was done by hand with sledge hammers and drill bits. Imagine wielding an 8 lb. sledge all day. Broken rock was picked up and carried to carts or carried in baskets to be dumped. In the tunnels the Chinese worked in very dim light and what must have been air very thick with rock dust and blasting powder residue.

At the end of the day, there was no comfortable warm place to rest. Their "huts" according to Bret Harte in Overland Monthly Magazine resembled "dog-kennels" made from shakes. Snow sits on Donner Summit where the railroad is from November to May or June. It can be frosty any night of the year at the 7,000 foot elevation of Tunnel 6. For most of the year the "huts" sat inside snow caves. When work moved to the Nevada desert it might have been a relief after the winters of snow – for awhile - until the heat set in. The "huts" were grouped in little camps all along the CPRR route. During a good portion of the year, the workers moved from their camps to their work through snow tunnels.

In 1866, The Dutch Flat Enquirer said, "'we are now in the midst of one of the most severe winters we have experienced." Tunnel portals were buried. Chinese encampments were snowed under. The Chinese lived under the snow. Chimneys poked up through the snow. Airshafts were dug through the snow. Walkways went through the snow in tunnels, Snow had to be continually shoveled away to get to the real work. Work materials had to be lowered down snow shafts some forty feet tall and rock debris had to be hoisted up the same shafts for disposal. The Chinese lived in the snow and it must have been miserable.

"The drillers are all Chinamen, and most excellent hands they make, as will be seen when I state that a gang of three can drill three holes of one and a quarter inches in diameter and two and a half feet deep in twelve hours."

Sacramento Union
4/22/1867

The Pacific Railroad

Here is a "camp;" but, alas! none of the old style of snow-white canvas, with its memories of refreshing sleep upon fragrant pine boughs; no, it is a Chinese camp, resembling a collection of dog-kennels, which, in fact, it is—each hut hastily made of "shakes," about four feet high by six feet broad, and eight feet long.

Brett Hart
September, 1869
Overland Monthly

Right: life size diorama showing Chinese workers on the Summit at the Railroad museum in Sacramento

Daily discomfort was not the only hardship. There was the constant danger from explosion, avalanche, rock slide, and other accidents. Those Chinese workers were tough.

Despite the conditions, the Chinese workers were the most civilized and healthy of the railroad workers. They formed groups selecting one member to be a cook for the whole group. The Irish ate repetive meals of boiled beef and potatoes. The Chinese had a varied diet of oysters, abalone, cuttlefish, dried bamboo sprouts, dried mushrooms, vegetables, pork, poultry, vermicelli, rice, salted cabbage, dried seaweed, sweet rice crackers, and dried fruit.



Catfish are not native to Donner Summit. Nevertheless there are ponds filled with catfish. At the summit they are small but the lower the altitude the larger the fish. It is said that the first catfish were stocked by the railroad for the Chinese. See our November, '10 edition for catfish in a Summit pond. They were not interviewed about their antecedents for this story.

In addition to cooking, the crew cooks had small barrels of warm water ready at the end of each day so workers could bathe daily. In addition, the cook would deliver to his crew containers of tea. The workers would drink tea rather than local water. White crews faced hard work and dysentery. The Chinese dealt only with the hard work.

On Tuesday, August 9, 1887, during the Pacific Railroad Commission hearings, James Harvey Strobridge was asked "What was paid for labor at the time?" His response "For Chinamen, we paid \$35 a month." However, a few minutes later he said "As I recollect it now, we paid white men \$35 a month and Chinamen \$30." White workers had their board provided which the railroad valued at .75 per day. Chinese workers paid for their board out of their wages which meant the Chinese were paid 3/5 of what the white men were paid. Their wages later rose to \$35 but they still supplied their own board. In June, 1867 near Cisco there was an abortive strike. Chinese workers' wages had been raised to \$35 and they struck for \$40 and ten hour work days on open ground and eight hours in the tunnels. They lost.

The Chinese had to work the hardest work and accept the prejudices of the white men. And then, there are many reports of Chinese leaving the railroad work only to be attacked and robbed of their earnings vwhile leaving the mountains.

Daylight Through the Tunnel

Pacific Slope Intelligence

DAYLIGHT THROUGH THE TUNNEL. - The Following item, from the Sacramento Union, will gratify the reader: The east end of the Summit tunnel is open and daylight shines gthrough its entire length.

In a few weeks the bottom will be cleaned out and the track laid. Many predicted it would require three years to accomplish what has been done in one.

The first locomotive east of the Sierra is now in running order, and will immediately commence the work of track laying. Twenty-five miles of road-bed ar ready for the superstructure.

Daily Alta California September 2, 1867



Alfred A. Hart. East Portal of Summit Tunnel #199 and wagon road from Tunnel 7; 1/2 of a stereopticon slide

Work Camps Along the Railroad Line

report dated Oct. 7, 1867, from the Federal Railroad Inspectors, directed to O. H. Browning, Secretary of Interior. They are speaking of the area around Tunnel 6. "These camps are generally built about one mile apart and consist of store houses, power houses, blacksmith shops, kitchen, eating and sleeping rooms, and stables for mules, horses and oxen. These, with the small buildings erected by the Chinese laborers for their own use, make quite a village."

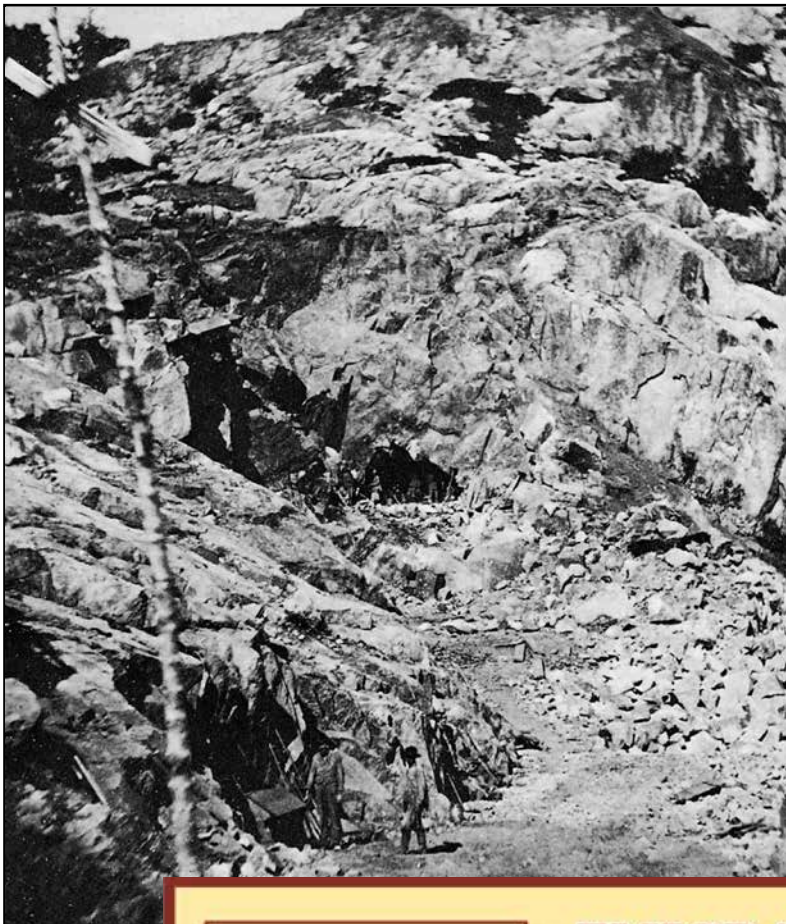
courtesy Chris Graves
Railroad Aficionado, Newcastle CA

Drilling in Granite



Above is an example of a drill bit used to drill into granite both for building railroad tunnels and for cutting granite blocks. One man holding the bit and hitting it with a sledge is a single jack. Two men working is a double jack. Much of the tunnel work was done by two men wielding sledges and a third holding and rotating the bit, a triple jack?

It is hard work. I visited Chris Graves in Newcastle, CA, a foremost transcontinental railroad authority, where he had a bit and sledge for me to use. I made no progress. I hardly chipped the granite. I cannot imagine drilling even one hole an inch deep let alone holes day after day each more than two feet deep. They were lots tougher in the old days.



The Great Bore

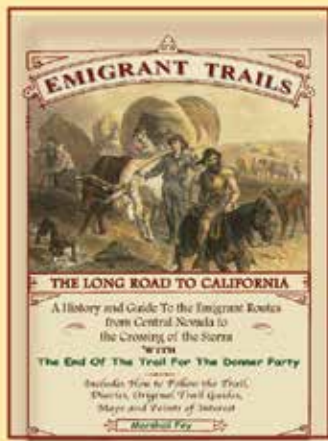
There are about fifteen tunnels, so far, constructed on the road, and they are all known to the initiated as number so-and-so, each tunnel having a number of its own, beginning with Tunnel No. One. The kin of the list, however, is No. Six, that being *the* tunnel, or the Summit Tunnel, as it is generally called. It ought to be called Number One, fo it is a wonder, surely, and we may well be proud that such a triumph of labor and skill has been executed in our own State and country.

This great bore is 1,659 feet long, and was about one year in being put through; it was commenced on the western side of hte ridge September 20th, 1866, and daylight was let through, August 3rd, 1867 the job being acctually finished in one-third of the time that the most experienced engineers were willing to acknowledge that it could be done.

The rapidity with which the work was finally prosecuted to a closee, however, was chiefly due to the discovery and use of that terrible explosive compund, nitro-glycerine.

Much of the work, it is true, had already been done before the new explosive agent was adopted, but it facilitated matters wonderfully when finally used. Experiments were commenced in February of the present year, and, after some considerable delays, the engineers became sufficiently familiar with the compound to use it constantly and safely, after which the work advanced with accelerated speed, equal to about fifty per cent. increase on all the former operations. So much for nitro-glycerine.

Daily Alta California November 10, 1867



EMIGRANT TRAILS

Marshall Fey

A History and Guide
to the Emigrant
Routes from Central
Nevada to the
Crossing of the
Sierra Passes

Includes How to Follow the Trails By
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From the DSHS Archives

Summers

People in the Past Were Just Like Us

Pleasure Trip

On a Pleasure Trip, A party of eight Sacramento ladies accompanied by a sufficient number of gentlemen to render proper escort, left yesterday afternoon for Summit Valley, near Tinker's Station to spend a few weeks "roughing it." They will reside in a little cabin which has been provided for them, and devote their time to amusement and health seeking.

Sacramento Daily Union July 13, 1871

A Trip to Donner Peak [1885]

Last Wednesday morning a party of sixteen from Donner Lake united in a picnic expedition to Donner peak. Following up the summit road as far as Lake Mary, some engaged in gathering flowers, and others admiring the grand scenery of the summit peaks, towering up like some grand castle, far above the snow sheds. After leaving Lake Mary the party proceeded a short distance, when lunch was served out under pine trees, which aided the mountain air as an excellent tonic for sharpening appetites. The party then proceeded up the mountain trail near the summit of Donner peak, passing over a large bank of snow. Here a gay game of snowballing was indulged in by the entire company. After fully ascending Donner peak some grand scenery was presented to view. In the distance could be seen Truckee, Martis Valley, Tinker's Knob, Castle peak, Summit Valley, Red Mountain, Devil's peak and six lakes. From off this peak fair Donner reminds one of a mirror spread out beneath amid the mountains.

The party satisfied with sightseeing, returned to former levels, greatly pleased with the trip. The party consisted of James Stuart, Frank Tomlinson, Hector Stromberg, George Mills, Lewis Tomlinson, Joseph Tomlinson, S. Willet, Tom Moartin, Albert Harney, Edgar Newkirk, Mrs. James S. Curtis, Mrs. Martin, Ida I. Tomlinson, Mattie Tomlinson, Kate Hyde and Maud Martin.

'Yours,

Truckee, July 28, 1885

Sacramento Daily Union July 31, 1885

Letter to Grandpa, 1872

Summit Valley June 2, 1872

Dear Grandpa:

Oh, if you had only been up here when we had the snow-storm the other day; it snowed hard all day, and I had such fun snow-balling; Oh, if you had only been here, Grandpa, wouldn't I have snow-balled you. The flakes were as big as my fist, and when I went outside I was just as white as snow.

I started to go over to the "ice Lakes" [Serene Lakes today] the other day, and just as I got half way it began to shower, so we waited under some trees for it to stop, but it still continued to rain, so we started for home again, and just as we got there it began to hail, and it hailed so hard that we were glad to be at home.

When you come up this summer we will have jolly times, and roam through the woods and listen to the pretty birds, and when we get thirsty we can go to the nice cool brook near the house and refresh ourselves and Papa will come up to go a hunting, and we will all have a splendid time, won't we Grandpa? I have had two sleigh rides and Mother has had one, and we did enjoy them so much.

I am going to run out now and have a play in the snow. Mother sends lots of love and kisses, so do I. Good-bye, from your little

Nellie

From the California Farmer and Journal of Useful Sciences June 6, 1872

[Wouldn't it be interesting to look at the 1870 census for Donner Summit and see who Nellie was? Feel free to do so and report back.]

The Stephen Pass Crossing of the Sierra Nevada - Reconfirmed

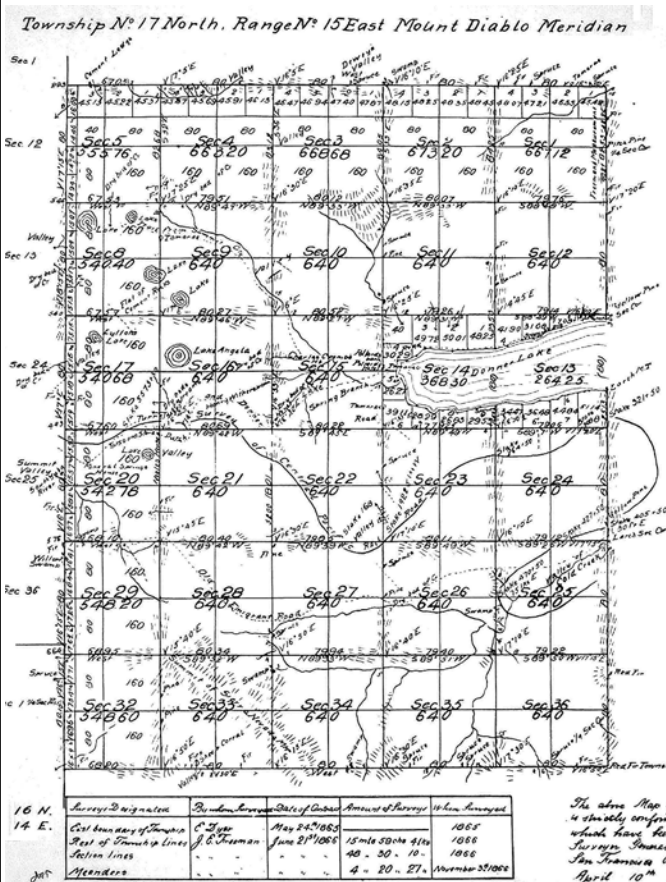
Marshall Fey

Editor's Note: History is indeed facts; but who did what, why it was done, and how it was done are open to interpretation. People reading exactly the same facts can come away with entirely different interpretations. So it was very interesting to me to hear Emigrant Trail experts argue over the routes of the first wagons. Here Marshall Fey has an entirely different interpretation than some others have. He leans to the traditional view and includes the following as proof..

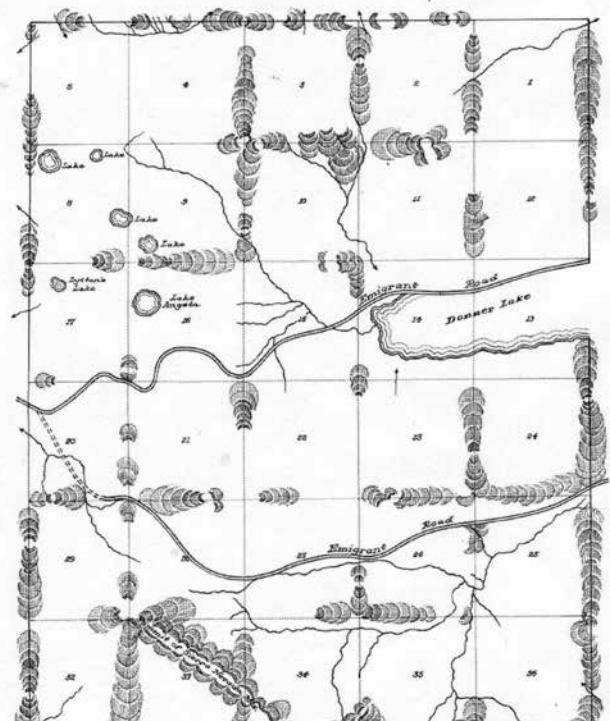
Introduction by Marshall Fey

It has been, for many years, the belief of noted early trail researchers, historians and those who marked emigrant trails that the emigrant wagon trains of 1844 and 1855 crossed Donner Summit a little south of old Highway 40, near the railroad tracks. That was until the turn-of- 21st century when a surprising claim was made that the 1844 Stephens-Townsend-Murphy Party crossed north of old Highway 40, at a much higher location.

Surveyor Includes Stephens Pass Route in 1866 USGS Map



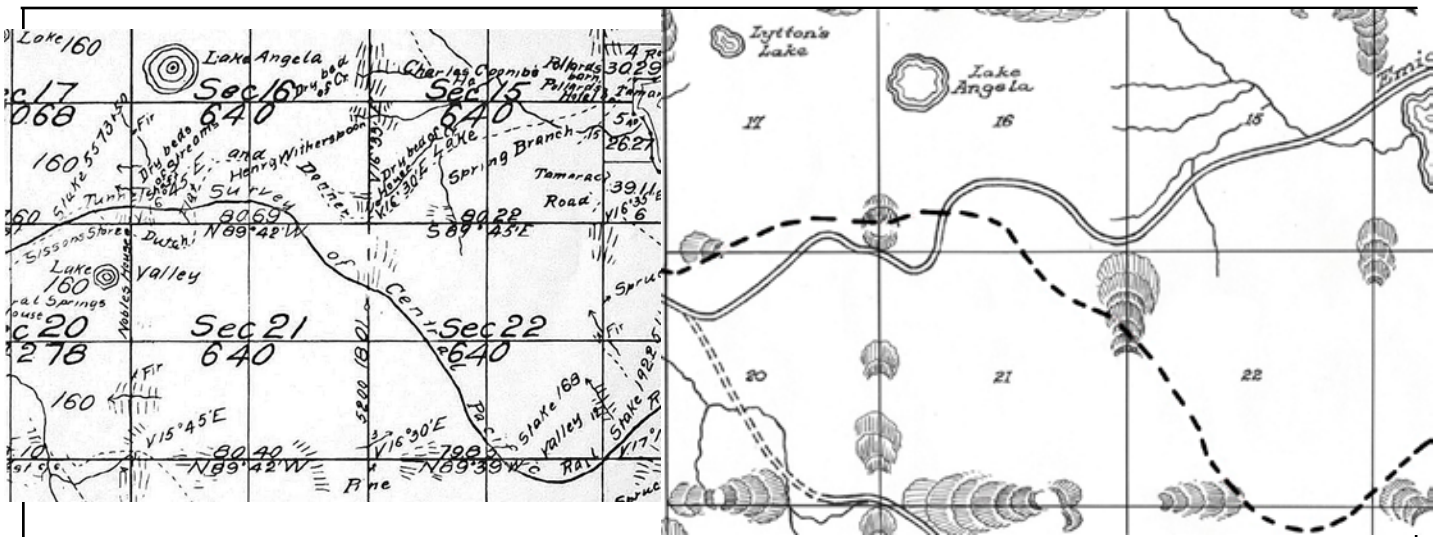
Township N^o 17 North, Range N^o 15 East, Mount Diablo Meridian.



In 1866 J. E. Freeman created the USGS Survey Map, top left, and included the Roller Pass Emigrant Road (marked in Sections 2 & 28). Because the 1844-45 Emigrant Road was similar to the Dutch Flat Donner Lake Wagon Road, Freeman drew a supplementary map, at the top right, adding the early Emigrant Road from Donner Lake to Stephens Pass.

"Several days were spent in attempts to find a pass and finally the route over which the present railroad is, was selected."

Moses Schallenberg was a member of the Stephens Party, interviewed about 1885 by H.H. Bancroft, Bancroft Library, U.C. Berkeley



This section of the Freeman 1866 USGS survey map, above, includes the Donner Lake Dutch Flat Wagon Road and the route of the Central Pacific Railroad through Donner Pass.

This section of the Freeman supplementary map shows the relationship of the 1844-45 Emigrant Road with the alignment of the Central Pacific Railroad. The Stephens Pass Route, shown as the Emigrant Road, crossing over the summit into Summit Valley, was on the north side of the tracks until Section 16 where it crossed over and continued on to the summit on the south side. The dashed line, which represents the future CPCPPR track alignment, was copied from the survey map at the left.

Diary Entry Confirms the Route of First Crossing of Donner Summit

The trail leaves the shore of the lake [Donner] on the right hand after ascending some rocky hills, and after crossing some difficult ravines and swampy ground densely timbered, we reach the base of the crest of the sierra Nevada. To mount this was our next difficulty...

In good heart, therefore, we commenced the steep ascent, leading our animals from crag to crag, and climbing in places nearly perpendicular precipices of smooth granite rocks. In good heart, therefore, we commenced the steep ascent, leaping our animals from crag, to crag, and climbing in places nearly perpendicular precipices of smooth granite rocks. One of our mules in the ascent, heavily packed, fell backwards twice, and rolled downwards, until her descent was interrupted by a projecting rock. We thought her career of duty and usefulness had terminated; and her bone would bleach among the barren rocks of the mountain. But she revived from the stunning and bruising effects of her backward somersaults; and with great exertions on our part in assisting her, she reached with us the summit of the pass.

The view from the crest of the Sierra to the east, is inexpressibly, comprehensible, grand and picturesque. After congratulating ourselves upon the safe achievement of our morning feat, and beathing our mules a few minutes, we proceeded on our journey. A mile brought us to a small dimple on the top of the mountains, in the centre of which is a miniature lake [Lake Mary], surrounded by green grass.

...Searching about, we ascertained, by the fresh trail of our party, that they had left the lake on the right hand over a small rocky elevation; on the other side of which, we could discover the indentations of wagon wheels made last year.

NOTE: The August 26, 1846 diary quotation, above, from *What I Saw in California*, by Edwin Bryant indicates he took his mules over the Sierra along the 1844-45 (Stephens) route. "Traveling one mile from the crest to a miniature lake" and "had left the lake on the right" confirms the location of his route. These two statements would negate a trail passing near Lake Angela.

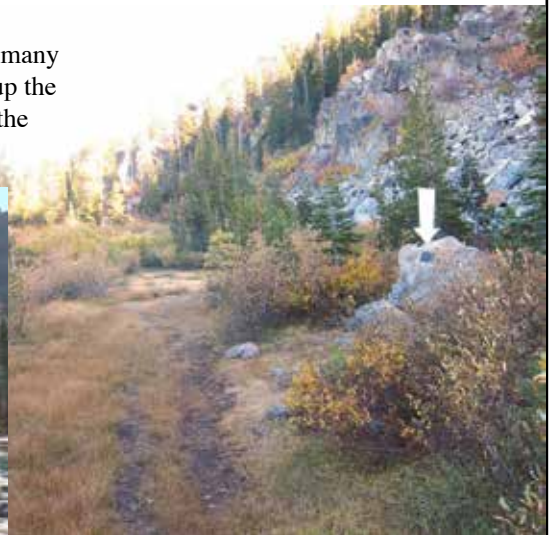
The Bryant-Russell mule train, one of the four parties to have taken the Hasting cutoff, may have been the only party to attempt this difficult crossing in 1846. A new easier emigrant route up Coldstream Canyon was blazed the prior year. Bryant was the last known diarist to cross the Sierra in the location of Old Donner Summit.



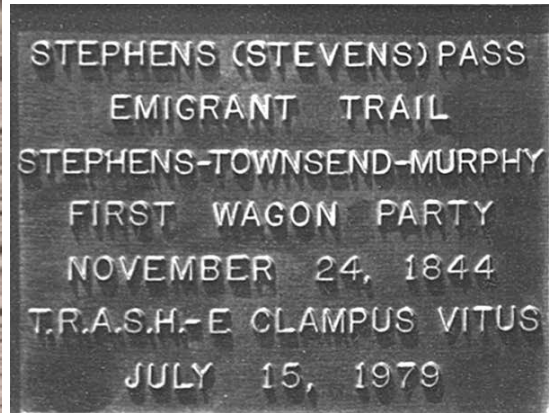
The picture above, probably photographed in the late 1860's of a miniature Lake Mary [for a "Then and Now" see page 10 of April, '12], shows probable signs of the Dutch Flat Donner Lake Road, formerly the Emigrant Trail, to the left of the clump of bushes in the lower right hand corner. The roadway would have left the valley at the far right of the photo.

The lake, named Valley Lake on Freeman's 1866 survey map, was dammed later to provide water for the Central Pacific Railroad train engines.

It has been recorded by George R. Steward, Walter Mulcahy (NETMC) and many other historians that the 1844-5 route, including the Stephens Party, passed up the granite slope in the photo at the left and crossed the railroad tracks where the tunnel is today. (See arrow).



As the photo above and the one at the top of the next page indicate, the Emigrant Trail from the railroad tracks to the Summit was ideal for wagon trains. The plaque on the rock at the right of the above photo is shown below. It was the first plaque to acknowledge the Stephens-Townsend-Murphy Party successfully crossing the Sierra into California.



At the left is a page from George R. Stewart's Donner Pass. Stewart, a noted trail historian, is the author of the epic *The California Trail* and *Ordeal By Hunger: The Story of the Donner Party*.

The True Pass

The lowest passageway is through this gap, which is here seen looking west. From bottom to top, at right, the pre-1923 road, the Dutch Flat Donner Lake Wagon Road, the 1960 highway, Weather station at right; highway maintenance buildings in center. The emigrants took their wagons along the winding road at the left, crossing at an altitude of about 7050 feet.

Stephens Pass Markers



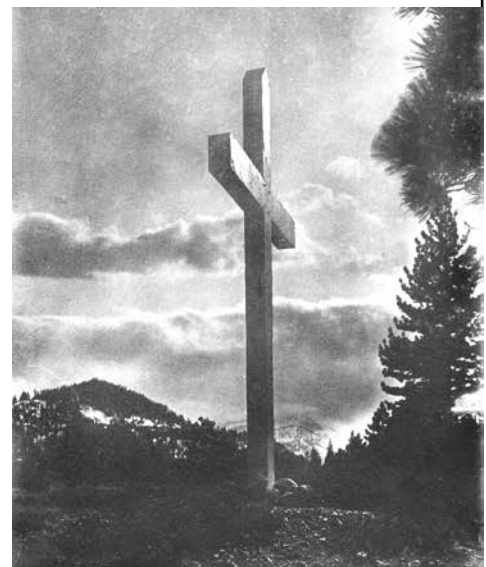
Around 2008 a trail marker like the one above right was placed on a fallen stump on a possible piece of the 1844-45 trail. This barren quarter-mile section of terrain, indicating signs of having been traveled over, is located on the route up to the summit. The peak at the top left of the photo is Mount Stephens.

A year after the photo was taken the round trail marker disappeared the the stump was moved.

In 1887 the first 24 foot tall Donner Cross¹ was placed near Truckee, California marking the cabin site of the Graves and Reed families, members of the Donner Party. Later one was placed on the Emigrant Trail at Gravelly Ford² and another one at Stephens Pass (right). The Photo is in the archives of the Nevada Historical Society and is identified as the "First Monument on the Summit." The cross was probably there by the time the Lincoln Highway first crossed the Pass in 1914.

1. <http://truckeehistory.org/historyArticles/history39.htm>

2. http://www.octa-trails.org/learn/people_places/grave_duncan_lucinda.php



The photo below, taken from the Pacific Crest Trailhead facing east, shows the route of the Emigrant Trail at the summit. This is the location at which the 1844 Stephens-Townsen-Murchpy Party would have crossed. At the right of the photo is a concrete post that once held a California Historical Landmark sign like the one pictured below right. The sign is one of a series of three designated as California Historical Landmark 799.



More From the DSHS Archives



Happy New Year - Will Rutherford - Soda Springs - 1938

Colonel Rutherford built the Donner Summit Lodge and operated the Ice Lakes Lodge in Serene Lakes in the 1040's

Look closely at this house and drive through Soda Springs. Where did it stand?

Book Review

High Road to Promontory

George Kraus, 1969

We take for granted trains, highways, and fast travel but there was a time, before the railroad, when it took four or five days just to cross the Sierra. That stage travel was a lot faster than wagon trains or freight wagons, but it was still slow.

There were only 400 or so Americans in California before 1848 and even after was discovered there were only one hundred thousand people or so. California was an isolated land three thousand miles from the rest of the U.S. Still, it was growing and better communication was needed. With the Civil War the need was obvious to keep California in the Union. Hence the transcontinental railroad was launched. This book is about the building of the road from Sacramento to Utah.

Although it was written some time ago, it is readily available for purchase and in libraries. It is the classic book on the building of the Central Pacific.

The story covers all aspects of the building: early attempts, route, government aid, famous personalities, Civil War influence, whether locomotives could go uphill (seriously), and Congress' inability to act.

In telling the story the author relies on lots of pictures for illustration, some maps, and many, many primary source quotes from newspapers, letters, and reminiscences. It's interesting to read about bucking the snow, traveling on the first trains, and reading descriptions of railroad camps and work.

There are lots of stories too: the Dutch Flat Swindle, opposition to the railroad, how the definition of the Sierra puts their start only 7 miles from Sacramento, the break with Judah (the man who devised the route and did much to sell the idea of building the railroad), and the terrible winters.

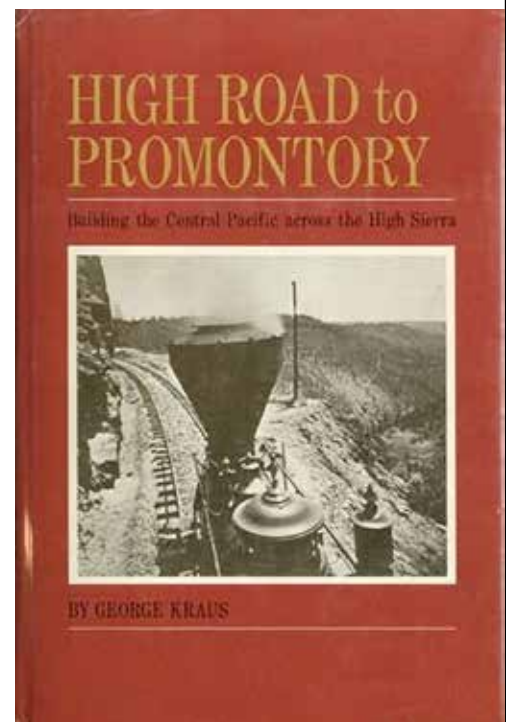
You learn how the railroad was financed and the incredible risk the Big 4 took. They could get no bank loans for the railroad company and could get no government aid until 40 miles of track had been laid and approved. The Big 4 had to personally guarantee the loans to build the first miles of track and pay for materials.

There are lots of details like the names of the locomotives, arrivals, ship names, the numbers of stages and passengers on the stage routes, freight rates, average speed of trains (22 mph for passengers and 15 for freight), how the Chinese lived, rail weight, twisting oxen tails, tunnel work crews, etc.

Since this is the Donner Summit Historical Society, that's why I was reading the book and there is some specific to the Summit. There is the Great Summit Tunnel, avalanche, hauling engines over the summit, the Tunnel 6 shaft engine, the first train over the summit, the terrible Summit winters, and some quotes such as of hiking to the top of Castle Peak.

If you want a good introduction to the building of the railroad this is it.

There is one oft repeated incorrect fact. Relying on the memory of one worker it is described that the Big 4 undertook side enterprises besides the railroad. One of those was the Summit Ice Co at Ice or Serene Lakes. There was an ice company there for a couple of years but it was not owned by the Big 4 or even one of the Big 4. It was owned by B.B. Redding and partners. B.B. was a railroad agent and friend of Mark Hopkins. the company moved to Prosser in 1872 because there was too much snow on the Summit and it was colder at Prosser. Summit Ice later became part of the Union Ice Co..



Then & Now with Art Clark

Scene near Summit Tunnel
Compare to Houseworth #120



Scene near Summit Tunnel
Compare to Houseworth #120

Art's Sierra Scenes

This is a view of the Dutch Flat - Donner Lake Wagon Road coming down from the eastern end of Tunnel Six. The wagon on the left appears to be the Photographer's. Barely discernable is a rock placed in front of the rear wheel to keep it from rolling downhill on this fairly steep grade.

The modern stereo was taken slightly to the left of the original to afford a view of Donner Peak. This Alfred A. Hart photo is sometimes titled, "120 Road and Rocks near Summit Tunnel - Donner Peak in dist." CENTRAL PACIFIC RAILROAD CALIFORNIA"



DONNER SUMMIT HISTORICAL SOCIETY
www.donnersummithistoricalociety.org

Membership

I/we would like to join The Donner Summit Historical Society and share in the Summit's rich history.

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____ Individual Membership - \$30

(Please mail this card with your check payable to DSHS to Donner Summit Historical Society, P.O. Box 1, Norden, CA 95724)

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If you would like monthly newsletter announcements, please write your email address below VERY neatly.

The Hidden Wonder of the World

Nimbus Films is offering "The Hidden Wonder of the World, the Transcontinental Railroad from Sacramento to Donner Summit" for sale, for just \$19.95.

For the first time the hidden wonders of one of America's greatest construction and engineering feats are revealed on camera. Come along and visit the abandoned granite tunnels, stunning trestles, gigantic cuts and breathtaking scenery traversed by the Transcontinental Railroad. People come from all over the world to see these hidden sites. Now you can travel to the summit of the Sierra Nevada and marvel at how the master engineers and builders of the 1860s accomplished this heroic deed. Perfect for history, railroad and travel fans!



To order a DVD, please send a check for \$19.95 to Nimbus Films, 4520 Shari Way, Granite Bay, CA 95746. Or Visit transcoshow.com to order online.

This includes shipping and handling.

To see it on the beach at Serene Lakes, see page 2's ad.