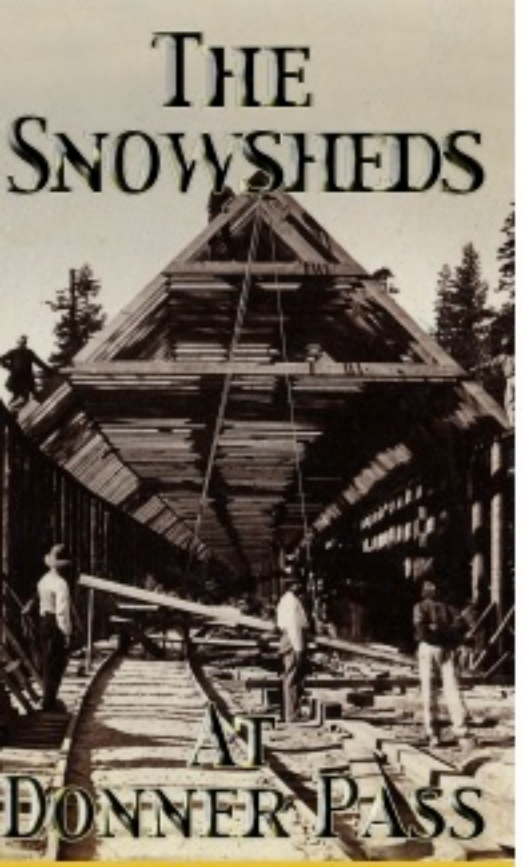
The Snowsheds at Donner Pass



Donner Summit Historical Society

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Snow is not a problem. Theodore Judah, who was the Chief Engineer of the Central Pacific Railroad and who laid out its route, said something like that about the snows of Donner Summit. He was wrong.

Called one of the "Marvels of the West" by an author in 1888, the snowsheds on Donner Summit are almost as iconic as the scenery. In the picture to the right the snowsheds stretch along the now abandoned railroad route across the face of Donner Peak.

Theodore Judah had studied the moss and tree branches on the Summit and was convinced that as the snow fell locomotives could push it easily off the tracks and train traffic would not be hindered.

He was not alone. The Sacramento Daily Union summarized feelings best in 1866, "no fears whatever are entertained now ... any obstacles it may place in the way will be easily overcome." That was before tracks reached the Summit and the railroad came to really know Sierra snows.

Snow is a problem on Donner Summit. An average of 34 feet of snow falls each year. It is also affectionately called "Sierra Cement" because of its density. Storms called "pineapple expresses" coming directly across the Pacific from Hawaii put a lot of moisture and weight into Sierra snows.

The railroad tried Judah's method, just pushing the snow out of the way using a "mammoth snow plough [above about 1867] which rests on two four-wheeled trucks. It is twenty eight feet long, ten and a half feet wide; thirteen and a quarter high, and

"It is no exaggeration to say that the scenery… is one continuous glorious masterpiece of painting."

Sacramento Union April 22, 1867

Railroad buildings, stations, workers' houses, a hotel, and even the school on Donner Summit were connected by snowsheds. In winter residents might never see the light of day for weeks at a time. The picture below shows Summit Station on Donner Summit. The white building is the Summit Hotel. The peaked building to the right housed a turntable. The shed in the center led to Tunnel 6.

Even with the snowsheds there were problems. Avalanches removed large sections and stopped trains. A snowbound train was finally dug out of the snow in Truckee in 1890 and the passengers had to walk to Emi-

grant Gap, almost 30 miles to get to a train on which they could continue. The train had been stuck 15 days. In 1952 the Streamliner City of San Francisco was stuck near Yuba Gap for six days until it was dug out. In 1887 a newspaper's headlines screamed, "SNOWED IN AT CISCO" where passengers were stuck in a train for more than three days.

In summer the sheds baked in the sun and dried tinder dry. Sparks from locomotives often started fires and the sheds acted like chimneys. Snowsheds burned regularly, so regularly, that fire trains were kept ready to speed to fires. Telescoping snowsheds were developed so sheds could be rolled over other sheds in summer to make fire breaks (see the reverse).

"…a more convenient arrangement for a long bonfire I never saw."

Hawke's Bay Herald January 28, 1870

A lookout was established on Red Mountain where lookouts kept an eye on miles of snowsheds ready to telephone to Cisco when they saw fires. Cisco would then telegraph the fire trains. That telephone was installed the year after its invention and may have been the first one in California. There is a marvelous view from the top of Red Mountain and it's a wonderful hike.

Today the railroad, and residents, have better snow machines, the railroad has concrete snowsheds, there are no fire trains or track walkers, and just a few workers take the place of the thousands of old.

This column top: Snowshed interior at Summit Station; Below, the first snowsheds were built of round timber because there were not enough sawmills.

Telescoping Snowsheds

The snowsheds could act as chimneys with the drafts spreading fire with tremendous speed. To give the fire trains time to get to the fires before miles of sheds were destroyed telescoping snowsheds were developed. The picture above is a postcard from 1910 showing a telescoping snowshed near Lakeview, just a bit east of Donner Summit.

Circus Animals Escape

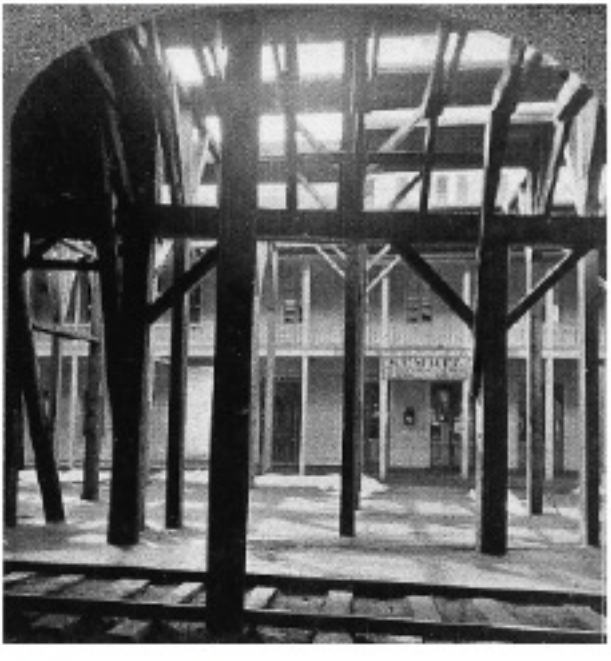
In May, 1904 a circus train was traveling over Donner when some of the circus wagons came loose and fell off the railcars in a snowshed just past Donner Summit. A railroad worker, walking home through the sheds was shocked to see a tiger and he ran for his life. A posse captured the tiger and a couple of lions "meandering about in the snow for some hours, disconsolately". A snake charmer was called in to coax a boa constrictor from the rafters. Monkeys scampered about in the branches of nearby trees for months after.

Recycled Snowsheds

The snowsheds were built out of two inch thick planks. When the wooden sheds were replaced by cement sheds, locals took the discarded wood and used it as building material. There are some beautiful houses on Donner Summit that incorporate snowshed timbers.

Mole People of Donner Summit

In Winter on Donner Summit people moved from building to building from home to work, and kids even went to school, by traveling through the snowsheds. There was even a restaurant in the snowsheds. In the picture below the entrance to the Summit Hotel can be seen through the snowsheds. One newspaper called the residents the Mole People of Donner Summit.



Hunting Icicles

In Winter and Spring melting snow caused continual dripping through the shed roofs. At night that dripping water would freeze forming large icicles that could damage train cars. Railroad personnel traveled the sheds with shotguns to blow away the icicles.

Cover panel, Snowsheds under construction. The first sheds had peaked roofs but snow pressed unevenly causing collapse. Designs were changed which then called for hundreds of snow shovelers to keep the new flat roofs from collapsing.

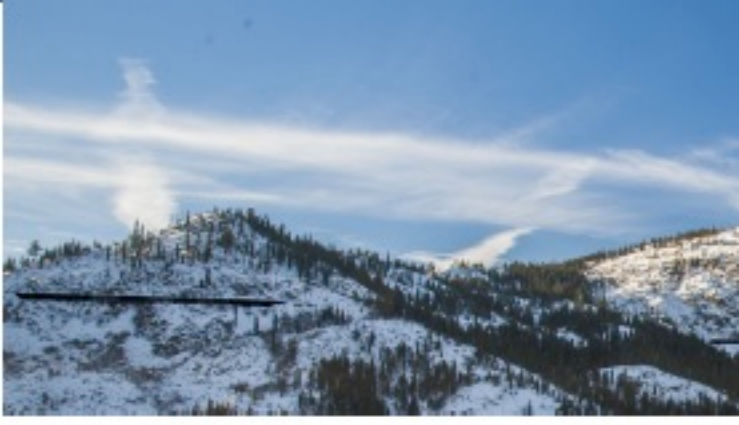
GREAT FIRE IN THE SNOW SHEDS.

The Cisco Railroad Hotel Burnt Down.

Cisco, June 29th. — [T]o-day a fire broke out in the snow sheds completely destroying the Cisco Hotel, Western Union Telegraph Office and a number of other buildings, together with about three-quarters of a mile of snow sheds... The telegraph wires ... were completely destroyed. ... The fire spread so rapidly that there was very little property saved, the operators not having time to save the telegraph instruments. The track is badly damaged the whole distance. The up-train was detained eight hours in consequence... The fire was caused by a spark from a passing locomotive.

Daily Alta California June 30, 1871

Pictured in this panel, snowsheds at Summit Station



weighs FORTY ONE THOUSAND EIGHT HUNDRED AND SIXTY POUNDS! It was once driven by ten locomotives into a snow-bank on the Sierra Nevada Mountains at the rate of sixty miles an hour." Even at that weight and speed, Sierra snows easily stopped the train.

Eventually the railroad did, for the most part, conquer the Sierra snows by building 40 miles of snowsheds across Donner Summit (below, Yuba Gap in 1899).

Some of the most spectacular scenery on the planet is on Donner Summit and it should have been one of the most beautiful train rides. Instead, passengers were treated to the unique experience of "railroading in a barn" as the trains traveled through snowsheds and tunnels.

Passengers completely missed the scenery, traveling through the dark and smoke-filled sheds.