

The Cape Horn Myth

By Chuck Spinks, 2019

The myth of Chinese workers being lowered in baskets to construct the line around Cape Horn has been beaten to death, but there are still those out there that continue the story. It is not controversial and there are not any conflicting reports on its construction. There are no primary historical sources that support the story. The best recent publications on the Cape Horn myth are:

A Study of Cape Horn Construction on the Central Pacific Railroad 1865-1866, by **Jack E. Duncan**, 2005. Jack is a Mechanical Engineer and describes how the roadbed was constructed.

The Central Pacific Railroad and the Legend of Cape Horn 1865-1866, by **Edson T. Strobridge**, 2001. Edson was a descendent of James Strobridge, the man most responsible for overseeing the construction for the Central Pacific. Edson outlines the history of the myth and list the various books and articles that originated and continued the myth.

The workers constructing the line around Cape Horn were not lowered in baskets, on “bosun’s” chairs, or with ropes tied around their waists. The grading of the roadbed for a side-hill cut is worked from the top down, or from one or both ends, not from the face of the slope. There is no need to lower workers, since the work progresses from the top or ends of a side-hill cut. **E.B. Crocker** describes a side hill cut in hard rock at the summit in an August 10, **1867** letter to Collis Huntington:

“The work is done up scientifically. They work the rock up to a face, then go back 3 or 4 feet from the face, put in a hole 12 to 20 feet deep, fill it with powder which is only powerful enough to “spring a seam”, cracking the rock enough so that powder can be poured in. Then they put powder in by the keg, from 1 to 50 kegs, according to its size. The effect is to blow the greater part of the rock clear over the cliff & out of the way.”



Edwin Crocker, with his degree in civil engineering, was the only Associate with a technical background.

The material at Cape horn was slate, and not hard rock, and was easy to work. Although it could be broken with a pick, they probably used powder to expedite the work. **Sam Montague** in his October 8, **1864** Chief Engineers Report, stated that:

“The construction of the road around this point, will involve much heavy work, though the material encountered is not of a very formidable character, being a soft friable slate, which yields readily to the pick and bar.”

The slope around Cape Horn was not a cliff. **Montague** in his 1864 report also states about Cape Horn, that:

“The dip of the ledge is about seventy-five degrees, or nearly perpendicular, but, as our line at this point crosses the line of stratification nearly at right angles, the cuttings will admit of a much steeper slope than can be generally adopted for that class of material.”

Many writers have interpreted this to mean that the slope of the hillside was 75 degrees. That isn't what Montague is stating. These are engineering and mining terms. The "dip" is the angle that the stratified slate formation makes from a horizontal plane, not of the hillside. A "ledge" in mining is the vein or lode, and in this case is the slate rock formation that he is referencing. What he is saying is that, because the roadbed crosses the stratification at right angles, the cut slope of the bank uphill of the roadbed could be much steeper than a normal soil cut slope, saving time and money. The actual slope, as shown in Duncan's detailed site study, is between 34 and 50 degrees, with an average slope of about 40 degrees. A typical modern cut or fill slope is no steeper than 1½ to 1, or 34 degrees.

Chronology of the Myth

The first publication that describes Central Pacific men suspended by ropes on cliffs was written by civil engineer **Robert L. Harris** for the September 1869 issue of *The Overland Monthly*, called *The Pacific Railroad-Unopen*. Harris, who had previously worked for the Central Pacific, describes a trip along the uncompleted line in October **1867**. He describes the surveyors working along the cliffs east of the summit:

"The only way for the chain-men to work along these cliffs and those of the northern side was by being suspended by ropes from above, the chain-bearers signaling to those holding the ropes, up or down, forward or back."

This may have been the spark that ignited the imaginations of subsequent authors.

The first publication that mentions ropes and the construction around Cape Horn was an **1869** tourist publication; the *Great Trans-Continental Railroad Guide*, by **Bill Dadd**:

"When the roadbed was constructed around this point, the men who broke the first standing ground were held by ropes until firm foot-holds could be excavated in the rocky sides of the precipitous bluffs."

The **1877** tourist guide, *William Minturn's Travels West*, by **Samuel Tinsley** is the first that has Chinese hanging by ropes:

"The first workmen on this rocky point-hardy industrious Chinese-were held steadily by the aid of a rope tied securely around their bodies. Thus, they hammered away at the rock until they made for themselves standing room."

In **1919**, the 50th anniversary of the completion of the Transcontinental Railroad, **Edwin L. Sabin** published a book, *Building the Pacific Railway*. This is the first 20th century book written about the event, and was frequently used as a source by subsequent authors. He repeated the story of workers suspended by ropes at Cape Horn:

"Here a bed had been literally chiseled from the granite slope so sheer that the laborers, yellow and white, were suspended by ropes while they hacked, drilled, and blasted, 2,500 feet above the rushing American River."

The May, **1927** issue of the *Southern Pacific Bulletin* include the first use of bosun's chairs. The article was written by the Southern Pacific Public Relations Department. They were clearly not historians.

“It was at Cape Horn that workers were lowered over the cliff in ‘bosun’s chairs’ and did the preliminary cutting, suspended 2500 feet above the American River.”

The first picture showing Chinese in baskets constructing the Central Pacific was a fanciful painting by artist **Jake Lee** in **1959** or **1960** for Johnny Kan’s Restaurant in San Francisco’s Chinatown. The painting was one of a series in the Gum Shan, or “Gold Mountain” dining room. The caption was:

“In the Sierra. Thousands of Chinese laborers built the Central Pacific tracks which joined the Union Pacific to span America in 1869.”

The caption didn’t state where on the railroad the construction took place. The painting has been reproduced many times in publications.

The first publication to reference wicker baskets was the **1962** book, A Work of Giants, by **Wesley Griswold**. The book stated:

“Here **Strobridge** had to lower Chinese from the top of the cliff in wicker baskets to chip out holes for the initial charges of powder.”

Edson Strobridge states in his **2001** paper: “**Griswold’s description is totally made up without any foundation, documentation or basis in fact.**”

Since **1962**, this myth has been repeated many times. It is still being repeated.