

# Engineering marvel spans SC Mountains

Gibson, Ross

**A**N 1880 TRAIN ad read: "RIDE THE MARVEL OF THE AGE, TO SEE THE WONDERS OF THE AGES!" Readers knew the "engineering marvel" was the once-impossible railroad line from Los Gatos to Santa Cruz, while the natural "wonders of the ages" were the ancient redwoods of the Santa Cruz Sierra. Freight and tourists chugged through canyons dubbed the Near Yosemite by San Franciscans, and once nationally proclaimed "the most scenic rail line in North America."

Since pioneer days, the county's isolation behind high trackless mountains and rugged coast led to early plans for a railroad. One was proposed during the population explosion of the 1852 "Spud Rush" that filled the county with potato farmers, and again in 1862. But a depression and then the Civil War postponed the project.

When the Southern Pacific refused to be enticed to extend its line into the county, local lumber giant Frederick A. Hihn was elected to the state Legislature in 1869 to help build an independent narrow-gauge line. His Santa Cruz Railway came up the coast from Watsonville in 1873, reaching Santa Cruz in 1876, only to find the Santa Cruz & Felton Railroad already there!

Prior to Highway 9, Isaac Graham's toll road was the only way to bring lumber out of the San Lorenzo Valley, paying a high tariff per wagonload. To by-



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pass Graham's toll road, it was proposed in 1874 to float logs out of the hills in an elevated flume running from Boulder Creek to Felton, where an eight-mile rail line would be built to reach Santa Cruz harbor. Unfortunately, any such railroad would cross Davis & Cowell's limeworks property in Rincon Gorge, which had sufficient shipping facilities. The limeworks actively tried to stop the railway.

To the rescue came Ben Lomond mill owner James P. Pierce, who incorporated the Santa Cruz & Felton Railroad, gaining the power of eminent domain. For the budget price of \$600,000, the flume and railway were built, with tracks running down Pacific Avenue to the beach, onto what became "Railroad Wharf," forerunner of today's Municipal Pier. Pierce's line opened in 1875 as the county's first freight rail service.

A barrel served as a mail-and-parcels delivery system on the flume, and flume shooting became a popular sport with young men and women, straddling logs that reached speeds of 15 mph. One such daredevil was Irish millionaire

James Fair, "Silver King" of the Comstock mines, who owned Santa Cruz property and built the Fairmont Hotel. Yet he was called "Slippery Jim" not for flume-shooting but his business wiles!

When the train reached Pacific Avenue it drew complaints, as by law it could move through downtown no faster than a horse team, and when parked it obstructed street crossing in the business district. So a Chestnut Street line was built to bypass downtown, with a 900-foot-long tunnel under Mission Hill. The Pacific Avenue tracks were then converted into the town's first trolley system.

Without survey data for much of the summit, the desired rail link to San Lorenzo Valley mills focused speculation for a summit crossing on the ridge northeast of Boulder Creek. But the extremely steep grade needed would require multiple engines with heavy upkeep, and the constant danger of overheated boilers exploding. This and massive fillwork made the job prohibitive, and a summit rail crossing impossible.

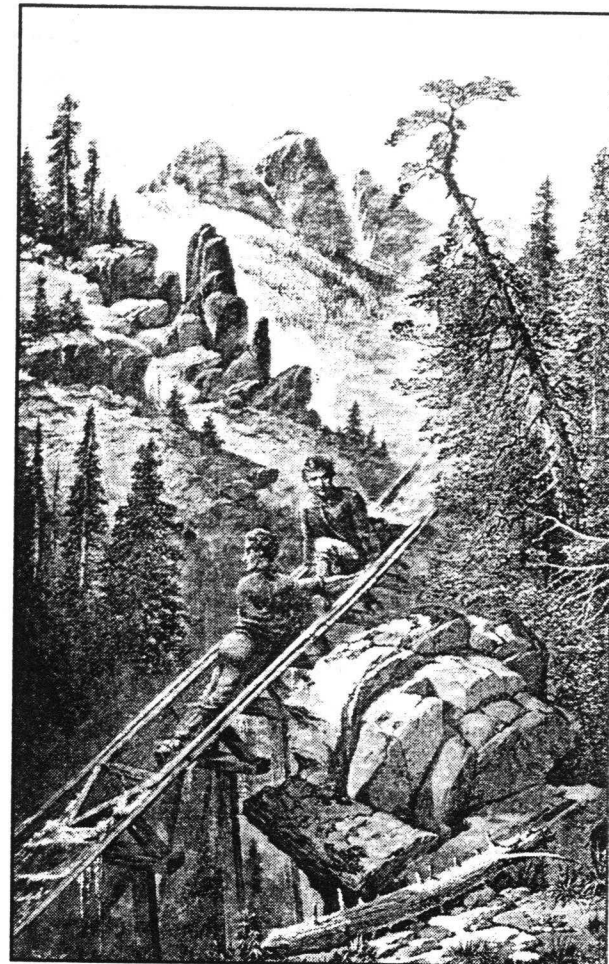
But in 1876, James Fair visited the Centennial World's Fair in Philadelphia. Proponents of narrow-gauge equipment inspired the construction of his South Pacific Coast Railway (a Southern Pacific competitor) from Alameda to Los Gatos. And methods for extending it to Santa Cruz came from an exhibit for the Transcontinental Rail-

way of T.D. Judah (great-uncle of Senator H.R. Judah of Santa Cruz). Models of the Sierra Nevada crossings showed a series of high trestles and tunnels, reducing the need and expense of a steep grade. This solution had been suggested by Chinese railroad workers, from their experience building high mountain roads in China.

Where often mountain lines depended on 6 to 8 percent grades, Fair's 1.7 percent grade was an amazing achievement, rising 90 feet per mile. The grading also cost \$110,000 a mile. This was the job of the 2,000-plus Chinese, who risked their lives for 75 cents to \$1 a day. They blasted out six tunnels, sometimes igniting pockets of natural gas, losing nearly 60 men in tunnel mishaps. The summit tunnel at Wrights was the longest at a mile and a quarter. It was graded to drain seepage from underground springs, and had a red lantern midway to mark the summit. Second biggest was the mile-long "Tunnel 2" at Laurel.

When the railway opened in 1880, Chinese work camps were converted into whistle stops. All depots were constructed in "Alpine Stick Style," evocative of the mountains' promotional slogan: "The Switzerland of America." It was the most expensive narrow-gauge railroad per mile, yet never operated at a loss.

*Next week: The rise and fall of the Suntan Special.*



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Santa Cruz millionaire James Fair, top, was one of the thrill-seekers who would ride the logging flume from Boulder Creek to Felton.