



Walt  
Disney's  
RAILROAD STORY

*The Small-Scale Fascination  
That Led to a  
Full-Scale Kingdom*

By Michael Broggie

*Founder and Historian  
Carolwood Pacific Historical Society*

Pentrex • Pasadena, California

## Chadwell O'Connor: Steam-Driven Man



A CHANCE ENCOUNTER between two railfans eventually led to a friendship and business relationship lasting nearly two decades.

On a sunny spring morning in 1950, Chad O'Connor was setting up a motion-picture camera at the busy Glendale, California, suburban train station to film Southern Pacific's arriving and departing trains. As Chad fastened a 16-millimeter Bell & Howell camera to its custom-built tripod, he noticed a stranger standing alone on the platform.

Not giving him any more thought, Chad began panning the camera to test-frame his view; the expected *Daylight* streamliner would be arriving any moment. Engrossed in his task, Chad was surprised when a voice from behind asked about his filming technique. Looking around, Chad saw the man he'd noticed earlier.

"Sorry to bother you," the stranger said, "but I noticed the way your camera was moving on your tripod. I've never seen such a smooth movement. Mind if I take a look?"

As the fellow moved the camera back and forth, Chad could tell he was used to handling motion picture equipment. "How do you get the smoothness?" was his next question.

Chad explained that he had created a liquid platform between the camera and its tripod mounting. The fluid greatly reduced friction between the metal surfaces, allowing for incredibly smooth panning and tilting of the camera when he was shooting his favorite movie subject: steam locomotives.

"Can you build these for me?," he was asked.

"That's not my business," was Chad's reply.

Becoming more direct, the man implored, "I don't think you understand. I need this mount for a film I'm making. It's being shot on location in the desert and the crew is using long telephoto lenses to film animals. The dailies I've seen are terrible because of the camera's jerky movement. Your mount is the best one I've ever seen and I need it. By the way, my name is Walt Disney."

One month later, Chad delivered the first commercial version of his invention to Walt



*Chad O'Connor poses in 1996 with a motion-picture camera and his original fluid-head tripod camera mount. CPHS collection.*

Disney Productions. Placing an order for more, Walt directed that no Disney film would go on location without using an O'Connor fluid-head tripod. Word soon spread in the film industry as camera technicians and cinematographers discovered the unique fluid head crafted by this former aircraft engineer.

To meet increasing demand for the mount, Chad eventually formed O'Connor Engineering Labs. In 1976, the Academy of Motion Picture Arts and Sciences presented Chadwell O'Connor with a Scientific and Technical Achievement Award for his concept and design. In 1993, the Academy upgraded the achievement award with an Oscar® for "contributions to the art of movie making."

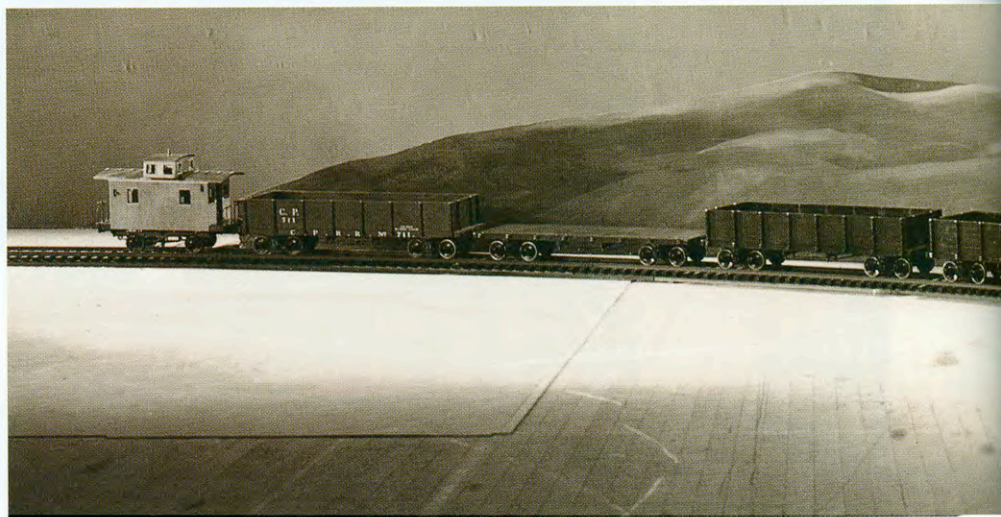
In addition to his engineering abilities, Chad is recognized as a leading expert on steam power (his business cards depict an ancient Greek prototypical steam engine). He has owned, built, or restored nearly every imaginable kind of steam-driven conveyance, including boats, locomotives, and even a Stanley Steamer automobile.

Not surprisingly, Chad harbors a love of railroading; it began at age four when he received his first train set for Christmas. The year was 1916, and steam locomotives were a common sight running through Chad's Massachusetts hometown. Later, after obtaining a master's degree in mechanical engineering, Chad was hired by the Douglas Aircraft Company of Santa Monica, California. There, he is credited with creating the first standardized-parts system to make aircraft components interchangeable.

Never treading far from his railroading passion, Chad was honored when his engineering firm was selected by the National Park Service for a special contract: design and construction of exact working replicas of the Central Pacific Railroad's *Jupiter* and Union Pacific Railroad's No. 119, both 4-4-0s constructed in the 1860s. The two locomotives would be placed on permanent operating exhibit at Promontory Summit, Utah, site of the famous May 10, 1869, "Golden Spike ceremony" (in which the original *Jupiter* and No. 119 participated) signifying completion of the nation's first transcontinental rail line, and today home to Golden Spike National Historic Site.

A close friend of rail enthusiasts and historians Jerry Best and Ward Kimball, Chad became involved in refurbishment efforts for the pair's two full-sized, narrow-gauge Hawaiian plantation locomotives. Jerry's locomotive would be restored to its Hawaiian appearance, while Kimball's would be refurbished into Grizzly Flats Railroad No. 1 *Chloe*—with Chad helping on major alterations to backdate its appearance.

Now in his mid-80s, Chad O'Connor still reports to his engineering office every weekday to oversee a variety of projects. On weekends he can often be found in Ward and Betty Kimball's backyard, where yet another project is under way.



close to developing one he liked. Utilizing his early background as a letterhead and advertising designer at Pesmen-Rubin Commercial Art Studio in Kansas City, Walt had produced an ornate Victorian-style letterhead for his railroad—along with a luggage tag, a ticket, and a special “Vice President” identification card that he issued to friends and business associates. All his railroad lacked was a formal emblem.

Walt drew a concept for the design, and Roger gave it to Eddie Sargeant for final development. After a few days, Eddie produced a clean rendering based on Walt’s concept and featuring the slogan “Fair Weather Route.” The slogan reflected Walt’s acute memory of the bitter winters he endured for six years while delivering the Kansas City TIMES and STAR newspapers for his father’s distributorship.

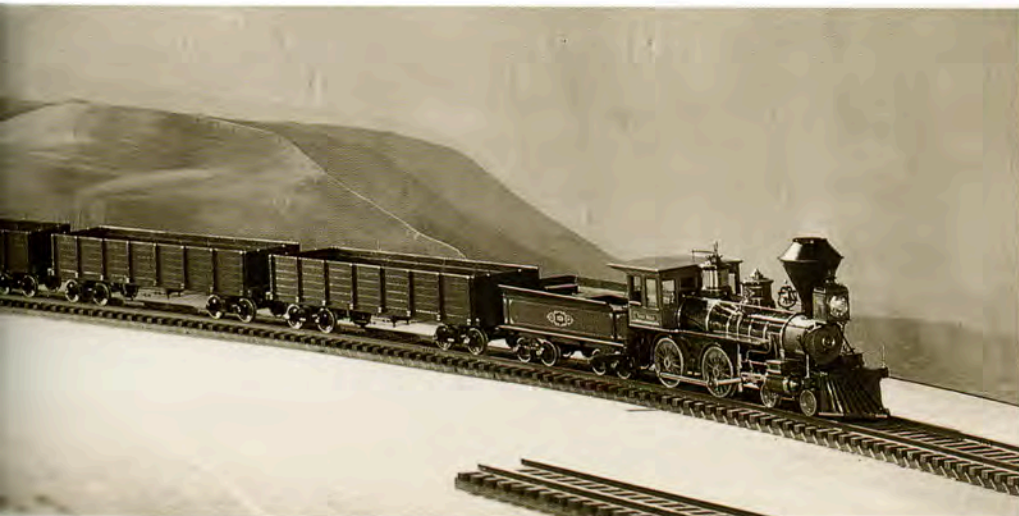
### Where’s Walt?

Naming his layout the Carolwood Pacific Railroad gave Walt’s railroad the same initials as the Central Pacific Railroad—the line that had built and operated locomotive No. 173, *Lilly Belle’s* prototype. Given Walt Disney’s preference for railroaders over critics, it is a safe bet he would not have been swayed in his choice even if he *had* seen the following commentary, written by Ambrose Bierce and published in the SAN FRANCISCO EXAMINER of July 22, 1888:

*The worst railroads on the Pacific Coast are those operated by the Southern Pacific Company. The worst railroad operated by the Southern Pacific Company is the Central Pacific. It owes the government more millions of dollars than Leland Stanford has vanities, it will pay fewer cents than Collis P. Huntington has virtues. It has always been managed by rapacity tempered by incompetence.*

Notwithstanding these harsh words, the Central Pacific and its “Big Four” principals—Leland Stanford, Mark Hopkins, Charles Crocker, and Collis Huntington—had in the early 1860s taken an enormous gamble in deciding to build a railroad from Sacramento, California, east to meet the Union Pacific Railroad (itself building west from Omaha,

*A consist of gondolas (one still a flatcar) follows the Lilly Belle in this early 1950 view. Although the trim 4-4-0 appears to be complete, Walt’s caboose is still “in the rough,” and nearly all the freight cars have yet to be painted. © Disney Enterprises, Inc.*





*Above: Walt sketched the design, and Eddie Sargeant produced this final version of the Carolwood Pacific logo. © Retlaw Enterprises, Inc.*

*Above right: Using a somewhat-more-ornate logo, Walt then put together this whimsical letterhead for his "Fair Weather Route." © Retlaw Enterprises, Inc.*



Nebraska). The 1869 completion of this first transcontinental railroad had signalled a new era of prosperity for the Golden State—and vast income for the Big Four. Settlers and vacationers could travel to California in a matter of days; manufactured goods could be brought in cheaply from the East; grain, fruits, and vegetables could be shipped out quickly to new markets. Walt Disney undoubtedly enjoyed the symbolism inherent in his railroad's "C.P.R.R." initials.

Eventually, Walt equipped his barn with all the basic machines and tools necessary for a complete woodworking and metalworking shop. He spent many hours in the barn, making miniatures that he would show to Lilly and their daughters at dinner. Taking great pride in his ability to build things, Walt admired the skill displayed by others who could create with their hands, and would invite them to Carolwood to share his barn.

When Lilly was asked, "Where's Walt?," her usual reply was, "He's down in the barn with the boys." Some weekends, he would be seen only at the dinner table. Lilly responded by sending housekeeper Thelma Howard down to the barn—with enough sandwiches and sodas for everyone.