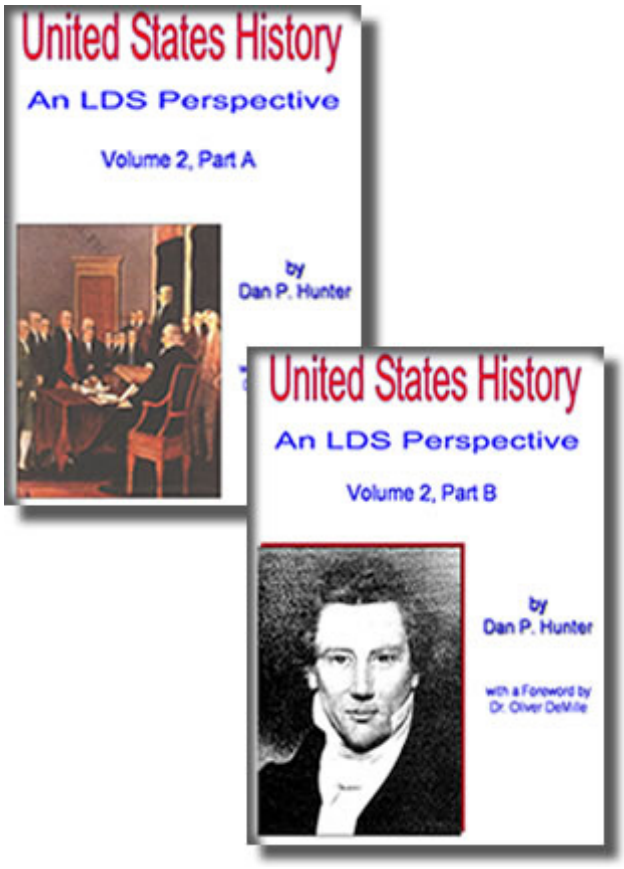

United States History, an LDS Perspective

(1215 – Present)

VOLUME 2

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The Coming of the Railroad

United States History, an LDS Perspective, Volume 2.
"The Coming of the Railroad," pages 450-455.

The first great westward migrations to Oregon and California in the 1840's and 1850's did not settle the plains areas with people. The United States stretched west to the Pacific, with little means of defending the west coast from outside attack. The only route open for heavy military equipment and large numbers of troops was by way of Cape Horn around South America, a voyage of 18,000 miles. Any naval power at war with the United States could easily close this water route. On a continental railroad within the country, soldiers and supplies could be shipped if an enemy threatened to invade the Pacific coast. Important mail could be transported by rail faster and cheaper than by stagecoach and pony express.

A little weekly newspaper in Michigan -- the *Ann Arbor Emigrant* -- was probably the first to suggest a transcontinental railway in 1832. In Boston, Dr. Samuel Barlow, a surgeon, wrote a series of pamphlets urging construction of an overland railroad from Cape Cod to the mouth of the Columbia River. Asa Whitney, a retired ship owner who had made a fortune in the China trade, spent all his money touring the country, trying to win public support for a bill in Congress to construct a railroad. The line was to run west from Wisconsin across the Plains to the Rockies, down the Lewis and Clark trail along the Clearwater and Columbia Rivers, and to end at Puget Sound. Congress studied this bill in 1845, 1846, and 1847, but it was blocked by the powerful Southern congressmen who thought the railroad should start in some Southern seaport such as Baltimore, Charleston, or Savannah. They blocked efforts to name a Northern city as the terminus, but the railroad could not be built without Northern money, and this could be had only with the construction of a northern route. When the Civil War began, Southern members of Congress went home. In their absence, it was easy for Northern members to agree that a transcontinental railroad over a northern route was needed.

President Lincoln chose Omaha as the eastern terminus of the railroad. His choice was probably the result of a talk he had had four years earlier with General Grenville M. Dodge, chief engineer of the Union Pacific. General Dodge met Mr. Lincoln by chance at Council Bluffs, Iowa, in 1859. The man who was to be the next President of the United States had listened carefully as General Dodge told him that the best route across the Great Plains was up the 600-mile-long valley of the Platte River. This route led to a natural pass through the Rockies, at their lowest elevation. Later, when construction actually began, General Dodge had a hard time organizing his track laying gangs. So many able bodied men of the North were serving in the Union Army that he had to fill out the Union Pacific construction crews by importing immigrants from Ireland.

In the middle of 1862, no one could be sure which side would win the Civil War. The Battle of Gettysburg was still a year away. Although their first concern was the terrible conflict dividing the North and the South, President Abraham Lincoln and Congress also took time to think about the future of the West. On July 1, 1862, President Lincoln signed the *Pacific Railroad Act*, that would begin the building of the first transcontinental railway from Omaha, Nebraska to Sacramento, California. Two new companies were chartered for this big job. The *Central Pacific* was to start at Sacramento and come east over the Sierra Nevada Mountains. The *Union Pacific* was to head west up the valley of the Platte River toward the Rockies. Somewhere in the desert plateau between these great barriers the two rail lines would meet.

Many months were needed to assemble materials and workmen, and it was not until January 8, 1863, before the Central Pacific laid its first rail. Three weeks later its first locomotive, the *Governor Stanford*, chugged proudly up and down the few hundred yards of new track. The new railroad published its first timetable on June 6, 1864, announcing freight and passenger service over thirty-one miles of track from Sacramento to Newcastle. Except for wooden ties which could be cut out of the Sierra forests, all the Central Pacific's rails, locomotives, cars, and other supplies had to make the 15,000 mile voyage by sea, around Cape Horn, South America, from the East.

As for the Union Pacific, when it began work, no eastern railroad had yet come within two hundred miles of Omaha. The first Union Pacific rails and other supplies arrived in Omaha aboard freight wagons. Its ties had to be cut in forests far to the north and floated down the Missouri River, for the Platte River Valley had no suitable timber. Hostile Indians often attacked construction camps, killing workers and destroying supplies. There were no good surveys of the routes the two railroad companies were to follow, and engineering teams risked being scalped by Indians as they searched for passes through the mountains. A correspondent for the *Fortnightly Review* described the scene at the end of the track on the Union Pacific line:

> ***Track laying on the Union Pacific is a science, and we...hacked westward before that hurrying corps of sturdy operators with a mingled feeling of amusement, curiosity, and profound respect. On they came. A light car, drawn by a single horse, gallops up to the front with its load of rails. Two men seize the end of a rail and start forward, the rest of the gang taking hold by twos until it is clear of the car. They come forward at a run. At the word of command, the rail is dropped in its place, right side up, with care, while the same process goes on at the other side....Less than 30***

seconds to a rail for each gang, and four rails go down to the minute. Quick work, you say, but the fellows on the Union Pacific are tremendously in earnest.

The moment the car is emptied, it is tipped over on its side of the track to let the next loaded car pass it, and then it is tipped back again; and it is a sight to see it go flying back for another load, propelled by a horse at full gallop at the end of sixty or eighty feet of rope, ridden by a young Jehu **[a fast reckless rider],** *who drives furiously. Close behind the first gang come the gaugers* **[the person who measures the distance between the ends of two rails of a railroad],** *spikers, and bolters, and a lively time they make of it. It is a grand Anvil Chorus that these sturdy sledges are playing across the Plains; it is in triple time, three strokes to a spike. There are ten spikes to a rail, four hundred rails to a mile, eighteen hundred miles to San Francisco – twenty-one million times are they to come down with their sharp punctuation before the great work of modern America is complete.* **(Labert L. McCready,** *Railroads in the Days of Steam***, pages 44-45)**

In 1866, when the rails had been pushed some two hundred miles west of the Missouri River, Chief Spotted Tail and his Sioux braves decided the white man and his iron horse had gone far enough. They came war whooping down on Plum Creek, surrounded a handcar running ahead of a freight train as a pilot, and scalped the crewmen. Then they ripped up the track and derailed the following train. Leaving the tomahawked corpses of the engineer and fireman in the burning wreckage, they galloped off with their plunder from the boxcars. Surveying crews working ahead of the track layers usually were accompanied by a military escort of from ten to one hundred soldiers. In spite of the troops, the crews were often attacked.

Out in California the Central Pacific was having problems of a different kind. The Central Pacific's progress was being slowed by rugged mountains and terrible storms. Try as they might, Central Pacific surveyors could not find an easy route across the Sierra Nevada mountains. They realized they would have to begin bridging and tunneling on a scale never before attempted in construction history. Charles Crocker, the Central Pacific's construction boss, was not to be stopped. If there was no low pass through the Sierra's, he would go right over the top. He hired an army of Chinese laborers, and soon they were carving a path through the mountains. Over the steep cliffs of the American River, the Chinese would lower one of their number in a wicker basket tied to a rope. There he would dangle while he drilled a hole in the solid rock deep enough for a charge of black powder. After lighting the fuse, he would signal frantically to be hauled up. Seconds later, the explosion would punch out a few feet of ledge for the Central Pacific's rails.

When blizzards buried the roadbed under drifts thirty and forty feet deep, they went underground to dig a series of fourteen tunnels through peaks that could not be bypassed. One, at the summit of the Sierras, goes through 1,659 feet of solid rock. Despite these efforts, the Central Pacific's mileage of completed track seemed small. The Union Pacific was speedily working up the flat valley of the Platte. So, in the winter of 1866-1867, Crocker had his Chinese workers dragged three locomotives, forty cars, and enough rail and spikes for forty miles of track across the top of the Sierras. They took them into the Truckee River valley, seven miles ahead of where the track ended, so they could work in less snow. Even after the track was laid, heavy snows blocked the tracks for many weeks each winter, cutting off the movement of supplies from Sacramento to the end of the track on the other side of the pass. Crocker hired loggers and carpenters, built sawmills high in the mountains, and began constructing snowsheds to protect his track. At last there were forty miles of these sheds along the route. By the end of 1867, the Central Pacific and the Union Pacific no longer thought of themselves as partners. They became bitter rivals in a race for big stakes. The government was paying up to $96,000 a mile of laid track, as well as giving a 400-foot right of way through public lands. So both companies looked at the other as a rival who was taking their share of the wealth as they laid track. `````

Once at Laramie, the Union Pacific had a new source of supply for wooden ties. Now timber could be floated down the streams from Rocky Mountain forests instead of being hauled eight hundred miles from the Missouri River. Forty carloads of rails, spikes, food, and ammunition still were needed every day to supply the crews at the end of the track. In 1868, General Dodge's 20,000 workers pushed the Union Pacific tracks across the Rockies, past Ogden, Utah, and on to remote Humboldt Wells. A bitter winter caught the Union Pacific construction gangs in the Wasatch Mountains, but they would not be stopped. Tracks were laid on a roadbed of packed snow and ice. They would have to relay the rails after the spring thaw, but in the meantime the line could go forward. Then one mild day the ice melted just enough to be slippery, and an entire construction train slid – rails, ties, and all – into the ditch, thus wiping out all the work they had done through the mountains.

With the Wasatch Mountains at last behind them, Union Pacific crews, in the spring of 1869, lined their tracks straight out across the Utah desert, and then began sprinting for the finish line. The Central Pacific in 1869 had crossed the Nevada desert and had reached Utah's western border. Word came to Crocker in early April that the Union Pacific had broken its previous record by laying eight miles of track in a single day. Crocker challenged General Dodge ten thousand dollars that his Chinese could lay ten miles of rail between daylight and dark. Ties were arranged on the graded right of way several miles ahead. Rails and spikes were stockpiled at intervals along the way. As dawn broke on April 28, 1869, Crocker's crews went into action, with Union Pacific's General Dodge on hand to make sure there was no cheating. With the grace and precision of ballet dancers, the Chinese swung rails into place and pounded down the spikes. In a little less than twelve hours, the Central Pacific was ten miles and fifty-six feet longer than it had been the night before. Crocker won his bet, and his track laying record still stands.

Now locomotive whistles from both railroads could be heard on the shores of the Great Salt Lake. Rival surveying parties had long since passed each other in opposite directions, and soon grading crews were working alongside each other on parallel roadbeds, sometimes only a few yards apart. The crews did not like each other and often there were fist fights and battles with shovels. Finally, Congress realized that if it did not call a halt, the rival railroads might never stop laying track alongside each other. So the congressmen voted to fix Promontory Point, on the plateau north of the Great Salt Lake, as the official meeting place. On the morning of May 10, 1869, Leland Stanford, governor of California and president of the Central Pacific, chugged up to the ceremonial spot in a private train. The Union Pacific sent a train, too, with a large delegation. Not far from the tracks, the saloons in the brand new tent city of Promontory were doing a thriving business.

At last the last rail was down on the prepared track bed. Governor Stanford stepped up with a silver sledge hammer and a solid gold spike. It was planned that Stanford and the vice-president of the Union Pacific, Thomas C. Durant, would drive in the last spike, but neither seemed able to hit the Golden Spike with their silver sledges. Finally, Jack Casement took over, and drove the spike home with the skill of much practice. The telegraph lines tapped out to the nation the activities at the Golden Spike ceremonies. As the news spread, bells began ringing and cannons were fired in salute as news spread across the country.

After the last spike had been hammered into place, a Central Pacific wood-burning locomotive, the *Jupiter*, moved up to touch the Union Pacific's coal-burning *No. 119*. A Sacramento photographer, Colonel Charles Savage, recorded the historic moment on a glass negative with his camera. When Governor Stanford saw a print of Colonel Savage's photograph, he was most unhappy. The distinguished personages present at the Golden Spike ceremony, including himself, did not show up at all, while the "raffish, uncouth" people from the tent city of Promontory were far too visible for his liking. Back in Sacramento, Governor Stanford commissioned a celebrated artist, Thomas Hill, to paint an idealized version of the events at Promontory Point. The drunks, gamblers, and dance hall girls of Promontory were nowhere to be seen. Ordinary railroad workers stood at a respectful distance while Governor Stanford posed with dignity between the rails in the company of Reverend John Todd. As for the Golden Spike, it was quickly removed from Promontory Point before someone could steal it. In 1904, a twelve mile trestle across the Great Salt Lake was finished, shortening the distance between Lucin Utah and Ogden Utah from 147 to 103 miles. Afterwards, only a few freight trains used the Promontory route. Now, Promontory Point is almost as lonely as it was a century ago.

Before the Civil War, railroad travel was not very pleasant. Passengers were crowded into tiny, flat-roofed cars that were little more than boxes on wheels. They sat on hard wooden benches. Smoke and sparks, soot and dust poured through the open windows in the summer. In the winter passengers would huddle around wood stoves, shivering each time the conductor opened the door, going from car to car to collect tickets. Complaints from customers soon forced the railroads to make their cars more comfortable. One of the first improvements was what was called a *sleeping car*. In these cars, wooden bunks or shelves were stacked three deep against the wall.

The coming of George Pullman's wonderful *Pullman Palace Car* after the Civil War made it possible for the first time for railroads to carry passengers in dignity and comfort. In the middle of a sleepless night spent aboard a sleeping car between Buffalo, New York and Westfield, Massachusetts, young Pullman had sketched a rough plan for a passenger coach with comfortable berths let down from the ceiling on ropes and pulleys. In 1864 Pullman risked his own funds of $20,000 in the construction of a radically new car, which he called the *Pioneer*. The *Pioneer* had many unusual features. Its wheels were cushioned with blocks of solid rubber, to give it a smooth ride. In the daytime, the upper berths slung up against the ceiling, providing a place to store bed clothing. There were plush carpets, mirrors, and carved woodwork.

To make room for its hinged berths, the *Pioneer* was built a foot wider and two and a half feet higher than any other railroad car of its day. This meant that it could not squeeze through some of the narrow bridges or get past the depot platforms. For a time the *Pioneer* seemed destined to sit idly on its sidetrack, beautiful but useless. It is said that Mrs. Abraham Lincoln, on a visit to Illinois a short time before the assassination, had seen and admired Pullman's new car. Later, she asked that it be attached to the funeral train at Chicago for her personal use. The necessary changes in bridges and platforms were made, and the future of the *Pullman Sleeping Car* became secure.

Where George Pullman made it possible for railroad passengers to sleep in comfort, Frederick Harvey provided them with something to eat. "Hotel cars," which served meals while rolling along the tracks, had appeared on some eastern railroads in the early seventies, but hungry travelers in the west were obliged to wait until the train paused briefly at a station, and then dash out to a quick lunch counter to gulp down sandwiches and coffee. The food in depot lunch counters was always very bad, the prices high, and the service poor. Harvey, a Kansas restaurant man, teamed up with the Santa Fe Railroad in 1876 to give better treatment to passengers. With the company's assistance, he opened a lunchroom in the Topeka station. Customers were astonished to find the place clean and freshly painted, the food hot and tasty, and the waitresses neat and polite. There were even such luxuries as tablecloths and napkins.

Fred Harvey is best remembered for the famous "Harvey Girls." He wanted his waitresses to be pretty and ladylike, but it was not easy to find such girls in the rough western towns served by the Santa Fe. So Harvey advertised in eastern newspapers for "Young women of good character, attractive and intelligent, 18-30." The "Harvey Girls" all wore black dresses with bows, black shoes and stockings, and white hair ribbons. They earned $17.50 a month, plus room and board, and had to keep a strict 10 p.m. curfew.

***There were always many more men than women along the Santa Fe line, so the pretty "Harvey Girls" always had plenty of beaux* [male suitors], *and Fred Harvey was kept busy finding replacements for those who found husbands. They seemed to prefer the company of railroadmen, and some 5,000 of them, according to Santa Fe historians, married engineers, conductors, and station agents – and helped tame the Wild West.* (Albert L. McCready, *Railroads in the Days of Steam*, pages 122-123)**

Another civilizing influence on rail travel was the appearance of the private car. Many a millionaire owned his own railway car, and had it attached to a passenger train when he wanted to take a trip. Some of these private cars were equipped with their own kitchens, sleeping rooms, and baths. Traveling artists sometimes lived in their own cars also as they toured the country.

Along with the popularity of the railroad came the effort to provide timely service and dependable deliveries. It was the railroads which gave the United States its present *Standard Time* zones. As the railroads added more trains, they had to be able to schedule them accurately to avoid accidents. This was impossible as long as each city set its own time. In 1870 Charles F. Dowd, a school teacher, organized the original four-zone system. After November 18, 1883, when the railroads persuaded Congress to adopt Dowd's plan, all of the cities in Zone A agreed to operate on the same time. In other words, the cities of Albany, Norfolk and Charleston, for example, reached 12:00 noon at the same instant. At the same moment all the cities in Zone B reached 11:00 a.m.; all those in Zone C reached 10:00 a.m.; and all those in Zone D reached 9:00 a.m.

Before Dowd's plan went into effect – when cities operated on "sun time" – trainmen running between New York City and Buffalo, for example, had to account for a nineteen-minute difference in time. The difference was caused by the fact that clocks in each city had been set at 12:00 noon as soon as the sun reached its highest point in the sky. This was confusing, as the sun stood overhead at different times – depending upon the location of the city.

(*United States History, an LDS Perspective*, Volume 2, pages 450-455).