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## The San Gabriel Canyon Railroad and The Forks Dam Fiasco

by John W. Robinson

The Mount Lowe Railroad is well remembered by Southern California historians and railroad buffs. Not so well known is that another rail line also wound into the San Gabriel Mountains. It didn't climb as high as Professor Lowe's marvel, but it did penetrate farther back into the heart of the range. This was the 12-mile line from Azusa up San Gabriel Canyon to "The Forks"—the point in the canyon where the East and West forks join. The purpose of this canyon railroad, built in 1927, was to haul construction equipment and materials for the great Forks Dam, the \$25 million concrete barrier that, had it been completed, would have become the world's largest.

The proposed Forks Dam was the brainchild of John W. Reagan, chief engineer of the Los Angeles County Flood Control District. Reagan and his flood control associates, spurred by complaints from numerous towns along the course of the San Gabriel River, had long desired to harness the destructive torrents that periodically emitted from the canyon. Levees and small barriers placed along the river's course in the early years of the century had proved woefully inadequate. Nothing less than the construction of a

major dam in the canyon would solve the flood problem.

In 1921, after completing an engineering study of possible dam sites in San Gabriel Canyon, Reagan announced a proposal to construct a concrete dam 425 feet high and 1,700 feet across, to be located in the main canyon just below the confluence of the West and East forks. This "Forks Dam," as it became known, would be the world's largest concrete structure and would create a reservoir of eight square miles.

At the time, the only route up the canyon was a poor dirt road, annually washed out and repaired, that crossed and recrossed the river without benefit of bridge a dozen times—totally inadequate for transporting construction materials for the dam. To remedy this problem, Reagan proposed that the county build a standard gauge rail line from the Santa Fe tracks in Azusa up canyon 12 miles to the dam site.

It would be six years before the canyon railway became a reality. Seemingly endless delays in building the railroad and the dam were caused by legal obstacles, financial uncertainties and conflicting engineering studies. During the interim, Reagan was

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# The Branding Iron

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LOS ANGELES CORRAL

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less, dealing with every phase of the Old West. Contri-  
butions from members and friends welcomed.

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## Corral Chips

Many Westerners—too numerous to mention by name—attend the Preview Reception of the Maximilian Lando Gallery exhibit “California and the Southwest, 1540-1940” at the Los Angeles County Museum of Natural History on October 13 . . . *Dwight Cushman* writes “An Introduction to Books About the Pilgrims” in the August 1980 *Mayflower Quarterly*. Also, he is appointed regional vice president of the Conference of California Historical Societies for the San Fernando Valley by *Bill Burkhart*, president of the conference . . . Honorary Member *Horace Albright* receives the nation’s highest civilian honor, the Medal of Freedom. Responds Horace: “I thought they were kidding and I told them there must be some mistake.” . . . Corresponding Member *Richard C. House* and his interest in antique guns is profiled in the *Pasadena Star-News* of October 12, 1980 . . . *Donald Duke* does the design work for *Arcadia: Where Ranch and City Meet*, to be published by the Friends of the Arcadia Public Library . . . Noted among the many attendees at the 20th annual Conference of the Western History Association held in Kansas City are Active Members *Dutch Holland*, *Stan Melora*, *Rod Paul* and *Victor Plukas*, and Corresponding Members *Don Bufkin*, *Bob Clark*, *Erl Ellis*, *Father Barry Hagan*, *Mike Harrison*, and *Bruce Walton* . . .

*Robert A. Weinstein* presents “The Historic Legacy of Pacific Coast Maritime Photographers, 1851-1920,” at a seminar on Maritime History jointly sponsored by San Jose State University and the San Bruno National

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## The San Gabriel Canyon . . .

succeeded as County Flood Control Engineer by E. C. Eaton. The main objection to building the railroad came from the city of Pasadena, which wanted to erect its own dam in the lower canyon. The rail line would pass through the site of Pasadena's dam, causing that city to petition the county to build a "high line" railroad well up the west slope of the canyon, above the proposed dam. As a high line route would increase the cost four-fold, the county supervisors rejected Pasadena's request. In 1926 Los Angeles County filed an application with the Department of the Interior (most of the canyon was federal land) to build the railroad up the canyon floor. The Interior Department initially ruled against the rail line, then reversed itself and approved the canyon railroad. By year's end, all legal obstacles were finally out of the way, the county taxpayers had approved a \$25 million bond issue to build the dam, and construction was at last ready to begin.

The county supervisors called for bids on building the canyon rail line. The lowest bid was received from the Nevada Construction Company of Reno: \$278,424. The Nevada company was awarded the contract and work commenced early in 1927.

Work crews under Superintendent R. H. Travers hurriedly graded a roadbed out of Azusa and into San Gabriel Canyon. Other crews followed the graders, laying wooden ties and spiking down steel rails. Within a month three miles of line were completed and blasting crews were gouging a tunnel through a horseshoe ridge just inside the canyon mouth. Once through this obstacle, the railroad took shape rapidly. By July eight miles along the east floor of the canyon were completed and a trestle was under construction to move the line to the west side of the river for the final four miles. The railroad was completed in September 1927, and Superintendent Travers proudly turned it over to Los Angeles County. All was in readiness now, many thought, to begin construction of the great Forks Dam.

But the canyon railroad lay idle for more than a year. New hassles erupted over the size and cost of the proposed dam. A board of

consulting engineers recommended that the barrier be lowered in height from 425 to 385 feet. While the county supervisors argued over this, a taxpayers' suit demanded all work be stopped until a complete cost analysis could be made. The supervisors first voted to lower the dam to 385 feet, then reversed themselves and opted for the original high dam. The taxpayer group was finally placated when the supervisors promised that the cost of the dam would not exceed \$25 million.

While all this was going on, a disaster took place along the Santa Clara River in Ventura County that had implications toward the building of the Forks Dam. During the night of March 12, 1928, the newly-completed St. Francis Dam, part of the Owens Valley Aqueduct system, gave way. The resulting torrent swept all the way to the sea and claimed over 400 lives. The supervisors immediately ordered Eaton and the consulting engineers to review the plans for the Forks Dam to make certain a similar disaster would not occur in San Gabriel Canyon. And within a year, new state regulations would tighten dam-building standards throughout California.

Reassured by Eaton that the dam site was safe, the supervisors called for bids on the Forks Dam in July 1928. In November the contract was awarded to the lowest of six bidders, the San Francisco construction firm of Fisher, Ross, McDonald and Kahn. The construction contract was signed on December 7, 1928, and the San Francisco firm announced that work would proceed at once. After years of delay, it appeared that the great dam was about to become a reality.

By February 1929 work was in full swing. The San Gabriel Canyon railroad was ferrying men, equipment and materials around the clock. A construction camp the size of a small city, built to house a work force of over 600, sprang up just below the dam site. So as not to block canyon travel, a new "high line" road was carved in the west canyon wall, climbing high over the top of the dam-to-be. By March two of the world's largest electric shovels were in operation, and the first cache of black powder was exploded on the west wall, loosening tons of earth and rock. Powerful jet streams of water were directed at the

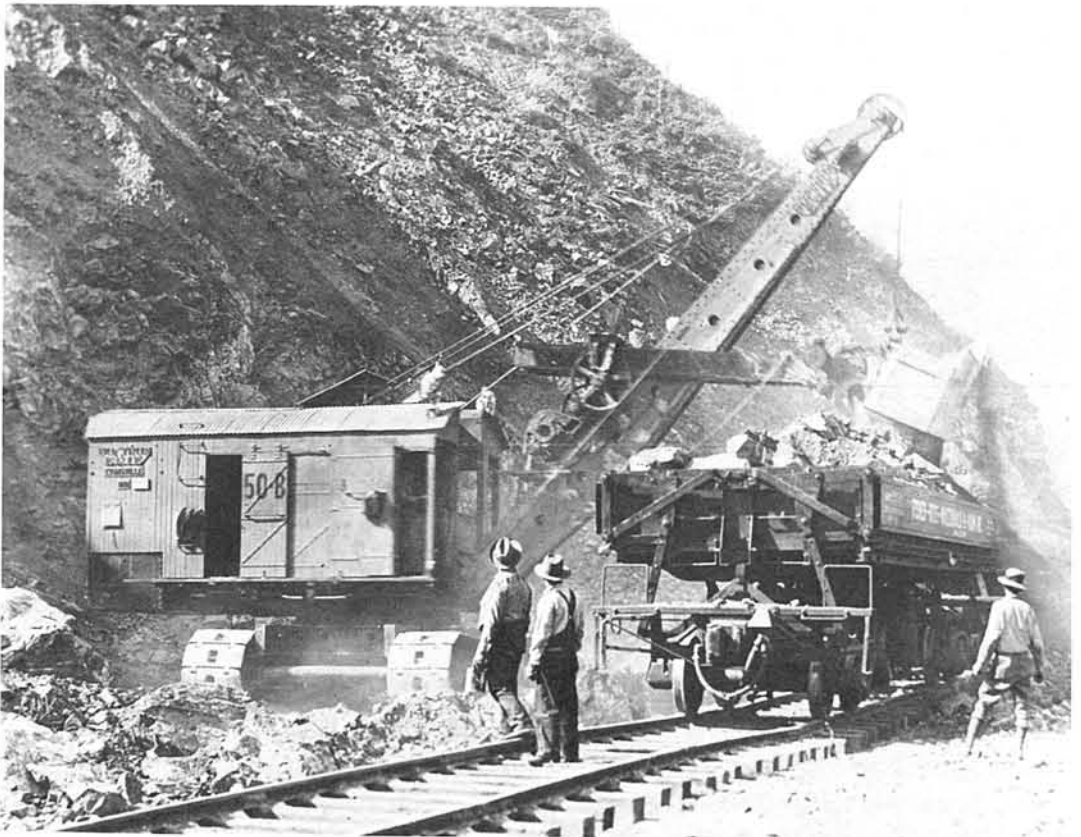
loose material, washing it to the canyon bottom to be loaded on railroad cars and hauled away. In this manner, 600,000 tons of dirt and rock had been removed by June. The canyon railroad was operating at full capacity. Probably no other short line in the state was as busy, night and day. Puffing steam engines and a contingent of gasoline-driven "donkey" engines hauled hundreds of freight cars full of men, equipment, steel, concrete, lumber and various other necessities to the dam site and its busy construction camp. Scores of flat cars were daily toting tons of dirt and rock out of the canyon. Crews were constantly repairing and replacing rails and ties along the 12-mile line.

Residents of the upper canyon traveled the busy canyon road at peril. Part of the way, the railroad tracks followed the road. A favorite game of "chicken" played by some daredevil residents was to drive through the railway tunnel near the canyon entrance, hoping they would not meet a train while

inside. This was risky, but it cut off a mile of driving around the horseshoe ridge.

At the dam site, operations were at a peak when, on the afternoon of September 16, 1929, misfortune struck. "Accompanied by a roar and rumble that could be heard for miles, an enormous earth movement carrying 100,000 tons of rock and earth from an approximate height of 400 feet crashed into the pit of excavation," reported the *Los Angeles Times* (September 17, 1929). A landslide had crumbled the west wall, negating months of work. Water and power lines were destroyed, and several hundred feet of the railroad was buried. Fortunately no lives were lost; Chief Engineer Eaton had noticed signs of impending earth movement the previous day and had ordered the men away from the area.

No one realized it at the time, but the landslide spelled the end for the Forks Dam. Work was suspended while engineers studied the west abutment. Their report, given to the supervisors in October, stated that a safe



World's largest electric shovel at work, dumping debris into flat car of San Gabriel Canyon Railroad, 1929.

photograph courtesy L.A. County Flood Control District



## Facts About San Gabriel Dam

San Gabriel Flood Control Dam, located 11 miles up San Gabriel Canyon from Azusa, the Gateway, is the largest dam in the world. It is the largest public improvement ever undertaken by Los Angeles County, excepting only the building of public roads. The cost, \$25,000,000, is equal to that of the Los Angeles Aqueduct and is also equal to the expenditure of the City of Los Angeles for the harbor at San Pedro.

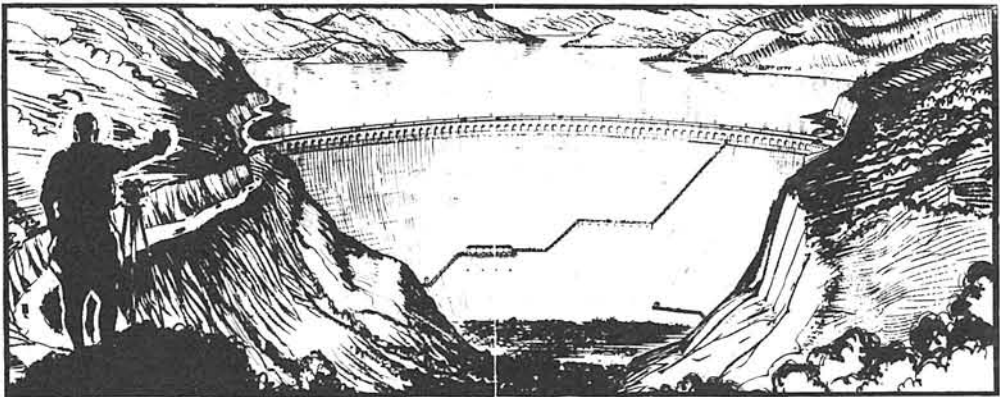
The Dam will contain 4,000,000 cubic yards of concrete, compared with 5,000,000 cubic yards of concrete used in the construction of the Panama Canal and 3,000,000 cubic yards to be used in Boulder Dam on the Colorado River.

After several years of negotiation, work on the dam commenced in January, 1929. Five to seven years will be required to complete the project. The Dam will have an impounding capacity of 240,000 acre feet of water, but as this is primarily a flood control and not a storage project, it is possible this amount of water will not be impounded, for some time.

The Dam is 425 feet high from stream bed to top; 500 feet high from bed rock to top; 2400 feet wide at top; 900 feet wide at bottom; 407 feet thick at bottom and 20 feet thick at top. It is what is known as a gravity type dam, depending on its enormous weight for its stability. Some of the most prominent engineers in the West have been employed in an active or an advisory capacity in working out the plans. Four contracting firms joined forces in order to provide facilities for the construction work.



*Camp houses for 800 men, dining hall, recreation hall and other facilities for taking care of workmen on San Gabriel Dam.*



Page from a promotional pamphlet containing facts about Azusa, published by the Azusa Chamber of Commerce.

dam at the proposed height of 425 feet could not be built at the Forks site because of unstable rock conditions.

The final demise of the Forks Dam project occurred following an investigation by engineers of the State Division of Water Resources, authorized by the state legislature as a consequence of the St. Francis Dam

disaster. The state engineers concluded that "the dam proposed . . . cannot be constructed without creating a menace to life and property." As a result, the State of California, on November 26, 1929, revoked the Los Angeles County Flood Control District's permit to build the Forks Dam.

The Forks Dam fiasco wasted almost three

million dollars of the taxpayers' money. And the bitter aftertaste did not end with the final abandonment of the project. Not only was the county condemned for gross engineering mistakes, but charges of bribery and corruption at the highest level of county government crept into the picture. Following a grand jury investigation, it was revealed that \$80,000 had been "transferred" from the San Francisco construction firm of Fisher, Ross, McDonald and Kahn to the personal account of Los Angeles County Supervisor Sidney Graves while the contract was being negotiated. Supervisor Graves was indicted, tried and convicted of accepting a bribe, and in 1933 sentenced to a term in San Quentin Prison. The contractors were indicted for offering the bribe but never brought to trial. A civil damage suit for \$2.6 million was filed by the county against the contractors; it was settled in 1936 with the county recovering \$737,986. Reagan and Eaton of the County Flood Control District were exonerated of any criminal wrongdoing, but their reputations as competent engineers were sullied as had been William Mulholland's after the St. Francis Dam disaster. So ended what county supervisor John Anson Ford called

"the darkest episode" in the history of Los Angeles County government.

The massive landslide of September 16, 1929, had abruptly ended the use of the San Gabriel Canyon railroad. The tracks lay abandoned as the great Forks Dam lay in limbo. The 12-mile rail line was cut in half with the construction of Pasadena's Morris Dam in the years 1932 to 1934. Another good-sized chunk of the railway was removed to allow construction of the County Flood Control District's earthen San Gabriel Dam #1, two miles down-canyon from the Forks site, in the mid-1930's. In 1936 the last links of the short-lived canyon railroad were taken out.

Few reminders of the railway that once ascended San Gabriel Canyon remain. The tunnel remained open until the early 1960's, when it was finally boarded up as a safety hazard. Three miles beyond the present San Gabriel Dam, just to the right of the highway, are a handful of buildings today used by the Forest Service as a fire station; these are all that remain of the Forks Dam construction city. Above the highway, well up the west canyon slope, can be seen the eroded remains of the high line road built in 1929 to bypass the great dam that never was.



Construction city for the San Gabriel Forks Dam, 1929. San Gabriel Canyon Railroad in foreground.

# Corral Chips...

Archives Records Center. *John Haskell Kemble* also presented a paper . . . Over 400 friends of the western entertainment world attend the Santa Clarita Valley Chamber of Commerce's annual western celebrities dinner on October 23, where C. M. *Gene Bear* receives a lifetime membership award. *Iron Eyes Cody* is among the celebrities . . . Sheriff Ed Aslip of the San Bernardino Corral sponsors a one-man exhibit for C. M. *Kirk Martin's* engravings, prints, and blocks at the Lyon Gallery of the A. K. Smiley Public Library in Redlands. Kirk's book, *Insomnia Grams*, has been virtually sold out. . . .

Honorary Member *Clifford M. Drury* is honored on his 83rd birthday by the Huntington Westerners Corral. *Thomas F. Andrews* introduces Drury, who speaks on "The Story Behind the Stories" of his experiences in a half century of historical research . . . Associate Member *Bob Hattem* writes "Los Angeles Welcomes the Xth Olympiad" for *Olympic World*, a new magazine devoted entirely to the Olympic Games, past, present, and future. His article is the first to be accepted by the new magazine; the first issue will be published in February 1981 . . . C. M. *Msgr. Francis J. Weber* speaks to an annual convocation at Lompoc about La Purisima Concepcion commemorating the 193rd year of the founding of that historic mission. He also addresses the Holy Name Society for the Archdiocese of Los Angeles at its annual breakfast, speaking on Los Angeles' bicentennial birthday . . . C. M. *Roger E. Henn* resigns as executive director of the Union League Club of Chicago and moves to Ouray, Colorado. A former sheriff of the Chicago Corral, Roger continues active in Westerner publications and programs, among them "Equal Opportunities for Women in the Old West: Lynching," a talk delivered before the Chicago Westerners and subsequently printed in its *Brand Book*, and "Chicago: When did it Cease being a Western City," another presentation to the Chicago Westerners which will be published in its next *Brand Book* . . .

A. M. *Martin Ridge* hosts the third meeting of the Haynes-Huntington conference of

historians interested in Southern California history, sponsored by the Haynes Foundation and held at Cal Tech and the Huntington Library on November 7-8. Attending the meeting are *Abe Hoffman*, *Doyce Nunis*, *Rod Paul*, and A. M. *Don Pflueger* . . .



## THE MONTHLY ROUNDUP

September

Again taking place on the spacious spread of past-Sheriff Alden Miller, the 1980 Annual Rendezvous had as its highlight the honoring of two outstanding members of the Corral, Carl Dentzel and Iron Eyes Cody. Carl's death shortly before the event was tragic to the many who knew and loved him, and the knowledge of his loss tinged the Corral's expression of its deep admiration and affection for him with a sense of sorrow. Carl's wife there to represent him, accepted the honor on his behalf. To Iron Eyes Cody, for his many years of outstanding and unselfish contributions to the Corral, went a Humanitarian Award and the Westerners' "Guest of Honor" plaque.

In further tributes, Easy Cheno presented Alden Miller with a Token of Appreciation for his unflagging hospitality in offering his grand yard for the annual Rendezvous over the years, and Sheriff Donald Duke gave a Token of Appreciation and a Thank You Award to Bert Olson in recognition of Bert's thirty-two year tenure as Keeper of the Chips (1952-1980).

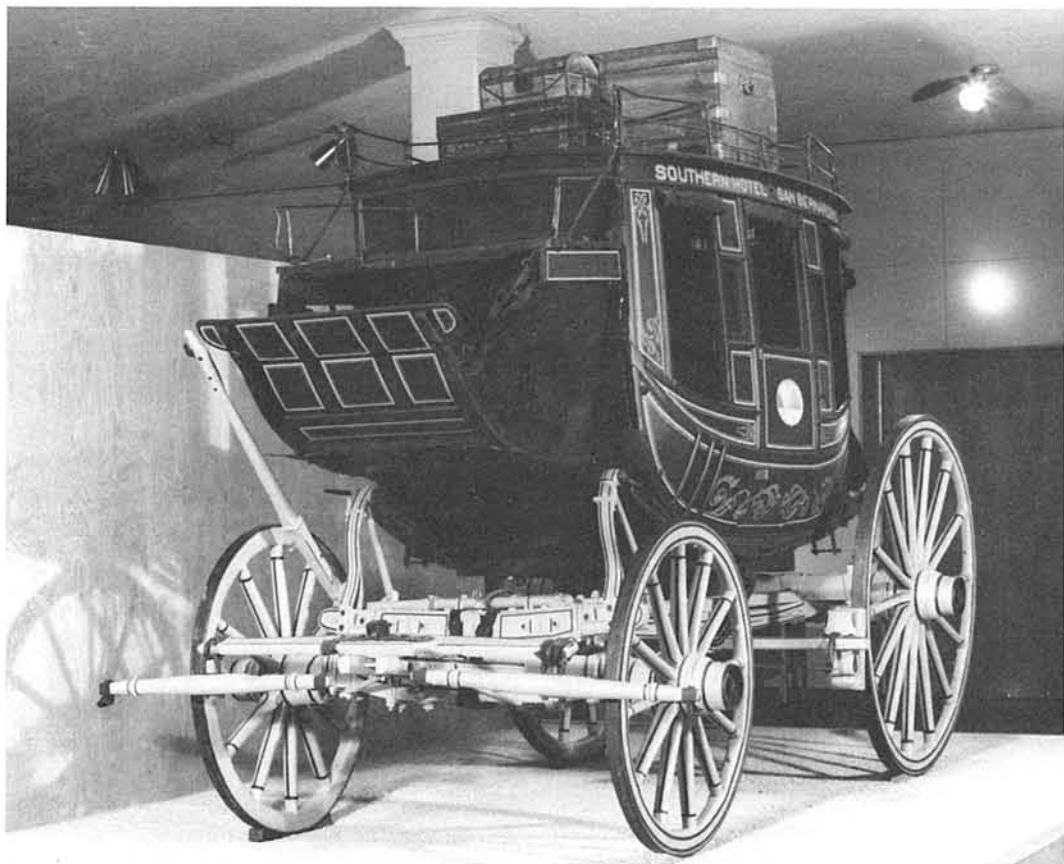
Also recognized were Tony Kroll, for the unfailingly excellent quality of the engraving and printing he has contributed for many

(Continued on Page Twelve)

... Page Seven

# What Western Stagecoaches Were

by Konrad F. Schreier, Jr.



An 1870 Abbot-Downing Overland Stagecoach which passed through many hands before finishing its long career as a hack for the Southern Hotel in San Bernardino, California, about 1910. It is now in the Los Angeles County Museum of Natural History.

**THE SCENE**—A typical main street in a typical western town (either real or fictional).

**ACTION**—A cloud of dust approaches the town from a far distance. People begin to gather. As the dust cloud gets nearer, the crowd grows to a couple of dozen, all are excited—the stage is coming!

And now comes the place where this scene may or may not be truly realistic. At one time or another western stage lines used any kind of vehicle available—from an upsprung farm wagon with seats to long buckboards with three or four seats. Most lines, however, ran three distinctive types of passenger vehicles. One was the Stagecoach, the second the

Stage Wagon, and the third the Mountain Wagon. Each of these had its own reason for being, and all three were used until the end of horse drawn stages.

The premier vehicle used on western stage lines was the Stagecoach—the Concord Coach of legend and history. These coaches were of two different types: The heavy Overland Mail version favored in the West, and the lighter Hack or Hotel type favored in the East. The redoubtable Overland Stagecoach was developed for use in the West, and it was undoubtedly one of the finest horse drawn passenger vehicles ever conceived. First made in the 1850's, they took their name



from the overland stage line from Missouri to California.

The foundation of the Overland was its stout running gear—wheels, axils and frame—which incorporated brakes for the rear wheels. On the front and back of the running gear were iron structures about two feet high which supported the ends of the thorobraces—massive leather slings—which in turn supported the stage's body. The body was crafted in wood reinforced with iron. To develop its strength, the front, back and sides curved inward toward the bottom. The roof was almost flat. To give the Overland's body even more strength it had pillars about a foot wide on both sides of its doors. Each of these pillars had a small glass window. These windowed door pillars were found only on the heavy duty Overland coaches.

High on the front of the Overland's body was the driver's seat with a small boot, or cargo box, under it. A much larger boot hung on the rear of the body, and there was an iron rail around the roof so more baggage could be carried on top. The area under the inside seats provided a little more baggage and cargo room.

Stagecoaches were usually made to seat nine inside, but a few Overlands were made to seat six, or some could accomodate twelve. There was room for several more passengers up top with the driver or on the roof. There was no glass in the large side windows; they had heavy leather curtains which rolled down. Overland coaches were handsome vehicles in their customary red body and straw colored running gear which were trimmed out in beautiful fashion.

The lighter Hack coach was a less durable vehicle which looks very much like an Overland to the casual observer. The Hack, however, did not have windowed pillars on either side of its doors, and some were fitted out with glass windows. In the West Hacks were often used by hotels and resorts to run to and from the nearest railroad or steamboat station. A few were used on short stage runs where conditions allowed. Few Hacks were painted in the regular red body and straw running gear colors used on the Overlands. More often they were custom painted to suit their purchasers.



An Abbot-Downing type very light Stage Wagon. Was used in the Pacific Northwest and often called a light Passenger Wagon. It is in the Museum of History and Industry in Seattle, Washington.

The Stage Wagons were a large family of passenger vehicles with similar characteristics. While closely related to Stagecoaches, they were quite different in many ways. The whole idea of the Stage Wagon was to make a light weight vehicle which would approach the Overland Stagecoach in strength and durability. Variations of the Stage Wagon were known by a host of names: Mud Wagon, Celerity, Overland Wagon, Passenger Wagon, Concord Passenger Wagon, California Wagon, and many more. Some, like Jerk Wagon, were not complimentary. Others, like Yellowstone Wagon, described rigs more closely related to the Overland Stagecoach than the Western Passenger Wagon.

Stage Wagons all had running gear of practically the same design as that of the Overland Stagecoach, but somewhat lighter in construction. They were customarily fitted with rear wheel brakes. They used thorobraces to support their bodies, but these were in a different layout from those on Stagecoaches. While Stagecoach thorobraces were supported above the running gear on iron structures, those on Stage Wagons were supported well down in the frame with their ends running over cross beams on top of the frame, and then anchored to the ends of the



Photo courtesy — Nevada Historical Society

Ed Smith's stages at Snap's Ranch, Quinn River Valley north of Winnemucca, Nevada about 1905. The rig behind the team is a Stage Wagon of the mud wagon variety, the other is a Mountain Wagon.

frame with iron shackels. This lighter and more compact arrangement worked as well as that of the Stagecoach.

Most Stage Wagon bodies were square (some like the Yellowstone Wagon were exceptions to this), and they all had iron structures which looked like sled runners to carry them on the thorobracers. From the bottom up Stage Wagon bodies could take a number of forms, but all of them were characterized by an open look and a light roof structure. Doors were practically never used on Stage Wagons, but they all had a full complement of roll-down curtains. They had some sort of a boot under the driver's seat, and they had a rear boot. Many of them had roofs too lightly constructed to carry anything. Many Stage Wagons had external squared-off body bracing which gave them a very distinctive appearance.

Stage Wagons were noticeably slower than Stagecoaches, and they looked smaller even though most of them had enough room to seat nine inside. They were seldom fancily painted or trimmed, and few were done in the red and straw colors used on Overlands.

The utility of Stage Wagons was admirably proven by their good service over poor roads in rugged country. Although they were used as much or more than any other type of stage line vehicle, they were considered second class vehicles compared to Stagecoaches. Lines which used the preferred Overland often took pains to advertise the fact.

The Mountain Wagon was also considered a second class vehicle compared to a Stagecoach, but they were used throughout the existence of western stage line service. As early as 1850 Waldo and Hall used "spring passenger wagons" on their run between Independence, Missouri and Santa Fe, New Mexico. These were among the first Mountain Wagons used in the West. A Mountain Wagon, now in the Henry Ford Museum in Dearborn, Michigan, was used as late as 1920 on the Julian run by United Stagelines of San Diego. While a Mountain Wagon could travel over any road, they came into greater use as the roads of the West got better. At the end of the horse drawn stage era, shortly before World War I, they may well have outnumbered all other types in use.

The layout of the Mountain Wagon was excellent for use as a stage line passenger vehicle. Their foundation of rugged running gear also had brakes for the rear wheels. Their bodies were supported by a distinctive arrangement of four or five steel leaf springs. They also had either a single elliptical spring running transverse above the rear axle, or a pair of them running just inside and parallel to the rear wheels. Most distinctive to the Mountain Wagon was a pair of half-elliptical springs which supported the body, lengthwise on each side. They curved down so their ends would bear on the outside member of the running gear frame, thus allowing unbalanced loadings. They were seldom used on



This heavy Mountain Wagon of the five spring type was the Julian Stage until about 1920. Today it is at the Henry Ford Museum in practically original condition.

*Photo courtesy — Henry Ford Museum*

any sort of vehicle other than a Mountain Wagon.

Mountain Wagons' bodies were a basic, simple, solid wagon box. They had three, four or, infrequently, five transverse seats which allowed them to carry a driver and eight, eleven or fourteen passengers at three to the seat. If the driver's seat was elevated—and many were not—it had a boot under it, and there was a book on the back. There was additional space for baggage and cargo under the seats. Mountain Wagon roofs were supported by slender posts not strong enough to carry anything heavier than the standard roll down side curtains. Mountain Wagon paint schemes usually included trim and lettering, and were done to the purchaser's order.

The builders of these three kinds of stage line vehicles were some of the best in the world. The Overland Stagecoach was developed by the famous Abbot-Downing Com-

pany of Concord, New Hampshire and its predecessors. The majority of these coaches were Concord made, but other firms built them and several carriage makers rebuilt them. The redoubtable Abbot-Downing people also built large numbers of Stage Wagons, however, many other quality wagon and carriage makers constructed these useful vehicles. There is good reason to believe, however, that the thorobrace designs used on Stage Wagons and Stagecoaches were perfected, if not invented, by the Concord builders.

Mountain Wagons were built by practically every well known carriage and wagon builder in America, and, like the Stagecoach and Stage Wagon, they are uniquely American. Abbot-Downing built superior Mountain Wagons, but they were also produced by the famous wagon factory of Studebaker Brothers Manufacturing Co. in South Bend, Indiana. The Henry Ford Museum's very

well built Julian Stage Mountain Wagon is supposed to have been built by the L. Lichtenberger Carriage Manufactory in Los Angeles, California.

The purchase prices of these three types of stage line vehicles were vastly different. For example Abbot-Downing's catalog price for their Overland Stagecoach "to seat 9 inside (heavy) model" was \$1,150.00. Their typical nine passenger Stage Wagons ran around \$650.00, or something like 60% of what the same capacity Overland Stagecoach brought. Their Mountain Wagon of the same capacity only cost about \$450.00, or about 40% of the Overland Stagecoach and 70% of their Stage Wagon. It was often difficult to raise the money to outfit a stage line, so the cost of these vehicles was often a determinant of what was used. There was, incidently, an active market in used and rebuilt stage line vehicles all through the era when they were in use.

Their weight and the team required also helped to decide what kind of a stage line vehicle was used. An empty Overland Stagecoach weighed in at approximately 2,000 pounds and generally required a six horse team. This number could be reduced to four in pancake flatlands. Stage Wagons usually tipped the scales at around 1,300 pounds—two-thirds the Overland Stagecoach's weight—and could usually get by with a four horse team. Mountain Wagons came in at 1,000 pounds or less, and, while they needed four horses in hilly country, often ran behind a single pair in flatlands. The preferred horses were medium drafters—horses of any ancestry suitable for the work and somewhat larger than most modern saddle horses. They usually weighed from 1,000 to 1,250 pounds and stood under 15 hands high.

These stage vehicles did the job asked of them, and most of it over roads only a four wheel drive motor car would undertake today. All three of them—the Overland Stagecoach, the Stage Wagon and the Mountain Wagon—were the most "hell for stout" horse drawn vehicles ever used anywhere. Without them, "The West," as we know it, never would have been.

## THE MONTHLY ROUNDUP ...

years now, and Andy Dagosta, who was tendered a Token of Appreciation for his untiring efforts in behalf of the Los Angeles Corral.

*Photograph by Iron Eyes Cody*



Dick Cunningham, Deputy Sheriff, Bill Hendricks, Sheriff Donald Duke and Bill Bender

October

Bill Bender and Dick Cunningham, respectively, talked about artist Burt Proctor and the deep and lasting impression that knowing him has made on their lives. Long a friend of Burt, Bill explained how the former taught him to "see as an artist" and influenced him to expand and change his own style of painting for the better. He described Burt as an artistic genius of superior intellect, with a great enthusiasm for life, unfailing sensitivity, and a grand sense of humor. Dick, who knew Burt for only two and one-half years, focused on their first meeting, a rare and unforgettable experience. Dick saw Burt as a man born excited—a dedicated and driven artist who strove constantly for perfection. Each in his own way, both speakers freely communicated their cherished memories of a man neither will ever forget, and it was a privilege to share their recollections.



November

The speaker was Martin Ridge. His talk was entitled "Henry Huntington: The Private Side," and his chief resource in preparing it was several tons of unclassified papers of Henry Huntington housed at the Huntington Library. Martin's approach, particularly his choice of quotations from correspondence between Henry and his mother, provided great insight into Henry Huntington's personality and character; attitudes; and thoughts about family, friends, education, business, and life itself. The presentation, sparked by the speaker's own good wit and humor, captivated all present.

Photograph by Iron Eyes Cody



Sheriff Donald Duke and Speaker Martin Ridge at the November meeting.

## Clamper Drawings Available

Readers of Paul Bailey's September 1980 *Branding Iron* review of Don Perceval's book *Adam was a Clamper* will be interested to learn that the original drawings of the book are for sale. John D. Gilchriese is handling the sale of the drawings on Mrs. Perceval's behalf. The drawings are available for \$100.00 each, plus \$5.00 postage and handling. All proceeds will go to Mrs. Perceval, and checks should be made out to Mrs. Edith Perceval. Most pages are available, except for a few which have already been sold. For information write to John D. Gilchriese at 1975 East Kleindale Road, Tucson, Arizona 85719, or contact him at (602) 795-4536.

## Duncan Gleason Mural

A project of interest to all concerned with Western history is the creation of the Los Angeles Maritime museum in the old Ferry Building at the foot of Sixth Street in San Pedro. This reconstruction has been accomplished with artistic care and architectural skill. The old ramp has been preserved, there is still a view of the busy Channel and areas have been planned for exhibits and the display of historical records and other maritime material.

*Dorothy Gleason C*, widow of Duncan Gleason, was so deeply interested in the project that she and her daughters donated a Gleason mural 6' x 15' (oil on canvas) which now hangs on the wall of the Museum. It is to be framed in the teakwood from the deck of the now dismantled cruiser *Los Angeles*, the subject of the mural.

Mayor Tom Bradley, Councilman John S. Gibson, Jr. and the Department of Parks and Recreation hosted an elaborate reception honoring Mrs. Gleason and her husband. It was attended by 400 boat, art and history enthusiasts, among them Westerners *William Escherich*, *Donald Grossman* representing Oltman's Company, *Everett Hager*, *Col. M.E.W. Holland* with their charming wives, *Robert Cowan*, *Tom McNeill* and his sister, *Peg Cassidy*, Secretary HSSC and of course *D. Gleason* and her family.

Mrs. Gleason has saved and organized much of her husband's press clippings, research notes and photographs. They form, in a way, a slender history of that art period and of California history as well because of the study of material for the clipper ships and Channel sailings. Any who would like to examine these records will find a welcome at "Casa Feliz" studio.

## Ex-Sheriff Harvey S. Johnson

Harvey Starkweather Johnson, M.D., died May 5, 1980 in Quartzsite, Arizona, at the age of 75. Harvey, who joined the Los Angeles Corral in the 1950's, was Sheriff in 1964, and he proved an unfailingly gracious and jolly host at several outdoor summer meetings of

the Corral held at his home on Lombardy Road in San Marino. He was also an avid Clamper, and went on many a Platrix Clamper outing to historical places. Although he moved to Yucca Valley in the late 1960's, for reasons of health, Harvey maintained his interest and membership in the Corral.

Harvey received a Bachelor's degree in Zoology from the University of Southern California in 1927 and his medical degree from Northwestern University School of Medicine in 1933. Specializing in orthopedics, he served as an attending staff member of the California Hospital Medical Center for 42 years. As an Air Force major during World War II, he was stationed at a number of field hospitals in England, and became a pioneer in the field of bone graft techniques.

Harvey is survived by his son, Lyman Harry Johnson of St. Louis, Missouri; two grandchildren, Christine and Bradford Johnson; and a brother, Lyman Henry Johnson of Los Angeles.

## DOWN THE WESTERN BOOK TRAIL ...

*Chief Lawyer of the Nez Perce Indians*, by Clifford M. Drury. Hard cover, illustrated, notes, bibliography and index. The Arthur H. Clark, Co., Publisher, Glendale, CA, 294 pp., 1979. \$22.75.

Given the tradition of Indian oral history (as opposed to the non-Indian written form) the task of the historian in reconstructing the lives of important characters is difficult indeed. Despite this handicap, fellow Westerner Clifford M. Drury has brought to life an important figure in the development of the Old West.

By now, most of us are familiar with the epic flight and brilliant military maneuvers of Chief Joseph of the Nez Perce. Joseph's band, however, was a minority of this important northwest tribe. A larger segment of the tribe remained peaceful with the whites and submitted to the encroachments of an often insensitive government. This latter group was led and inspired over the crucial years of

missionary endeavor and white settlement by Lawyer, Head Chief of the Nez Perce.

Drury has rescued Lawyer from undeserved oblivion. His tale is less dramatic than that of Joseph—the way of peace often is. Without in any way disparaging Joseph's accomplishments and courage, Drury paints a bold picture of the strength and fortitude of Lawyer, the man who truly saved the Nez Perce people through his patience, wise counsel and unswerving belief in peace and the law.

Drawing upon research covering many years, Dr. Drury has pieced together interviews, letters, diaries, newspaper accounts, and military, missionary and governmental reports to give us a clear picture of the time, the place, the people and the man. This volume should be welcomed by every student of Indian and/or Pacific Northwest history.

—Jerry Selmer

*Pioneers and Preachers*, by Robert William Mondy, Nelson-Hall, \$21.95.

This multifaceted volume considers a wide variety of subjects through a series of anecdotes and vignettes, as the author has diligently culled fascinating incidents from letters, diaries, newspapers and church records.

Mondy is a retired professor of history, but his work is far from academic. He has an eye for the unusual, the harsh and sometimes humorous reality of life on the frontier. Describing the pioneers as a diverse people, Mondy believes their character traits "were nothing more than an adjustment or an attempted adjustment to time and place." As society evolved, the frontier would disappear and order would replace chaos.

Concerning the strange and fascinating habits of pioneers, Mondy relates the Puritan practice of "bundling," a form of premarital petting, whereby a couple spent the night together, separated in bed by a wooden plank. These same people believed warts could be cured by burying a stolen dishrag under a tree.

Mondy also discusses the pioneers' home-life, their sod houses and log cabins, their food and clothing, marital practices, medical treatment and social customs. Whatever the

subject, Mondy emphasizes the bizarre, which makes very entertaining reading.

Mondy's pioneers are a vigorous, unorthodox lot. Violent individuals such as the cannibalistic Boone Helm and the murderous Harpe brothers are seen as creatures of their environment, where brawling, eye-gouging and gang fights were commonplace. A lack of law enforcement led to vigilantes and lynch law. Many of the disagreements were land disputes, and Mondy provides a lively account of "squatter's rights" and land claim clubs.

The traveling preacher was an important figure on the frontier, and Mondy has come up with some curious data. As a source of information and religious contact, the preacher was held in high regard and generally accepted anywhere. But the naive pioneers often fell victim to imposter preachers and theatrical circuit riders. There were also fighting preachers, such as Peter Cartwright, who at times, literally whipped his congregation into a pious semblance.

Religion was the great emotional release for frontier people, and as they were easy to influence, many preachers incited their followers to "fall" or "jerk" in a psychological frenzy guaranteed to cleanse the filthiest of sinners.

Complete with notes and an index, Mondy's lively text includes illustrations by Albino Hinojosa. The book is enjoyable, informative, and should find space in any Westerner's library.

—Jeff Nathan

*Gold Dust*, by Donald Dale Jackson. Knopf, New York, 1980. 364 pp. \$13.95.

Donald Dale Jackson has written a new book on the 49ers, a subject about which the prospective reader might think had been played out by now. In his prologue Jackson attempts to distinguish his book from its predecessors by noting that his intent "is to tell the story of the gold rush through the experiences . . . of the men who participated in it. I want to convey what it was like to be on the trail and in the diggings."

From the first episode, in which James Marshall finds gold while digging a ditch on the American River, Jackson demonstrates

an ability to put the reader in the center of the action. Jackson writes that Marshall "carefully examined the granite bedrock on the floor of the ditch. He saw something shining beneath about six inches of water, reached down, and picked up a tiny piece of brass-colored metal. His heart was pounding."

In this well written, richly detailed story, the author uses Marshall's discovery as a springboard to creating an overall view of the initial gold rush years of 1848-1849. Jackson describes how the news of the gold discovery was brought to a skeptical world, and how Americans, Europeans, South Americans, and Chinese responded to the sensational events.

The story of the different routes that the gold seekers took in attempting to reach California is thoroughly told. We learn of the hardships and privations suffered by the overland travelers who took such well known routes as the Santa Fe Trail. The sea routes by way of Cape Horn and to Panama are also described. Along the way we are told the stories of men like J. Goldsborough Bruff, who was abandoned to the terrors of a winter in the Sierra Nevadas by the company he had successfully led across the plains; and of John Woodhouse Audubon, whose group lost its leader, much of its money, and many of its men before it even started on the trail.

A highlight of the book is the description of life at the mining camps and in the new gold rush towns. Drawing on the diaries of the 49ers, Jackson is able to evoke the sights and sounds of the period while vividly describing the hardships suffered by the men at the diggings. The stories of the many individuals help form a larger context for the gold rush era. Best of all, the author graphically portrays the sense of disillusionment in the failure of most gold seekers to make their fortune.

Jackson ends his book with the return of disappointed Argonauts at the end of 1850. By then grim knowledge had replaced exaggerated stories, and Easterners paid greater heed to the counsel of sadder but wiser men. Still and all, California's lure remained irresistible. Any number of unsuccessful gold seekers found they missed the excitement of the new state, and after an absence of months

or years they returned for more adventure. This time they came tempered with the wisdom that California might offer opportunities that glittered as well as or better than gold dust.

This book invites comparison with already published narratives of the gold rush, most notably Rodman Paul's *California Gold* (1947) and John Caughey's *Gold is the Cornerstone* (1948, reissued in paperback in 1975 as *The California Gold Rush*). Jackson's best feature is his integration of gold seekers' observations into a smooth-flowing narrative that preserves the flavor of an exciting period. In mining his sources Jackson offers the retelling of a familiar story rather than providing any startling new information, and he is mainly concerned with the rush to the gold, leaving subsequent events to a brief epilogue. This narrows his focus, but readers will find his presentation an exciting and durable armchair adventure.

—Robert L. Cannon and Abraham Hoffman

John D. Weaver, *Los Angeles: The Enormous Village, 1781-1981*. Santa Barbara: Capra Press, 1980. Pp. 239. \$8.95 (paper).

In celebration of Los Angeles' bicentennial birthday, John Weaver has reworked and expanded his 1973 book, *El Pueblo Grande*, retitling it with a comment given by Louis Adamic by way of Carey McWilliams. Like McWilliams, Weaver well fits the role of affectionate critic. His views, vignettes, and anecdotes of the city and its history are witty, perceptive, and in the long run optimistic. Weaver does not hesitate to place blame where prejudice, poor planning, and narrow thinking have hampered the city's progress; yet he is patient with the many foibles found in Los Angeles fact and legend, and his tolerance even extends to the easterners who periodically take potshots at the city.

Readers of this book will find the stories delightful and the photographs interesting (if a bit murky in their reproduction). It should be noted, however, that despite its enlargement from the earlier version, Weaver's book is far from definitive. The period from the founding of Los Angeles in 1781 to

the end of the nineteenth century is covered in but two chapters, some forty of the book's 216 pages. The remaining chapters provide a decade-by-decade account of twentieth-century developments. A final chapter records an alphabetized miscellany of city trivia, pretty much identical to the same coda in *El Pueblo Grande* except for the inclusion of minorities in the body of the text in this new edition (Catholics, Jews, and Protestants, however, remain in the miscellany chapter). Despite the concentration on the twentieth century, much is missing or at best noted briefly that surely deserves greater attention. Clifford Clinton and his civic reform efforts of the 1930s are omitted, Fletcher Bowron gets short notice, the water wars of the 1920s are overlooked; on the other hand, Sister Aimee, Walter O'Malley, and Harrison Gray Otis are accorded prominent displays of space. Most chapter titles are identical to those in the earlier version.

Angelinos who are already to some degree knowledgeable in city history may shudder at some of the typographical errors (p. 53, Free Habor League; p. 201, Isias Hellman), while others may be disappointed at the narrow focus of Weaver's research. Weaver acutely perceives the frail, the faulty, and the felicitous in the city's past, but his sympathy for the victims of prejudice and exploitation, such as Chicanos, contrasts oddly with occasional stereotyping as in the photo caption on page 32, where Sonora Town "holds out against change." Perhaps Weaver did not write the captions. Is Weaver being ironical or cynical when he reports that "aboriginal Angelinos got their first glimpse of civilization in the summer of 1769," or does he mean this straightforwardly? Weaver is at his best in his blending of contemporary observations into the narrative. But it is all too easy to confuse forest with trees in this book. Paragraphs follow each other without transition, giving the impression of a shuffled deck of note cards. The book will find an audience that will express delight at the many interesting anecdotes, and it is fun to read. But at \$8.95 for the paperback, the price seems a bit stiff for a recycling of *El Adobe Grande* and a trip down a rather bizarre memory lane.

— Abraham Hoffman