

Tracklaying in Utah, Nevada And California

ONE of the features of the splendid work that has been accomplished on the Salt Lake Route under the supervision of the engineering department has been the rapid tracklaying operations that mark the closing epoch of construction on the desert.

On Oct. 26 there was a record of 649 feet of track laid in 10 hours. This record was made with a machine on the extension from the salt lake end, under the engineering department. Mr. A. L. Jones, division engineer, in charge; Mr. John Cocayne, general foreman, and Mr. Thomas Costello, track foreman. The track was full tied, full spiked and bolted, and was laid and raised up to grade by a gang of 124 men, all told, including those working with the machine, taking materials from the cars and in the other various operations necessary to complete the work of laying. The work of causing track to grade is not usually considered part of laying track, properly, but is included in this record.

The Harris tracklaying machine consists of a train of flat cars with a train track of two feet gauge laid over the same, on which are run push cars to forward the ties. There is also a series of rollers on which the rails are pushed to the front. On the head car, which is known as the "pioneer car," there is a transverse frame over which rods are run to support an extension of the tram track about 30 feet beyond the head end of the car. The rails of the tram track are spiked to the laid crosswise the car, and these ties are temporarily spiked to the car floor. The continuity of the tram track, where the cars are coupled together, is made of short pieces of rail dropped into splice bars which are coupled to the ends of the tram rail on each flat car, the base of this connecting rail at the ends being cut away. The tie car or hand truck, used to deliver the ties onto the roadbed, both automatically loads specially piled bunches of ties upon itself and automatically dumps them onto the road bed in advance of the last track laid.

With the ties and rails laid down on this roadbed the work of putting these materials together is by hand tools, much in the ordinary manner, but in the operation of placing them there the Harris machine is different from all others in several respects. One point of difference is in the choice of employing "single-rail" or "double-rail set-outs." In the latter case two rails, coupled together, making a length of 60 feet with rails of ordinary length, are run down from the pioneer car and placed upon the ties, where only a single rail is put down at a time. In the other case, by the "double-rail set-out" method this machine has, in years past, made a record of handling the material for more than three miles of track per day.

On the San Pedro, Los Angeles & Salt Lake Railroad the track is being laid by the "single-rail set-out" method. By this one rail is first run for the line side of the track and put into place, then the opposite or gage rail is run out by the same men and heeded into place, and the train is moved up every rail length. The same men that handle the rails also put the ties into place on the roadbed after they have been dumped from the machine. Usually only about a dozen men are used to handle both rails and ties on the roadbed in front of the machine. This system is also different from that of all other track-laying devices, in that no separate force is employed on the roadbed whatever.

This 5,640 feet of track laid in one day of 10 hours, by the "single-rail set-out" method is thought to exceed any single day's track-laying on record, when the number of men employed in putting the material in place and the conditions under which the work was done is considered.

One thing which undoubtedly facilitated the work a good deal was the use of Harris bridle rods in lieu of "front spiking," to ready ready for the train and machine to move up. The ends of these rods clasp the outside of the rail base like a stub switch rod, while inside each rail there is a sliding clamp on the road which is moved up to the inside edge of the rail base and held secure by swinging over a pivot latch at the back of it. The bar can be quickly applied to the rail and when so applied it holds them securely to gauge. As soon as the "line rail" is heeded into place they are almost instantly gauged and clamped and the train is at once moved forward, saving the expense for "front" spikes and about 25 per cent of the time for the track-laying machines waiting for the "front" spiking to be done. After the train passes over the track the bridle rods are disconnected and the track spiked in full by the regular back-spiking gang. With this exception nothing was used in the way of temporary appliances, such as temporary fish plates ahead, temporary "instantaneous" track bolts, "plugs," etc., as is sometimes done to save time to the men ahead of the machine.

HUNTINGTON'S BIG THREAT.

It was just about this time also that Collis P. Huntington gained the control on the Southern Pacific. One of his first moves was to declare that if the Union Pacific built the line through to Southern California he would indulge in a right merry war and drive the Overland to the wall or go under himself in the attempt.

Jay Gould, who had gained control of the Union Pacific concluded that it was not good policy to stir up Huntington, and in 1883 ordered the track that had been laid to be pulled up.

CANNONS TO THE FORE.

In 1886 George Q. Cannon, Abraham H. Cannon, George A. Lowe and others organized another company to build to Los Angeles, the Union Pacific being ostensibly behind them. However the untimely death of Abraham H. Cannon caused work to be stopped indefinitely.

A. W. MCCLURE NEXT.

Then came the incorporation of the Utah & Pacific by A. W. McClure, David Eccles, C. W. Nibley and others. It was proposed to utilize the abandoned grade below Milford and extend to Los Angeles. The Oregon Short Line furnished rails and received stock in exchange. The company also gave special rates on ties. The track was laid to Uvada on the Utah-Nevada state line, a distance of 75 miles. When this was done again Collis P. Huntington served notice that he would deem any invasion of Nevada as an infringement upon Southern Pacific territory. Accordingly the grade in the Sage Brush state was abandoned. Later it was sold for taxes and became the property of Lincoln county.

Early in 1889 it began to be rumored that the project would once more be undertaken and pushed through to completion.

WHERE CLARK CAME IN.

The first definite sign was the sale of the Terminal road between Los Angeles and San Pedro harbor to Senator W. A. Clark, the Montana copper king, and R. C. Kerens of St. Louis.

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last line to be constructed through to the Pacific in America and Canada. The initial line was financed and planned by Utah man, William Jennings, and the first president of the organization, John Finch, vice president and Fernando Little, superintendent. In 1872 the road was built to Las Vegas, the next year the track was laid to Provo. In 1873 it was extended to York, a distance of 27 miles. Four years later Judah was reached and Utah had a railroad all her own of 300 miles in length. The Utah Southern Extension company was then floated and by 1876 trains were running into Milford and Eureka.

Looking back to 1872 another railroad company had been formed to build southwest from Salt Lake via Garfield beach. This was the Salt Lake, Sevier Valley & Pioche, organized by A. T. Barnum and in which Dan, Patrick E. Connor and President Heber C. Kimball were all interested. This line was built as far as Garfield and then apparently died a natural death.

THE UTAH NEVADA.

The Utah & Nevada was in 1873, planned by John W. Young. It was a narrow gauge road with ambitions. It took over the grade of the Salt Lake, Sevier Valley & Pioche and by 1876 had a track that extended to Terminal near Stockton.

Both of these pioneer railroad lines are now part of the system of the Salt Lake Route. The intervening history between the time of the driving of the first spike in 1872 and the last spike on the Salt Lake Route, which at this time of writing is promised within 30 days, is interesting.

THE UNION PACIFIC.

In 1886 the Union Pacific began to show activity in the direction of constructing a road from Salt Lake to southern California. For the purpose of carrying out this project, the Salt Lake & Western was organized, with S. H. H. Clark, president of the Union Pacific, at the helm. Among the Salt Lake directors were W. W. Riter, Parry E. Williams, Le Grand Young and A. F. Donnelly. The survey started from Terlingua and connected with the Atlantic & Pacific at Barstow, California, on to Los Angeles. Considerable money was spent in surveys and work was commenced. It was soon abandoned and another line from Lehi was started with the same destination in view. This line was graded as far as Jericho, near West Tintic. The road was completed this far and for years formed the Tintic branch of the Oregon Short Line.

In 1886 Charles Francis Adams, president of the Union Pacific, sent H. M. McCartney, who until recently was assistant chief engineer of the Salt Lake Route, and Prof. W. F. Jenney over the route between Los Angeles and Salt Lake. Mr. McCartney was to report on the engineering features of the project, while Prof. Jenney was to devote his attention to the traffic possibilities of the mineral resources of the country traversed. They outlined at Los Angeles, came over Cajon pass and traversed the country to Milford, making a careful examination of every mile covered. Their reports were favorable with the result that in 1888 the Union Pacific made arrangements to start work on the road and the section between Milford and Caliente was cross-sectioned and the grading nearly completed, including the tunnels in the canyon on the Nevada state line. Seven miles of grade from Caliente to Pioche were also accomplished when the crash of the famous London financial firm, Baring Bros., occurred. As Baring Bros. were furnishing most of the money for the extension work came to a standstill.

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and annexation. A railroad was built from Los Angeles to San Pedro harbor wharves were built on the east side of the harbor on Rattlesnake Island, now known as Terminal Island. The road was built partly as a speculation by those long-headed men who foresaw the trend of events. That they had good business heads was shown when they came to sell out their interests, some of them outright, and others to take stock in the Salt Lake Route

as part payment.

At once a policy of obstruction was launched by the Harriman interests and in short order a legal battle royal was in progress. The United States land office at Washington, the interior department, and the various local and United States courts in Utah and Nevada were busy with right-of-way litigation.

To the onlooker it was apparent that in these right-of-way contests T. E. Gibson and C. O. Whittemore, the legal talent for the new road, did yeoman service and on several occasions outwitted the heavyweights who had been called in by the Harriman forces.

SHORT LINE PURCHASE.

For over a year there was a sort of

standstill.

PIONEER SQUARE COMMITTEE.

The committee appointed to wait upon the city council was as follows:

George A. Lowe, chairman; Edward P. Colburn, Heber M. Wells, O. J. Salisbury, W. S. McCormick, George M. Dewey, Frank Knox, M. H. Walker, L. H. Farnsworth, S. C. Park, E. W. Genter, E. G. Raybold, George M. Cannon, W. W. Riter, L. S. Hills, J. E. Caine, Fred Leonard, C. C. Good-

win, A. Clark, of Montana, president; R. C. Kerens, Jr., of Missouri, first vice president; J. Ross Clark, of California, second vice president; T. E. Gibson, of California, third vice president; T. F. Miller, of California, secretary; F. K.

At the outset it was announced that the new road was to be entirely independent and was to be entirely financed by the promoters. Subsequent developments, however, caused a modification of that statement.

The first visit of Los Angeles officials to Salt Lake City occurred on Sept. 11 and they proceeded to look over the situation pending the arrival of J. Ross Clark, vice president. On the 20th the officials got together and agreed upon a proposition to ask the city of Salt Lake to donate Pioneer square as a terminal for the new road. A committee of fifty representative Salt Lake men was subsequently appointed to appear before the city council and ask for the donation of Pioneer square, on the condition that it was not to pass title until the completion of the road, within a given time was assured. To look ahead some time, this petition was granted, but subsequently revoked and the square still remains the property of the city.

SALT LAKE CITY.

At the meeting of the Salt Lake City council on Saturday night, April 12, 1904, W. A. Clark wired the Salt Lake daily paper from New York through his secretary as follows:

"Senator W. A. Clark states that he has purchased for the San Pedro, Los Angeles & Salt Lake Railroad company all the lines and equipment of the Oregon Short Line company lying south of Salt Lake in Utah and Nevada, including the Leamington cut-off, and that he has obtained a 99-year lease on the terminal facilities in Salt Lake City in conjunction with the Oregon Short Line."

The property will be transferred as soon as necessary directors' meetings may be held and the contracts approved.

"Grading and tracklaying will be commenced at Daggett, Cal., and the road will be extended from Caliente through Nevada. From Leamington to Caliente the roadbed will be improved and relaid with 75-pound rails.

"The western terminus of the road is now being operated from San Pedro harbor to Ontario, and will soon be completed and in operation as far as Riverside.

"He hopes to have the road completed in about two years."

Following the formal transfer of the property the following June an epoch of brisk construction was inaugurated, but it soon died out and there were all sorts of rumors in the air. Later it became apparent that the operation and construction of the road were in a measure still under the jurisdiction of the Oregon Short Line.

Eventually, despite the repeated demands on the part of high officials hitherto, it was announced a couple of months ago that the Oregon Short Line had a half interest in the Salt Lake Route.

Of late construction has been pushed more rapidly and tracklaying has been under operation on an ambitious scale while the work of cutting down old roads and rectifying bad curves on the old line in Utah has been actively pushed.

At the present rate of construction, it is affirmed, the road will be in first class running order right through in the spring. While the gap has been practically closed up there is still an immense amount of work to be done before the road will be in every particular up to the standard set by the promoters.

When it is completed there will be no real place of railroad building in the entire west.

THE GAP ON THE DESERT.

IT Measures 27 Miles and Will be Closed Next Month.

When will the road to Los Angeles be finished? and when will trains commence to run over the new track? are questions that Salt Lakeans are asking on every hand. The interest beaks a desire on the part of many to visit the Angel City. But the most definite answer that can now be given to the inquiries is to say—"Some time next month?" A few

trains may run over the road before the end of January, but regular service will not and cannot be safely inaugurated before the early springtime. The distance that now separates the road "on the other end" and the road "at this end" is 27 miles between Good Spring Summit and Kessler, as indicated on the map hereinafter reproduced.

However 12 miles of that distance is graded and large crews of construction hands are at work at either terminal and gradually they are nearing each other. That time, as stated, is not far in the future, and when it arrives the news will be widely heralded with glad acclaim.

ROUTE OF CALIFORNIA, TREASURER.

These gentlemen together with Reed Smoot, W. F. Armstrong, R. S. Campbell, C. P. Mason, John J. Daly, W. P. O'Meara, H. G. McMillan, J. C. Culier, Joseph Geoghegan, A. L. Thomas, Thomas Weir, George Y. Wallace, W. W. Chisholm, Charles Burton, E. M. Weller, George T. Odell, John Henry Smith, Philo T. Farnsworth, J. J. Corrigan, John Leilin, W. M. Bradley, Albert Reiner, J. E. Bamberg, J. H. Anderson, G. S. Holmes, A. C. Ellis, C. S. Varian, Wiley S. Brown, David Keith, J. H. Houston, H. Hamner, H. B. Clawson, R. C. Chambers, J. F. Woodman, H. J. Faust, Henry Dinsmore, George Pyper, Le Grand Young, T. G. Webber, Thomas Jennings, George Remney, W. B. Preston, N. W. Clayton, John Clark, James H. Moyle, G. H. Pettit, F. S. Richards, Reed Smoot, R. K. Thomas, H. C. Whitney, Henry Wallace, Henry Stegemiller, Oscar W. Mayle, W. J. Newman, W. J. Ballance, W. A. Sherman, G. S. Porter, W. W. Booth, Jr., Glen P. Frank, T. J. Knutson, George A. Snow, C. A. Quigley, E. B. Wick, H. W. Lawrence, Byron Groe, J. A. Cunningham, John T. Caine, John Q. Canfield and S. C. Ewing.

On Nov. 21, 1903, the Deseret News printed exclusively the organization of the San Pedro, Los Angeles & Salt Lake before the big Knutson adjourned at 2 a. m. the next morning. The initial organization of the big \$25,000,000 company, together with its auxiliary corporations were:

FOR EXPLORATION.

For the purpose of carrying on the work implied by its name, the Los Angeles and Salt Lake Exploration and Development company, with a capitalization of \$3,000,000 was also organized, as follows:

INCORPORATORS AND DIRECTORS.

Thomas Kearns, Jr., T. E. Gibson, W. C. Kerens, C. C. McCormick, David Keith, W. A. Clark, Oscar W. Mayle, W. J. Newman, W. J. Ballance, W. A. Sherman, G. S. Porter, W. W. Booth, Jr., Glen P. Frank, T. J. Knutson, George A. Snow, C. A. Quigley, E. B. Wick, H. W. Lawrence, Byron Groe, J. A. Cunningham, John T. Caine, John Q. Canfield and S. C. Ewing.

These articles were eventually filed with the secretary of state on March 21, 1904.

RIGHT OF WAY BATTLES.

Then followed another big meeting

of capitalists interested when, it was understood, that a proposition was made by the Oregon Short Line, or some individual representing the interests of the company, to sell all of its lines and branches south of Sandy to a new company. After considerable debate as to the price the offer was rejected and a conclusion reached to build parallel to the existing road to Milford.