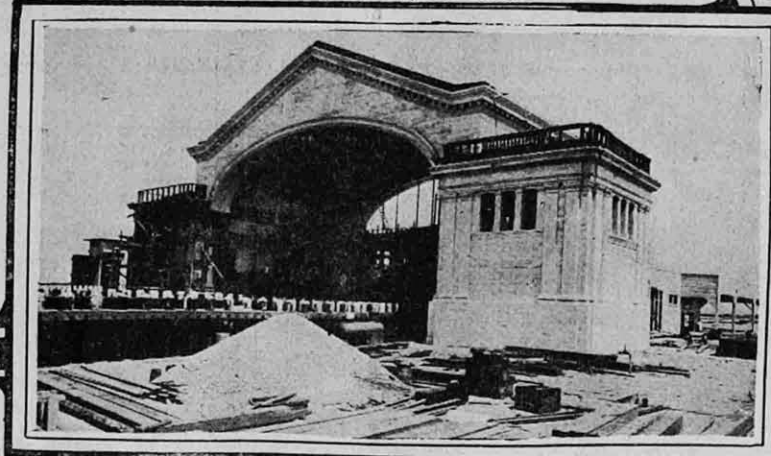


Vast Railroad Construction is Feature of the Year



Western Pacific Depot, Stockton



Western Pacific Terminal at San Francisco Bay at Oakland



Western Pacific Division House

Western Pacific Closing Up the Gap to the Coast

Nearly 40 years and six months after the completion of the first transcontinental railroad across America, the last spike was driven on the second railroad to span the continent and connecting Salt Lake with the Pacific coast—the Western Pacific. On May 10, 1909, the steel bands of the Union Pacific and Central Pacific roads met at Promontory Point, in Utah. On Nov. 1, 1909, the last rail connecting the two stretches of the Western Pacific track was laid in Nevada, at a point about 50 miles north of Reno and 160 miles west of Winnemucca.

This long looked-for consummation followed six years of strenuous railroad building. The stretch of 923 miles lying between Oakland pier on the west with Salt Lake City on the east was bridged with steel in this short period, and the rail laid down was placed on a grade which nowhere on the entire line exceeds 1 per cent, and built so solidly and so evenly that the coaches speeding over them ride with the ease of a motor car on an asphalt pavement.

On Wednesday, Nov. 10, at 3 in the afternoon, the first train to make the trip from the Pacific to Salt Lake arrived in the latter city, bearing on board Virgil Bogue, chief engineer, under whose direction the entire road has been built; T. J. Wyche, engineer of the eastern division of the road, who has personally supervised the construction of that end of the system; C. H. Schlocks, vice president of the road and personal representative of E. T. Jeffery, president of the Western Pacific; C. M. Levy, second vice president and general manager of the road; J. F. Evans, auditor of the road and several other officials. And while about 80 miles of the road remained to be ballasted at that time, the train made the trip without accident and at satisfactory speed. Until this ballasting is completed, the road will not be open for passenger traffic, but it is expected that freight trains will be running over its length by the first of the coming year, when the formal opening of the new transcontinental line will occur.

GREAT ENGINEERING FEAT.
The completion of the Western Pacific marks the culmination of one of the greatest feats of engineering construction of modern times. To maintain the maximum of 1 per cent grade, almost insurmountable obstacles had to be overcome, including the construction of 43 tunnels with a total length of 45,525 feet of underground work and the building of 40 steel bridges, aggregating a length of 9,269 feet of bridge construction. A force of 6,000 men, as well as thousands of teams, has been constantly maintained in the construction of the road.

ROUTE OF MAIN LINE.
The total length of the Western Pacific, from Salt Lake City to Oakland pier, is 923 miles. From Oakland the ferry connects with the San Francisco terminal a distance of 3.5 miles. The route of the road runs southeast from Oakland to Niles, 29.5 miles, and then east through the Niles canyon and over the summit of Oroville to the Sacramento through Stockton, 92.7 miles, to Sacramento, 128.5 miles, Marysville, 179 miles, and up the Feather river to Oroville, 294.9 miles. A few miles north of Oroville the road enters the canyon of the Feather river and begins the climb of the 1 per cent grade which from Bloomer Sliding, 218.9 miles, is continuous for almost 150 miles. Entering Plumas county the direction changes to the east, following the north fork of the Feather river and then the east branch, Spanish creek and Spring Garden creek, 233.7 miles,

crossing a divide through Spring Garden tunnel, 297.2 miles, 7,306 feet long, to the valley of the Middle fork. At Spring Garden tunnel the elevation is 4,043 feet. Just before reaching the tunnel, to maintain the maximum of 1 per cent grade, development work was necessary, and the approach to the tunnel was accomplished by means of what is known as the Williams Loop.

DIZZY STEEL VIADUCT.
At mile post 314.4 the line crosses Willow creek viaduct, the highest steel structure on the line, 175 feet high and 1,340 feet long. Four miles beyond is reached the head of the 1 per cent grade, 318.7 miles. Running east the line crosses the continental divide at an elevation of 5,018 feet, at Beckworth Pass, through Beckworth tunnel, 8,095 feet long, 340.4 miles. After leaving this tunnel the line turns due north and runs to Honey Lake, then east again, crossing into Nevada, and northeast across Snake Creek desert, Granite Creek desert and Black Rock desert to Deep Hole, 430.3 miles, then due east to Winnemucca, 532.2 miles, where it reaches the valley of the Humboldt river, adjacent to the Central Pacific railway. The road then follows the Humboldt river valley, paralleling the Central Pacific to Wells, 717.1 miles, then turns southeast to Lower Lake pass, which is crossed through the Flower Lake tunnel, 5,657 feet long, 733.7 miles. Turning northeast the Silver Lake pass is crossed by means of a horseshoe curve five miles long, running thence southeast to Wendover, 733.7 miles. From Wendover the line crosses the great salt desert on the east edge of the desert, then generally easterly to the southern end of Great Salt Lake near Grants, 886.3 miles. It then crosses the lake in shallow water for seven miles, and follows the lake shore to Garfield and thence directly east to Salt Lake City.

The scenery on the Western Pacific is claimed to be unsurpassed in America. The Feather river country is a commercial development in the construction of the road, and in the commercial development in material prosperity of the great section through which it passes, and incidentally for the whole country.

Saltair Road

ONE of the railroad improvements of the coming year will be the electrification of the Saltair line. Salt Lake county has already granted the road a franchise to electrify its line of road through the county precincts between Salt Lake City and the lake, and at this writing the city council has under consideration the proposition of granting to the Saltair road a franchise over certain streets of the city giving the line access to the uptown streets for its electrified lake cars.

Under proper restrictions there can be no doubt the franchise will be given to the Saltair line to traverse the main streets of the city, and next year the public will be served with trains to the lake at intervals of from three to five minutes, without the necessity for repacking to the lake trains, the cars will run from the lake on West South Temple to Fifth West, thence north to North Temple street over the viaduct, and returning west to First West street, thence north to North Temple street west over the viaduct again to the lake. The cars will be of the interurban type, seating 70 passengers, with full vestibule at the rear and half vestibule in front. The regular mode of operation will be with a motor car, but a motor car alone as traffic demands.

The road will be double tracked from the city to the lake shore, thus avoiding waits and the danger of collisions.

A MILLION IN ADVERTISING

GENERAL improvement has characterized the year on the Oregon Short Line, in common with all lines comprising what is known as the Harriman system. And though the latter portion of the year witnessed the passing from earthly duties of the head of the system, the work which he inaugurated and which it is known was his intention should continue toward that which he foresaw would be the destiny of the great system of roads of which he was the active head, has progressed along the lines laid down in a most gratifying measure.

Among the improvements completed and under way on the Oregon Short Line may be named the completion of the double tracking from Salt Lake to Woods Cross, and the extension of the double track between the last named station and Farmington is now under construction. Block signals have been installed from Ogden to Cache Junction through Bear River canyon, also on the main line between Granger and Huntington to complete installation on the entire line, most of which is now protected by the block signal system.

The telephone system of dispatching trains has been installed between Ogden and Sandy, and similar installation is contemplated on other divisions. The portion of the line already covered by telephone dispatching has been operated very successfully.

New 90-pound steel rails are being laid on 195 miles of the Oregon Short Line and 77 miles of the Southern Pacific east of Sparks, to release rail of lighter weight for use in the building of new branch lines, industry tracks, additional yard tracks, new sidings, etc.

IDAHO BRANCHES.

New branch lines now under construction and contemplated in the near future aggregate about 300 miles, mostly in Idaho, which are to serve new tracts of land that are being put under irrigation, as follows: Twin Falls to Salmon river reservoir site, 23 miles; Rupert to Bliss, through north side project, 75 miles; Morehead to Aberdeen, through American Falls irrigation project, Carey lands, 28 miles; Corro Grande towards Salmon City through lands of Lost river irrigation project, about 25 miles; Burley to Oakley, through Goose creek irrigation project, 25 miles; Vale to Brogan, in

Oregon, via Willow creek irrigation project, about 24 miles.

Up to the present time there has been expended on the new Union passenger station in this city between \$350,000 and \$400,000. There remains yet the erection of the umbrella train sheds which, when completed, will make the Harriman depot one of the most beautiful and best appointed railroad stations between Chicago and the coast.

During the year just drawing to a close the unit system of division organization has been inaugurated on the various divisions of the Oregon Short Line. This system was originated by Maj. Hine and in its operation does away with the titles of trainmaster, division engineer, master mechanic and chief dispatcher, with the title of assistant superintendent substituted in each instance. The modifications of the old system worked out under the new plan has the effect of expediting the company's business by the reduction and simplification of correspondence and records. The system has proved highly satisfactory thus far. It was placed in operation on the Utah division on Sept. 5, and since that time the other divisions have been brought under the government of the unit system.

PASSENGER DEPARTMENT.

In reviewing the record for 1909, the passenger department of the Oregon Short Line Railroad company, under the direction of D. E. Burley, general passenger agent, has reason for congratulation. It has seen general travel increase more than 50 per cent over last year. This includes travel to Yellowstone park; to the Alaska-Yukon-Pacific exposition; spring and fall colonial business from the east, and local traffic, all of which clearly demonstrates the awakened and growing interest in this intermountain country and the Pacific northwest.

This travel has not all been transient, or tourist travel; much of it has remained in the state. These great increases must not be charged to "chance," nor to the labors of a recent day alone, for back of them lie many years of ceaseless and untiring effort along publicity lines, the cry having been, "Come west!" The call of the west has been heard after many years, and those who have heeded the call and have "come west," have seen and have conquered; and an immeasurably rich territory in a once-desert country in the vast agricultural sections of Idaho and Utah has been opened to settlement.

The passenger department of the Oregon Short Line company has spent large sums of money in directing attention to the scenic wonders and the agricultural and commercial resources of the territory it serves. During the year just past, efforts along these lines have been redoubled, among new publicity features adopted being the "community plan," a co-operative arrangement between the railroad and various communities, under which individual booklets of a very high order of merit, both from artistic and argumentative standpoints are issued. Up to the present time, some 15 communities have been listed this service, among which may be mentioned Boise, Twin Falls, Idaho Falls, American Falls, Hailey, Blackfoot, Pocatello, Buhl, Burley, Rupert, Richfield, Gooding, St. Anthony and others.

For Yellowstone park, a handsome publication printed in four colors, containing an entertaining description of this wonderland, has been published each year for the last 12 years under the title of "Where Gush the Geysers," and this publication has probably been as effective as any other one feature in creating an interest in the park.

While the Oregon Short Line has been rendering publicity service here and outside, the Union Pacific, Southern Pacific and Oregon Railroad & Navigation company, and others of the related lines have been rendering yeoman support throughout the United States and the vast returns incident to these efforts is undeniable proof that the west is worthy of being advertised. These interests will spend during the year 1909 approximately \$1,000,000, strictly along advertising lines.

But publicity alone has not wrought the "miracle of the west" during the last 10 years. Rates have been materially reduced, great irrigation enterprises and commercial industries have been developed, railroad service has been improved; the most modern methods of transporting and protecting the public having been incorporated, such as the electric block signal system; and these varied efforts, backed by merit of country and the faith in its future, have, no doubt, combined to work the wonder.

Publication printed in four colors, containing an entertaining description of this wonderland, has been published each year for the last 12 years under the title of "Where Gush the Geysers," and this publication has probably been as effective as any other one feature in creating an interest in the park.

While the Oregon Short Line has been rendering publicity service here and outside, the Union Pacific, Southern Pacific and Oregon Railroad & Navigation company, and others of the related lines have been rendering yeoman support throughout the United States and the vast returns incident to these efforts is undeniable proof that the west is worthy of being advertised. These interests will spend during the year 1909 approximately \$1,000,000, strictly along advertising lines.

But publicity alone has not wrought the "miracle of the west" during the last 10 years. Rates have been materially reduced, great irrigation enterprises and commercial industries have been developed, railroad service has been improved; the most modern methods of transporting and protecting the public having been incorporated, such as the electric block signal system; and these varied efforts, backed by merit of country and the faith in its future, have, no doubt, combined to work the wonder.

Garfield has also received a great impetus as a smelter town on this line and the Garfield concentrator and smelters have steadily added improvements which are resulting in the rapid growth of the town.

Dry farming has come to the front along the line of the road in a gratifying manner, and at Cedar valley, which has heretofore been one of the chief of the southern Utah sagebrush fields, thousands of acres have been reclaimed by means of irrigation and the year 1910 will witness the reclamation of thousands of acres of additional land by no less than a dozen different companies.

Other points which have witnessed marked development are Akin, Burt, Clear Lake, Oas, Milford and Modena, where much labor and money have been expended in bringing under cultivation tracts of land and as a

D. & R. G. a Link in Transcontinental Line

A NUMBER of changes have transpired during the year on the Denver & Rio Grande railroad in the personnel of the operating department, as well as in the operating plans of the railroad. Since Jan. 1, 1909, A. C. Ridgway, general manager of the road at Denver has resigned, and his place has been filled by the appointment of H. W. Clarke. Ernest Stenger, general superintendent of the Utah lines of the road, resigned and J. C. Bailey was named in his stead. J. W. Dean of St. Louis has been appointed general superintendent of the road with headquarters at Denver. The territory of the Utah division has been subdivided and a superintendent has been named for each division. A. B. Apperson, formerly assistant to Gen. Supt. Stenger, has been appointed superintendent of the new Salt Lake division, extending from Ogden to Tucker, and O. G. Osgood, as superintendent of the Green River division, extending from Tucker to the central and eastern Utah divisions. The Denver & Rio Grande has had several things of an unpleasant nature happen along its lines during the year, perhaps the most disastrous floods and washouts of its history occurring during the past few months. Both on its main lines and branches the fates have seemed against the road in sending avalanches, floods and other calamities for its discomfiture. But it has not flinched, and, notwithstanding, for according to its published reports the earnings of the road aggregate more in proportion to the capital invested than several such roads as the Chicago & Great Western, the Chicago, Milwaukee & St. Paul, and others.

NEW EQUIPMENT.

The road has ordered the delivery of several thousand new freight cars. It has purchased two or three dozen new locomotives, and has a 100-ton wrecking machine, and has double tracked a considerable portion of the line over the mountain districts of central and eastern Utah during the year just closing.

The most pretentious piece of work undertaken by the Denver & Rio Grande in Utah is the new passenger station for the joint use of the Denver & Rio Grande and the Western Pacific railroad. This building is up to the square of the first story at

present, including the first course of masonry and a portion of the upper courses of terra cotta construction. The structure will be one of which the railroad company and the city will be proud when completed. It is thought the building will be in readiness for occupancy about the middle of next summer. The depot company is incorporated as a separate corporation, its capital being \$1,500,000, and its sole purpose being to construct and operate the joint Denver & Rio Grande and Western Pacific passenger station in this city.

The triumph of the year for the Denver & Rio Grande road, however, is the completion of the link connecting itself with the Pacific coast, the Western Pacific. Under the fostering care and patronage of the Denver & Rio Grande has this new line been made possible, for the parent road has stood back of the transcontinental infant on nearly \$75,000,000 worth of bonds to complete its construction, and now that the stupendous work has been completed and the active operation of life-giving artery in its march toward its glorious commercial and social destiny, besides providing itself with a means toward transcontinental independence which will be valuable in more ways than one.

IMPROVEMENTS AT BINGHAM.

The year has witnessed great improvements perfected at Bingham, perhaps the greatest single source of income on the entire line of the road. Thousands of dollars have been expended in building large shops, constructing new buildings, etc. at the noted Utah copper camp. The output of copper from Bingham during the present year has been estimated at one hundred million pounds, and the Denver & Rio Grande road does all the hauling in and out of the camp, giving it a handsome business from this mining center.

The plans of the Denver & Rio Grande and Western Pacific contemplate the erection of east machine shops, roundhouses and repair shops in Salt Lake, which means permanent employment of hundreds of men and the distribution of large annual payrolls among the merchants and people of Salt Lake. Prospects are bright for the Denver & Rio Grande, and those who have followed the struggles of the line for the mastery of the rugged conditions which have confronted every foot of its westward progress, will rejoice with it in the rosy future which seems now to be an assured reality with the completion of its coast connection.

Salt Lake Route Enjoys The Best Year of Its Life

DEVELOPMENT has been marked and rapid along the line of the Salt Lake Route during the year just drawing to a close, conceded to be the best year in its history of the road in Utah.

Take on new line is the new passenger station for the joint use of the Denver & Rio Grande and the Western Pacific railroad. This building is up to the square of the first story at

present, including the first course of masonry and a portion of the upper courses of terra cotta construction. The structure will be one of which the railroad company and the city will be proud when completed. It is thought the building will be in readiness for occupancy about the middle of next summer. The depot company is incorporated as a separate corporation, its capital being \$1,500,000, and its sole purpose being to construct and operate the joint Denver & Rio Grande and Western Pacific passenger station in this city.

The triumph of the year for the Denver & Rio Grande road, however, is the completion of the link connecting itself with the Pacific coast, the Western Pacific. Under the fostering care and patronage of the Denver & Rio Grande has this new line been made possible, for the parent road has stood back of the transcontinental infant on nearly \$75,000,000 worth of bonds to complete its construction, and now that the stupendous work has been completed and the active operation of life-giving artery in its march toward its glorious commercial and social destiny, besides providing itself with a means toward transcontinental independence which will be valuable in more ways than one.

IMPROVEMENTS AT BINGHAM.
The year has witnessed great improvements perfected at Bingham, perhaps the greatest single source of income on the entire line of the road. Thousands of dollars have been expended in building large shops, constructing new buildings, etc. at the noted Utah copper camp. The output of copper from Bingham during the present year has been estimated at one hundred million pounds, and the Denver & Rio Grande road does all the hauling in and out of the camp, giving it a handsome business from this mining center.

The plans of the Denver & Rio Grande and Western Pacific contemplate the erection of east machine shops, roundhouses and repair shops in Salt Lake, which means permanent employment of hundreds of men and the distribution of large annual payrolls among the merchants and people of Salt Lake. Prospects are bright for the Denver & Rio Grande, and those who have followed the struggles of the line for the mastery of the rugged conditions which have confronted every foot of its westward progress, will rejoice with it in the rosy future which seems now to be an assured reality with the completion of its coast connection.

Take on new line is the new passenger station for the joint use of the Denver & Rio Grande and the Western Pacific railroad. This building is up to the square of the first story at

present, including the first course of masonry and a portion of the upper courses of terra cotta construction. The structure will be one of which the railroad company and the city will be proud when completed. It is thought the building will be in readiness for occupancy about the middle of next summer. The depot company is incorporated as a separate corporation, its capital being \$1,500,000, and its sole purpose being to construct and operate the joint Denver & Rio Grande and Western Pacific passenger station in this city.