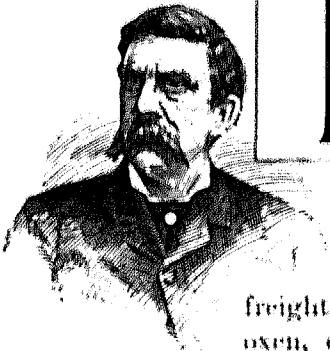


CHAPTER XX

THE STORY OF THE BUILDING OF THE UNION PACIFIC RAILROAD—EXTRACT FROM GENERAL SHERMAN'S MEMOIRS—GENERAL DODGE'S DESCRIPTION OF THE COUNTRY WHEN HE FIRST SAW IT—EXPLORATIONS FOR A ROUTE—CONFERENCE WITH PRESIDENT LINCOLN—LOCATION OF THE MILITARY POST OF D. A. RUSSELL AND THE TOWN OF CHEYENNE—DRIVING THE LAST SPIKE

General G. M. Dodge



IN this story of the Salt Lake Trail, our account would not be complete without including the history of the great "Iron Trail" that now practically, for a long distance, follows the grassy path of the lumbering stage-coach, the slowly moving freight caravans drawn by patient oxen, or the dangerous route of the relatively rapid Pony Express.

No better story of the construction of the Great Union Pacific Railroad can be found than the address of its chief engineer, General G. M. Dodge, before the Society of the Army of the Tennessee, at Toledo, Ohio, on the 15th of September, 1888. He had been over the whole region which extends from the Missouri River to Salt Lake in the early '50's, and, as has been said of him by a distinguished jurist, now dead: "He was an enthu-

siast who communicated enthusiasm to his working forces, and he showed his skill in the management of hostile Indians, and the ruffians and gamblers who followed the camp. The close of the war, in which he distinguished himself, left him at liberty to accept this position of chief engineer, and his intimate relations with Grant and Sherman put him on such terms with commanding officers of garrisons and military posts along the route, that he was enabled to avail himself of military aid against marauding Indians, and also frequently in maintaining order when worthless camp-followers become unruly."

The authors of this work have deemed it advisable to quote the greater part of General Dodge's address, as a more complete account of the construction of the road than anything to be found elsewhere on the subject:—

"Turn with me," he says, "to the first volume of General Sherman's memoirs, page 79, where he says:—

"Shortly after returning from Monterey, I was sent to General Smith up to Sacramento City to instruct Lieutenants Warner and Williamson, of the engineers, to push their surveys of the Sierra Nevada Mountains, for the purpose of ascertaining the possibility of passing that range by a railroad, a subject that then elicited universal interest. It was generally assumed that such a road could not be made along any of the immigrant roads then in use, and Warner's orders were to look farther north up the Feather River, or some of its tributaries. Warner was engaged in this survey during the summer and fall of 1849, and had explored to the very end of Goose Lake, the source of Feather River, when this officer's career was terminated by death in battle with the Indians.'

"He was too modest to add, as I have no doubt was the fact, that those instructions were sent at his own suggestion; that was the first exploring party ever sent into

the field for the special purpose of ascertaining the feasibility of constructing a railway on a portion of the line of one of the transcontinental routes, and that the exploration preceded by at least four years the act of Congress making appropriations for explorations and surveys for a railroad route from the Mississippi River to the Pacific Ocean, the earlier fruits of which were embodied in thirteen ponderous volumes, printed at the expense of the government.

"And still further. The interest thus early manifested continuing with unabated force was signalized in the closing days of his official life by a summary of transcontinental railroad construction up to that date, 1883, so exhaustive as to the leading facts that I am at a loss touching the scope he expects me to give to this paper. This summary may be found in General Sherman's last report to the Secretary of War, including the exhaustive statistics of Colonel Poe. (Ex. Doc. 1, Part 2, Forty-eighth Congress, 1st Session, pages 46, 47, and 253-317.)

"Under all circumstances, therefore, I must assume that he expects me to confine my remarks to something of an elaboration of the details of the construction of those lines with which I was personally identified, more especially that which first of all linked the two oceans together. . . .

"When I first saw the country west of the Missouri River it was without civil government, inhabited almost exclusively by Indians. The few white men in it were voyageurs, or connected in some way with the United States army. It was supposed to be uninhabitable, without any natural resources or productiveness, a vast expanse of arid plains, broken here and there with barren, snow-capped mountains. Even Iowa was unsettled west of the Des Moines River.

"It cost the government in those days from one to two

cents per pound to haul freight one hundred miles to supply its posts; and I was at one time in the country between the Humboldt and the Platte nearly eight months without seeing a white man other than my own employees.

"Now, from the Missouri River to the Pacific, from the Red River and the Rio Grande to the British possessions, the territory is all under civil law.

"The vast region is traversed its entire length by five great transcontinental lines of railroad. There is hardly a county in it not organized, and it is safe to say that there is not a township that is without an occupant. Its plains teem with all the products grown east of the Missouri River. It has become the great corn and wheat producing belt of the United States; its mountains are the producers of millions upon millions of the precious ores, and from every range and valley iron and coal in immense quantities are being mined.

"It is said that a railroad enhances ten times the value of the country through which it runs and which it controls, but the value of this country has been enhanced hundreds of times. The government has reaped from it a thousand-fold for every dollar it has expended; and the Pacific roads have been the one great cause that made this state of affairs possible. The census of 1890 will place, in this territory, fifteen million of people, and in twenty years it will support forty million.

"It is difficult, I doubt not, for you to comprehend the fact that the first time I crossed the Missouri River was on a raft, and at the point where stands the city of Omaha to-day. That night I slept in the teepee of an Omaha Indian.

"When I crossed my party over to make the first explorations not one of us had any knowledge of Indians, of the Indian language, or of plains craft. The Indians surrounded our wagons, took what they wanted, and

dubbed us squaws. In my exploring, ahead and alone, I struck the Elkhorn River about noon. Being tired, I hid my rifle, saddle, and blanket, sauntered out into a secluded place in the woods with my pony, and lay down to sleep. I was awakened and found my pony gone. I looked out upon the valley, and saw an Indian running off with him. I was twenty-five miles from my party and was terrified. It was my first experience, for I was very young. What possessed me I do not know, but I grabbed my rifle and started after the Indian hallooing at the top of my voice. The pony held back, and the Indian, seeing me gaining upon him, let the horse go, jumped into the Elkhorn, and put that river between us.

“The Indian was a Pawnee. He served me in 1865, and said to me that I made so much noise he was a ‘heap scared.’

“Within a radius of ten miles of that same ground to-day are five distinct lines of railroad, coming from all parts of the country, concentrating at Omaha for a connection with the Union Pacific.

“The first private survey and exploration of the Pacific Railroad was caused by the failure of the Mississippi & Missouri, now the Chicago, Rock Island, & Pacific, to complete its project.

“The men who put their money into that enterprise conceived the idea of working up a scheme, west of Iowa, that would be an inducement to capital to invest in carrying their project across Iowa to the Missouri River. They also wished to determine at what point on the Missouri the Pacific Railroad would start, so as to terminate their road at that point. The explorers adopted Council Bluffs, Iowa, as that point. All roads crossing the state for years ended their surveys at that point, and all roads now built connect with that point. These explorations, commenced by me in 1853, were continued each year until



ON THE SITE OF THE OLD TRAIL.

1861, when the result was seen in the framing of the bill now known as the Law of 1862.

" After this bill was passed, the Union Pacific Company was organized at Chicago, September 2, 1862, and Reed, Dey, and Brayton made reconnoissances east of the mountains, Reed confining his work to the crossing of the mountains to reach the Great Salt Lake Basin. The effort to engage capital in the road was a failure.

" During these explorations, in 1856 or 1857, I happened to return to Council Bluffs, where Mr. Lincoln chanced to be on business. It was then quite an event for an exploring party to reach the States. After dinner, while I was sitting on the stoop of the Pacific House, Mr. Lincoln came and sat beside me, and in his kindly way and manner was soon drawing from me all I knew of the country west, and the result of my surveys. The secrets that were to go to my employers he got, and, in fact, as the saying there was, he completely 'shelled my woods.' President Lincoln, in the spring of 1863, sent for me to come to Washington.

" When I received the summons from General Grant, at Corinth, Mississippi, to repair to Washington, giving no reason, it alarmed me. I had armed without authority a lot of negroes and organized them into a company to guard the Corinth contraband camp. It had been severely criticised in the army, and I thought this act of mine had partly to do with my call to Washington; however, upon reaching there and reporting to the President, I found that he recollected his conversation on the Pacific House stoop; that he was, under the law, to fix the eastern terminus of the Pacific Road; and, also, that he was very anxious to have the road commenced and built, and desired to consult me on these questions. He finally fixed the terminus at Council Bluffs, Iowa.

" In the discussion of the means of building the road I

thought and urged that no private combination should be relied on, that it must be done by the government. The President frankly said that the government had its hands full. Private enterprise must do the work, and all the government could do was to aid. What he wished to know of me was, what was required from the government to ensure its commencement and completion. He said it was a military necessity that the road should be built.

"From Washington I proceeded to New York, and after consulting there with the parties who had the question before them, the bill of 1863 was drawn. In due time it passed, and under it the Union and Central Pacific Railroads, constituting one continuous line, were built.

"In the fall of 1864, and after the fall of Atlanta, and while on my return from City Point, where I had been to visit General Grant for a couple of weeks, the commander-in-chief sent me back by way of Washington to see the President.

"While the President referred to the Pacific Road, its progress and the result of my former visit, he gave it very little thought, apparently, and his great desire seemed to be to get encouragement respecting the situation around Richmond, which just then was very dark. People were criticising Grant's strategy, and telling him how to take Richmond. I think the advice and pressure on President Lincoln were almost too much for him, for during my entire visit, which lasted several hours, he confined himself, after reading a chapter out of a humorous book (I believe called the *Gospel of Peace*), to Grant and the situation at Petersburg and Richmond.

"After Atlanta, my assignment to a separate department brought the country between the Missouri River and California under my command, and then I was charged with the Indian campaigns of 1865 and 1866. I travelled again over all that portion of the country I had

explored in former years, and saw the beginning of that great future that awaited it. I then began to comprehend its capabilities and resources, and in all movements of our troops and scouting parties I had reports made upon the country—its resources and topography; and I myself, during the two years, traversed it east and west, north and south, from the Arkansas to the Yellowstone and from Missouri to the Salt Lake Basin.

"It was on one of these trips that I discovered the pass through the Black Hills, and gave it the name of Sherman, in honour of my great chief. Its elevation is 8236 feet, and for years it was the highest point reached by any railroad in the United States. The circumstances of this accidental discovery may not be uninteresting to you.

"While returning from the Powder River campaign I was in the habit of leaving my troops, and, with a few men, examining all the approaches and passes from Fort Fetterman south, over the secondary range of mountains known as the Black Hills, the most difficult to overcome with proper grades of all the ranges, on account of its short slopes and great height. When I reached the Lodge-Pole Creek, up which went the overland trail, I took a few mounted men—I think six—and with one of my scouts as guide, went up the creek to the summit of Cheyenne Pass, striking south along the crest of the mountains to obtain a good view of the country, the troops and trains at the same time passing along the east base of the mountains on what was known as the St. Vrain and the Laramie trail.

"About noon, in the valley of a tributary of Crow Creek, we discovered Indians, who at the same time discovered us. They were between us and our trains. I saw our danger and took means immediately to reach the ridge and try to head them off, and follow it to where the cavalry could see our signals. We dismounted and started

down the ridge, holding the Indians at bay, when they came too near, with our Winchesters. It was nearly night when the troops saw our smoke-signals of danger and came to our relief; and in going to the train we followed this ridge out until I discovered it led down to the plains without a break. I then said to my guide that if we saved our scalps I believed we had found the crossing of the Black Hills—and over this ridge, between the Lone Tree and Crow Creeks, the wonderful line over the mountains was built. For over two years all explorations had failed to find a satisfactory crossing of this range. The country east of it was unexplored, but we had no doubt we could reach it.

"In 1867, General Augur, General John A. Rawlins, Colonel Mizner, and some others, crossing the plains with me, reached the point where I camped that night. We spent there the Fourth of July, and General Rawlins made a remarkable speech commemorating the day. We located there the post of D. A. Russell and the city of Cheyenne. At that time the nearest settlement was at Denver, one hundred and fifty miles away; and while we lay there the Indians swooped down on a Mormon train that had followed our trail, and killed two of its men; but we saved their stock, and started the graveyard of the future city.

"The explorations by the government for a Pacific railroad are all matters of official report, long since published and open to all. They were the basis for the future explorations of all the transcontinental lines, except the Union Pacific, then known as that of the forty-second parallel of latitude. That line, and the country from the Arkansas to the Yellowstone, was explored and developed mainly by private enterprise, and it is by far the most practicable line crossing the continent—the shortest and quickest, of lightest curvature, and lowest grades

and summits. It is not, in an engineering point of view, the true line from the Atlantic to the Pacific, but in a commercial point of view it is.

"In an engineering point of view we demonstrated, before the year 1860, that the true line was up the Platte to its forks, to which point the Union Pacific is now built, then up (where the Oregon Short Line now runs) to the Columbia, and then to tide-water at Portland. The Union and Central were built for commercial value, and to obtain the shortest and quickest line from ocean to ocean. The line of the Central was controlled almost entirely by the development of the mining industries in California and Nevada until it reached the Humboldt; then its natural course would be to reach Salt Lake and the Mormon settlements. The Union Pacific objective point was the Pacific Coast by way of the Great Platte Valley and Salt Lake. . . .

"When we reached the mountains a series of questions arose as to how this base should be determined. The eastern base was determined by Mr. Blickensderfer, who was appointed by the government. After examining the country he declared it to be right at the foot of the mountains, where the heavy grades to overcome the first range, the Black Hills, were made necessary—a very proper decision. The west base of the Sierra was located near Sacramento, where the drift of the mountains reached into the valley, or where, you might say, the first approach to the mountains begins, but long before the heavy grades commenced.

"A good story is told, the truth of which I will not undertake to vouch for, in relation to the fixing of the base. By the original railroad act, as we have noticed, the President was to fix the point where the Sacramento Valley ended and the foot-hills of the Sierra Nevada began. Chief Engineer Judah, in his report, had desig-

nated Barmore's, thirty-one miles from Sacramento, as the beginning of the mountains. This corresponded with a decision of the Supreme Court of the United States, made in April, 1864, in the case of the Leachdorff grant. The contestants of the grant attempted to fix the eastern boundaries at Alder Creek, eighty miles nearer Sacramento. This grant, by Mexican authority, was bounded by the foot-hills on the east. The Supreme Court decided that the foot-hills commenced about thirty miles from that city. Several attempts were made by Mr. Sargent, then a member of Congress, and since United States Senator, soon after the passage of the original act, to bring the attention of President Lincoln to this subject, but the President's constant occupation, with weightier duties forced upon him by the great war, prevented his action. The time came, however, when it could be no longer delayed.

"Owing to the increase of subsidy among the hills and mountains, it was important to the railway company that the foot-hills should begin as near as possible to Sacramento. The senator claims the credit of moving the mountains from Barmore's to Arcade Creek, a distance of twenty-four miles. His relation of the affair to his friends is this: Lincoln was engaged with a map when the senator substituted another, and demonstrated by it and the statement of some geologist that the black soil of the valley and the red soil of the hills united at Arcade. The President relied on the statements given to him, and decided accordingly. 'Here you see,' said the senator, 'how my pertinacity and Abraham's faith removed mountains.'

"Reconnoissances made in 1862, 1863, 1864, had demonstrated that a serious question would arise in reaching the Humboldt Valley from the western foot of the Wahsatch Mountains in the Salt Lake Basin. Should the line go north or south of the lake? The Mormon Church and

all of its followers, a central power of great use to the transcontinental roads, were determinedly in favour of the south line. It was preached from the pulpits and authoritatively announced that a road could not be built or run north of the lake. But our explorations in an earlier day unqualifiedly indicated the north side, though an exhaustive examination was made south, and only one line run north, it being our main line to the California state line surveyed in 1867.

"The explorations by parties south of the lake, and the personal examinations of the chief engineer, determined that it had no merits compared with the north line, and on such report the north line was adopted by the company and accepted by the government.

"Brigham Young called a conference of his church, and refused to accept the decision; prohibited his people from contracting or working for the Union Pacific, and throw all his influence and efforts to the Central Pacific, which just at that time was of great moment, as there was a complete force of Mormon contractors and labourers in Salt Lake Valley competent to construct the line two hundred miles east or west of the lake. The two companies also had entered into active competition, each respectively to see how far east or west of the lake they could build, that city being the objective point, and the key to the control of the great basin.

"The Central Pacific Company entered upon the examination of the lines long after the Union Pacific had determined and filed its line, and we waited the decision of their engineers with some anxiety. We knew they could not obtain so good a line, but we were in doubt whether, with the aid of the Mormon Church, and the fact that the line south of the lake passed through Salt Lake City, the only commercial capital between the Missouri River and Sacramento, they might decide to take

the long and undulating line; and then the question as to which (the one built south, the other built north, and it would fall to the government to decide) should receive the bonds and become the transcontinental line. However, the engineers of the Central Pacific, Clements and Ives, took as strong ground, or stronger than we, in favour of the north line, and located almost exactly on the same ground the Union Pacific had occupied a year before; and this brought the Mormon forces to the Union Pacific, their first love.

"The location of the Union Pacific was extended to the California state line, and that of the Central Pacific to the mouth of the Weber Cañon. The Union Pacific work hastened, and most of the line graded to Humboldt Wells, two hundred and nineteen miles west of Ogden, and the Union Pacific met the track of the Central Pacific at Promontory Summit, one thousand one hundred and eighty-six miles west of the Missouri River, and six hundred and thirty-eight miles east of Sacramento, on May 9, 1869, to the wonder of America, and the utter astonishment of the whole world, completing the entire line seven years before the limit of time allowed by the government. . . .

"In 1863 and 1864 surveys were inaugurated, but in 1866 the country was systematically occupied; and day and night, summer and winter, the explorations were pushed forward through dangers and hardships that very few at this day appreciate; as every mile had to be within range of the musket, there was not a moment's security. In making the surveys, numbers of our men, some of them the ablest and most promising, were killed; and during the construction our stock was run off by the hundred, I might say by the thousand. As one difficulty after another arose and was overcome, both in the engineering and construction departments, a new era in railroad building was inaugurated.

"Each day taught us lessons by which we profited for the next, and our advances and improvements in the art of railway construction were marked by the progress of the work; forty miles of track having been laid in 1865, two hundred and sixty in 1866, two hundred and forty in 1867, including the ascent to the summit of the Rocky Mountains, at an elevation of eight thousand two hundred and forty feet above the ocean; and during 1868 and to May 10, 1869, five hundred and fifty-five miles, all exclusive of side and temporary tracks, of which over one hundred and eighty miles were built in addition.

"The first grading was done in the autumn of 1864, and the first rail laid in July, 1865. When you look back to the beginning at the Missouri River, with no railway communication from the east, and five hundred miles of the country in advance; without timber, fuel, or any material whatever from which to build or maintain a roadbed itself; with everything to be transported, and that by teams or at best by steamboats, for hundreds and thousands of miles; everything to be created, with labour scarce and high,—you can all look back upon the work with satisfaction and ask, under such circumstances, could we have done better? . . .

"The experience of the war made possible the building of this transcontinental railroad, not only physically, but financially. The government, already burdened with billions of debt, floated fifty million dollars more, and by this action it created a credit which enabled the railroad company to float an equal amount; and these two credits, when handled by men of means and courage, who also threw their own private fortunes into the scale, accomplished the work.

"If it had been proposed, before the war, that the United States should use its credit, and issue bonds to build a railroad two thousand miles long across a vast,

barren plain, only known to the red man, uninhabited, without one dollar of business to sustain it, the proposition alone would have virtually bankrupted the nation.

"Possibilities of finance, as developed during the war, made this problem not only possible, but solved and carried it out, and accomplished in three years a feat which no previous plan had proposed to accomplish in less than ten years; and while it was being accomplished, the only persons who had real, solid, unshakable faith in its completion were that portion of the nation who had taken an active part in the war.

"Necessity brought out during the war bold structures that in their rough were models of economy in material and strength. In taking care of direct and lateral strains by positions of posts and braces, they adopted principles that are used to-day in the highest and boldest structures; and I undertake to say that no structure up to date has been built which has not followed those simple principles that were evolved out of necessity, though reported against during the war by the most experienced and reliable engineers of the world.

"A few bold spirits backed the enterprise with their fortunes and independent credit. They were called fools and fanatics. Oakes Ames - the real pluck of the work - said to me once, 'What makes me hang on is the faith of you soldiers,' referring, at the time, to the support the army was giving us, led by Grant, Sherman, Sheridan, Pope, Thomas, Augur, and Crook, and all who had direct communication with us on the plains. There was nothing we could ask them for that they did not give, even when regulations did not authorize it, and took a large stretch of authority to satisfy our demands.

"The commissary department was open to us. Their troops guarded us, and we reconnoitred, surveyed, located, and built inside of their picket-line. We marched

to work by the tap of the drum with our men armed. They stacked their arms on the dump, and were ready at a moment's warning to fall in and fight for their territory.

"General Casement's track-train could arm a thousand men at a word; and from him, as a head, down to his chief spiker, it could be commanded by experienced officers of every rank, from general to captain. They had served five years at the front, and over half of the men had shouldered a musket in many battles. An illustration of



Ames Monument - Sherman, Wyoming.

this came to me after our track had passed Plum Creek, two hundred miles west of the Missouri River. The Indians had captured a freight-train and were in possession of it and its crews. It so happened that I was coming down from the front with my car, which was a travelling arsenal. At Plum Creek Station word came of this capture and stopped us. On my train were perhaps twenty men, some a portion of the crew, some who had been discharged and sought passage to the rear. Nearly all were strangers to me. The excitement of the capture and the reports coming by telegraph of the burning train brought

all the men to the platform, and when I called upon them to fall in, to go forward and retake the train, every man on the train went into line, and by his position showed that he was a soldier. We ran down slowly until we came in sight of the train. I gave the order to deploy as skirmishers, and at the command they went forward as steadily and in as good order as we had seen the old soldiers climb the face of Kennesaw under fire.

"Less than ten years before, General Sherman had suggested a different method of dispensing with the Indian. Writing to his brother, he said:

"No particular danger need be apprehended from Indians. They will no doubt piller and rob, and may occasionally attack and kill stragglers; but the grading of the road will require strong parties, capable of defending themselves; and the supplies for the road and maintenance of the workmen will be carried in large trains of wagons, such as went last year to Salt Lake, none of which were molested by the Indians. So large a number of workmen distributed along the line will introduce enough whiskey to kill off all the Indians within three hundred miles of the road."

In speaking of the climatic changes incident to the building of transcontinental lines of railroad, General Dodge also says:

"The building of the Pacific roads has changed the climate between the Missouri River and the Sierra Nevada. In the extreme West it is not felt so much as between the Missouri River and the Rocky Mountains. Before settlement had developed it, the country west of the Missouri River could raise little of the main crops, except by irrigation. From April until September no rain fell. The snows of the mountains furnished the streams with water and the bunch-grass with sufficient dampness to sustain it until July when it became cured

and was the food that sustained all animal life on the plains, summer and winter.

"I have seen herds of buffalo, hundreds of thousands in number, living off bunch-grass that they obtained by pawing through two feet of snow, on the level. It was this feature that induced the stocking of immense ranches with cattle. Buffalo never changed the character of the grass, but herds of cattle did, so that now, on the ranges, very little of the bunch or buffalo grass remains.

"Since the building of these roads, it is calculated that the rain belt moves westward at the rate of eight miles a year. It has now certainly reached the plains of Colorado, and for two years that high and dry state has raised crops without irrigation, right up to the foot of the mountains.

"Salt Lake since 1852 has risen nineteen feet, submerging whole farms along its border and threatening the level desert west of it. It has been a gradual but permanent rise, and comes from the additional moisture falling during the year—rain and snow. Professor Agassiz, in 1867, after a visit to Colorado, predicted that this increase of moisture would come by the disturbance of the electric currents, caused by the building of the Pacific railroads and settlement of the country.¹

"It must be admitted, however, that the growth of the once vast supposed relatively sterile region west of the Missouri River is not due in its entirety to the building of railroads, but that the idea of absolute sterility was a mistaken one; without a fertile soil and other possi-

¹The authors of this book both well remember when the sand-hills of the Arkansas River were, as their name implied, mere dunes of shifting sand. Now they are covered with rich verdure upon which thousands of cattle feed, and in the intervalles are to be seen some of the finest fruit-farms in the region of the central plains. Whether Professor Agassiz was correct, or whether it is caused by great cycles of atmospheric variation, it is a fact.

bilities for the advancement of civilization there, railroads would never have been constructed. The railroads have developed what was inherently not a desert in its most rigid definition, but a misunderstood region, which only awaited the touch of the genius of agriculture, made possible alone by the building of transcontinental highways."

But for the railroads the great central region of the continent would indeed be a howling wilderness. As the late Sidney Dillon, ex-president of the Union Pacific Railroad, wrote in a magazine article on "The West and the Railroads" in the *North American Review* for April, 1891, "Like many other great truths, this is so well known to the older portions of our commonwealth that they have forgotten it; and the younger portions do not comprehend or appreciate it. Men are so constituted that they use existing advantages as if they had always existed, and were matters of course. The world went without friction matches during thousands of years, but people light their fires to-day without a thought as to the marvelous chemistry of the little instrument that is of such incalculable value, and yet remained so long unknown. The youngster of to-day steps into a luxurious coach at New York, Philadelphia, or Chicago, eats, sleeps, surveys romantic scenery from the window during a few days, and alights in Portland or San Francisco without any just appreciation of the fact that a few decades since it would have required weeks of toilsome travel to go over the same ground, during which he would have run the risk of starvation, of being lost in the wilderness, plundered by robbers, or killed by savages. The most beneficent function of the railway is that of a carrier of freight. What would it cost a man to carry a ton of wheat one mile? What would it cost for a horse to do the same? The railway does it at a cost of less than a cent. This

brings Dakota and Minnesota into direct relation with hungry and opulent Liverpool, and makes subsistence easier and cheaper throughout the civilized world. The world should, therefore, thank the railway for the opportunity to buy wheat, but none the less should the West thank the railway for the opportunity to sell wheat."

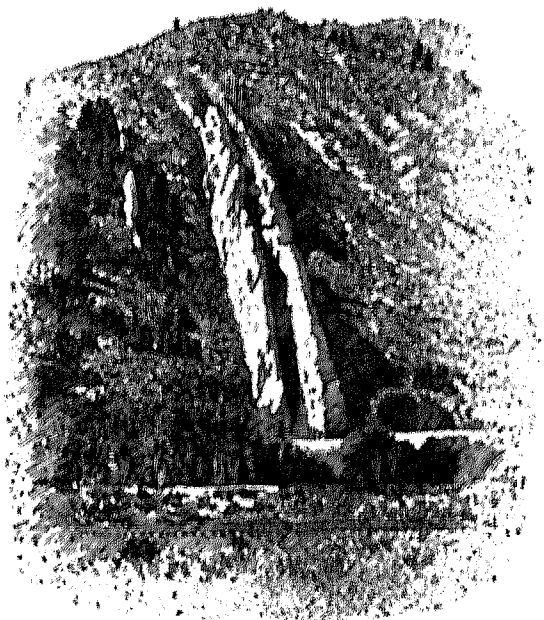
"Nothing now marks the spot at Promontory Point where the formal ceremony of driving in the last spike took place on May 10, 1869, and even the small station known as Promontory is at some distance from that point where the connection between the two transcontinental roads was originally made. The whole aspect of the country, from the Missouri River to Salt Lake, has marvellously changed. Where then were only tents, there are now well-built, substantial, and prosperous towns; and instead of the great desert wastes, supposed to be beyond reach of cultivation, one may now see an almost unbroken stretch of corn-fields and cultivated lands.

"The five or six hundred men who saw the junction made at Promontory Point were strongly impressed with the conviction that the event was of great national importance; but they connected it with the development of transcontinental communication, and trade with China and Japan, rather than with internal development, or what railroad men call local traffic. They were somewhat visionary, no doubt, but none of them dreamed that the future of the Pacific road depended more on the business that would grow out of the peopling of the deserts it traversed than upon the through traffic.

"It is not too much to say that the opening of the Pacific road, viewed simply in its relation to the spread of population, development of resources, and actual advance of civilization, was an event to be ranked in far-

reaching results with the landing of the Pilgrims, or perhaps the voyage of Columbus."

The Great Salt Lake Trail is now crossed and recrossed by the iron highway of commerce. The wilderness is no longer silent; the spell of its enchantment is broken. The lonely trapper has vanished from the stern mountain scene. The Indian himself has nearly disappeared, and in another generation the wild landmarks of the old trail will be almost the only tangible memorials of the men who led the way.



The Devils Gate, Weber Canyon, Utah.