STORY OF THE UNION PACIFIC

It is Told Anew by Frank Spearman in a Magazine Article.

BUILDING THROUGH MOUNTAIN AND DESERT

How Engineers Raced Against Time While Nation Waited for Junction that Would Unite Ocean and Ocean.

The story of the building of the Union Pacific never loses its fascination. It has been told over and over, and yet is always as entrancing as the best work of fiction. It is told anew in the current Harper's Magazine apparently from data furnished by General G. M. Dodge to Frank Spearman, over whose name the article appears. The most interesting parts are here reproduced:

"General Grenville M. Dodge, who was chief engineer of the Union Pacific, and in charge of construction during 1866 and thereafter, still survives, a Nestor in the honorable company of American construction engineers, and his name will always be coupled with the work of putting the first railroad across the Rockies. His reminiscences throw a pretty side light on Lincoln's decision concerning the eastern terminus. General Dodge in 1858 (assigning the date from recollection), after a summer of engineering reconnaissances west of the Missouri, camped with his party at Council Bluffs. Abraham Lincoln at that time was visiting the Bluffs. He heard of General Dodge's return and of his surveys and sought him out. Sitting with the mountain engineer on the porch of the hotel, Lincoln held him for two hours or more and drew from him the facts he had obtained, and his opinion as to the best route for a railroad across the continent and the possibility of building one.

"In 1862, while in command of the District of Corinth, Mississippi, General Dodge was ordered by Grant to proceed to Washington to report to the president; Lincoln had remembered the talk of 1858 on the hotel porch of Council Bluffs. The question of the eastern terminus for the newly authorized railroad was then a national question. In General Dodge's opinion there was from an engineering viewpoint but one national route for a railroad to cross Iowa, the Missouri river and the great plains. The route proposed by him was that along which the Union Pacific was afterward built. It offered the advantage of a great, open road from Omaha to Salt Lake, 600 miles of it up a single valley—that of the Platte. This, in turn, led to the natural pass over the Rockies, the lowest in all the range, and to the continental divide at a point where it lay in a basin 500 feet below the general level instead of on a mountain summit. Any engineer, in General Dodge's opinion, who should fail to avail himself of so rich possibilities should have his diploma taken from him. In designing the Missouri river terminus as he did Lincoln acted on these views.

Made Possible by War.

"The political aspect of extending government aid in the building of the first continental railroad must always remain an extraordinary feature in our national legislation. The civil war alone made such a step possible. The period had rudely brushed aside constitutional and laissez-faire legislators and reasoning and the men who stood in congress for action went in this case to the other extreme. The building of a Pacific road had every war argument in its favor. Such a line, it was urged, would bind California more closely to the northern interest and would enable the United States more promptly to repel any attack on the coast ports. Moreover, it would enable the government easily to control Indian outbreaks among those tribes still unreasonable enough to object to being exterminated.

"It must not be forgotten, however, that during the gloomy days of the civil war Indian outbreaks, whether justifiable or not, were serious matters to a government struggling to maintain itself; and an argument seeming trivial now might have seemed serious when people were excited or depressed by every rumor and portent. Even in 1867 General Sherman regarded the completion of the Pacific road as an end to the Mormon question, and it was the real beginning of the end.

"The very name used by congress in creating the corporation 'The Union Pacific Railroad Company,' implies a reflection of the union sentiment of the civil war period. The use of the word has been ascribed to the 'union' of various corporations and plans in the project. But there is undoubtedly more than this to it. By far the most powerful arguments in favor of the road were the war needs of the government. The word 'union' was everywhere foremost in the thought and speech of the day and federal action was meant to come as a final answer to the demand of nearly twenty years for national legislation on the Pacific road subject; to the foes of the union it was flung as an evidence of confidence and strength on the part of the republican party and its union administration. But of the burdens carried during those days by Abraham Lincoln there is no more pathetic glimpse than this, that in the midst of the profound anxieties of his struggle to preserve the nation he was required by congress to determine the detail of the proper track guage for the Pacific railroad. Nor will it surprise any one conversant with the legislative spirit of the war period that after President Lincoln had long and painstakingly considered the subject and decided on a track guage of five feet, congress cheerfully and at once passed a law changing the guage to four feet eight and one-half inches.

Financing the Enterprise.

"The act of 1862 was supplemented by a second act in 1864 containing more liberal subsidy provisions and under this charter the Union and Central Pacific railroads were built. The coterie of capitalists who undertook the enterprise believed that their chief profits would come from the construction rather than from the railroad as an investment, and in order to insure these to themselves they acquired the charter of the Pennsylvania Fiscal agency—a name afterward changed by the legislature of Pennsylvania, at the instance of George Francis Train, to 'The Credit Mobilier of America,' and the Credit Mobilier not only constructed the Union Pacific, but made for itself and a number of American statesmen the most sensational record of a long and exciting day of plots and counterplots in Pacific railroad history. For the beginning of construction much work had already been done. General Dodge had crossed the Missouri river as early as 1853 in the interest of projected Iowa railroads which sought to ascertain where a Pacific road would be likely to fix a Missouri river terminus. Until the civil war General Dodge was busy with reconnaissances and surveys.

"When he entered the service Peter A. Dey took it up and in 1862 put regular parties in the field on the first range of the Rockies, called the Black Hills, and over the Wasatch range, under a son of Brigham Young. These surveys extended from the Missouri river to the California state line and included 25,000 miles of reconnaissances and over 15,000 miles of instrumental surveys. They were made almost entirely under army protection, but despite all precaution men were scalped by Indians.

"Ground for construction was broken at Omaha, with a florid speech by George Francis Train, December 2, 1863, and actual construction began on the Union Pacific very early in 1864. Leland Stanford, on January 8, 1863, had turned the first shovelful of earth at Sacramento for the California end of the undertaking. In nine months the Omaha enthusiasts had completed the first eleven miles of one end of the transcontinental line. The Californians had come to a standstill with thirty-one miles. Thus the race started slowly, but at its end Jack Casement was laying seven and a half miles of Union Pacific track between sun and sun.

Route Long Famous.

"The route the new road followed from the Missouri river had long been famous on the frontier. Spaniards had probably reached what is now Nebraska as early as 1541, but it was more than 100 years later when Indians on the Mississippi described to Father Marquette the course of the Missouri, and his map showing the Platte flowing into the Missouri is still preserved. White men in 1739 explored the Platte as far as the present city of North Platte, in Nebraska, and French traders made a highway of the river for more than 100 years. The expeditions of Lewis and Clark, close upon the Louisiana purchase, opened the country to American influence and St. Louis became the great outfitting point for the adventurers and traders who penetrated to the remote regions of the northwest.

"In 1832 Captain Bonneville camped under Chimney Rock, and, penetrating Wyoming, skirted the Wind River mountains. He was the first white man to take a wagon across the continental divide on the line of the future railroad. Here the Mormon pioneers began their long journey to their unknown home beyond the mountains, for Fremont's narrative had decided Brigham Young upon this great undertaking. Along the Platte, year after year, were strung the wagons of the Forty-niners, and in a calm made sweet by the blossom of the wild plum rose the camp fires of the patient homeseekers following the overland trail.

"But the valely scenes changed when the railroad contracts were let. The grading camp made a rough companion to the quiet outfit of the emigrant. Civilization, now really coming, advanced in its mask of vice—the characteristic of its rise and decline. The grader, the gambler, the criminal and the adventurer moved together across the plains with the tough town, the outlaw and the vigilance committee. The forks of the Platte were reached by the tracklayers at the close of the second season's building, 1866, but before these first 246 miles were completed some conception of the enormous difficulties of the undertaking had dawned on the promoters.

Obstacles that Were Overcome.

"The Union Pacific was building across a desert, with a base at Omaha, that was likewise beyond a railroad connection. The engine for the Omaha railroad shops was dragged across the country from Des Moines. The Central Pacific, building from the western coast, was compeled to get everything except ties by ship around the Horn or by way of Panama. Marine insurance was upon a war basis, and the capital of the Californians was eaten into by indemnity tolls. The Union Pacific lacked even the tie supply afforded the Californians by the Sierra Nevadas, and was compelled to skirmish hundreds of miles up and down the Missouri river for ties and bridge timbers. Moreover, the Indians of the plains had already filed their protest against the novel invasion. Before the rails had been laid 200 miles from the Missouri river Turkey Leg and his Cheyennes swooped down on Plum Creek, scalped a handcar pilot, derailed the freight train following and with the engineman and fireman burning in the wreckage plundered the box cars and made away, heavy with booty.

"Amid these difficulties construction proceeded with such materials as could be brought up from St. Louis and St. Joseph during three months of water transportation, but on November 7, 1867, the last railroad link east of the Missouri in the transcontinental line was completed. William B. Ogden had pushed the Chicago & Northwestern railroad into Council Bluffs, and that road, then as now, a powerful ally of the Union Pacific, began pouring track material into the Council Bluffs yards, giving the latter road an actual railroad base for its supplies. It was needed. The Central Pacific party, taking advantage of the law of 1866, which opened the continent to a race between east and west builders, was bending every effort to get to Salt Lake ahead of its eastern competitor. During 1867 General Dodge had already pushed the Union Pacific to Cheyenne, in Wyoming, which, after November 14, became the winter terminus.

"The whole country now awoke to the contest that the Union Pacific and the Central Pacific were entering upon. Which should reach Salt Lake first and which should win the big government subsidies, ranging through the mountains from $64,000 to $96,000 a mile?

Stupendous Campaign Planned.

"The Union Pacific chief engineer, after a New York conference during the winter of 1867-8, returned to Omaha, called his staff around him, and laid out his plans. These centered upon Ogden, Utah, 502 miles west of the end of the track, as the objective point for 1868, and Humboldt Wells, 216 miles west of Ogden, for the spring of 1869. Preliminary lines had been run, but no final location had been made west of Laramie City, where town lots were sold in April, 1868. General Dodge had already solved the vital problem of the pass across the Rockies by getting lost one afternoon in the Black Hills—if it is fair so to describe the accident which led to the remarkable discovery. For over two years all explorations had failed to reveal a satisfactory crossing of this secondary range, known as the Black Hills, which, on account of their short approaches and their great height, is the most difficult of all ranges to get over. On this occasion General Dodge, returning from a Powder river campaign, leaving his troops, with a scout and a few men rode up Lodge Pole creek along the overland trail and struck south along the crest of the mountains. Indians beset the little party before noon and got between them and their trains. Holding the Indians at bay with their Winchesters, they retreated. It was nearly night when they finally escaped the enemy, and meantime they had ridden down an unknown ridge that led out of the hills and clear to the plains without a break. That night General Dodge told his guide that if they saved their scalps he believed they had found the crossing of the Black Hills. Over this pass the trains of the Union Pacific run today.

Race Becomes Exciting.

"Winter caught the builders at the foot of the Wasatch range, but it no longer stayed them. The spirit of the fight had got beyond that, and the frozen earth was dynamited like rock. Track was laid across the Wasatch on a bed covered with snow and ice, and one of General Casement's track-laying trains, track and all, slid bodily off the ice into the ditch! Even the Mormons roused themselves, and under Brigham Young's exhortation turned mightily into the race. In railroading then, as in politics later, the watchword was, 'Claim everything,' and the Central Pacific people astonished the eastern builders by filing a map 'claiming' to build as far east as Echo, some distance east of Ogden.

"The two companies had 20,000 men at work. The Casement brothers of the Union Pacific construction forces rose to the occasion. Eastern newspapers were carrying daily headlines, 'The Union Pacific Built —— Miles Today.' In the beginning a mile a day was considered good work, but the Casements had long been laying two miles a day and now were working seven days in the week and every hour that light gave them, and they crowned their supreme efforts by laying in one day nearly eight miles of track between daylight and dark.

"The Central Pacific people meantime stayed not for stake or stopped not for stone. They had fourteen tunnels to build, but they did not wait to finish them. Supplies, even to engines, were hauled over the Sierras, and the work was pushed until in the spring of 1869 the opposing track-layers met at Promontory, Utah. The moment at which the law had declared a junction must be made had arrived.

Driving the Last Spike.

"On May 10, Leland Stanford, governor of California, and president of the Central Pacific, and Durant, Duff and Sidney Dillon of the Union Pacific assembled with their friends to drive the spike that was to signalize the completion of the great undertaking. A little company of regular soldiers with a garrison band from Fort Douglas preserved the military atmosphere of the long struggle. The Mormons, who had helped so faithfully with the roadbed, were there, and the coolies from San Francisco and the Irish track-layers from the Atlantic seaboard faced each other. Strawbridge and Reed, the rival superintendents of construction, placed under the rails the last tie of California laurel. Spikes of silver and of gold from Montana, Idaho and Nevada were presented and driven into it, and Dr. Harkness, on behalf of the great Pacific state, presented the last spike, wrought of California gold.

"The country was waiting for the coming moment. Telegraph wires everywhere had been silenced to repeat the blows of this silver maul which were to ring from the little valley in the Sierras to end and end of the United States. The first engine from the Pacific faced the first engine from the Atlantic, and amid the silence of uncovered heads the governor of California and Vice President Durant of the Union Pacific drove the last spike.

Public Joy Unmeasured.

"From the stages of theaters and on the first pages of newspapers particular announcement was made of the celebration to come on the next day. The rejoicing in San Francisco reached the extravagance of a kermess. In the bay the shipping was bright with bunting, and between gaily decorated buildings processions of jubilant citizens marched all day. What matters it that we know now the electric current suffered a stage fright, and the ring of the sledge on the last spike could not be made to repeat beyond Omaha? Is it not enough that the chief operator was equal to the occasion and drove the heavy blows in dignified clicks at the telegraph office on the Missouri river? What is of consequence is the way in which the clicks were received—the blows repeated at San Francisco on the great bell of the city hall, and cannon booming with the last stroke off Fort Point, and on Capitol Hill in Omaha 100 guns following the explosion of bombs and screaming of steam whistles. Capitalists, prominent citizens, volunteer firemen and horseshoers could still walk happily in one tiresome procession when the last Pacific railroad spike was driven. Grant took the news in the White House, Chicago turned out a parade four miles long, New York was saluting the Pacific coast with salvos of artillery, Trinity chimes were ringing 'Old Hundred,' and Trinity voices were chanting 'Te Deum' when the earliest transcontinental line was finished; and in Philadelphia the old bell was ringing in Independence hall. For American railroading surely those were the golden days."

THE NIAGARA FALLS ROUTE.

To New York, Boston and the East.

The Michigan Central has four splendid through trains daily between Chicago and New York and Boston. Two run via Niagara Falls, stopping five minutes at Falls View. Ten-day stopover at Niagara allowed on all through tickets. Chicago ticket office, 119 Adams street; central station, lake front, foot of Twelfth street.

RELIGGIOUS.

The dean of Rochester is the tallest divine in the Church of England. He is 6 feet 3 inches in height.

Rev. Dr. John Robertson, the well known and successful Scottish evangelist, is preaching in Brooklyn under the auspices of the Christian Endeavor.

Rev. Dr. Charles H. Leonard, dean of the Tufts College of Divinity school, has reached the age of 82. He has been with the Medford (Mass.) institution since 1869.

Brazil has now thirty-one young people's societies of Christian Endeavor and six junoir societies. They have a national union, local unions and an admirable Christian Endeavor monthly in the Portuguese language.

The Presbyterians of America are covering the empire of Corea with mission stations and numerous native churches. They have a total force of 100 foreign workers. Dr. W. D. Reynolds, preacher, linguist and translator, is devoting all his time to translating the Bible into Corean.

The Salvation Army now has three colonies in successful operation. One colony is in Ohio, within twenty miles of Cleveland; the second is in the valley of the Salinas, near the Bay of Monterey, Cal., while the largest and most successful of the three colonies is at Fort Amity, Colo.

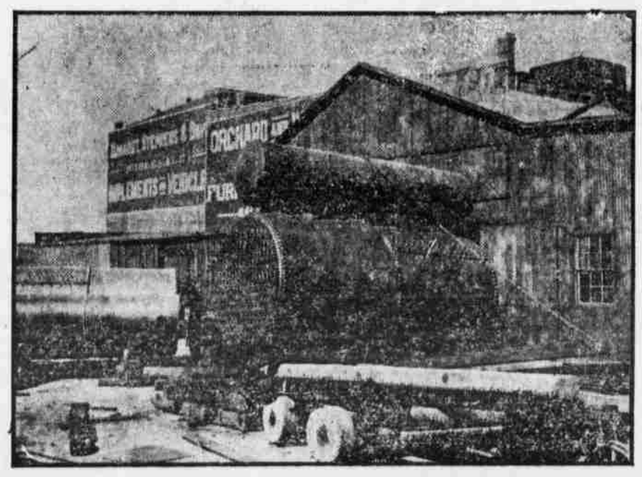
The American Sunday School union has recently completed eighty years of work for the neglected children of America. The work of the union is undenominational and is helpful to the churches in every state. The number of teachers and scholars enrolled in the schools organized by the society during the last year was 97,800.

Rev. Victor A. Schnell of Terre Haute, Ind., on Thursday last observed the thirty-eighth anniversary of his ordination to the priesthood. He has been described as a Frenchman by birth, a German by parentage, an American by adoption, a soldier in the union army by patriotism and a Catholic by divine calling. He is a pastor of an Irish congregation.

J. Pierpont Morgan has, it is said, in his possession a cope presented to the cathedral in Ascoli, Italy, by Pope Nicholas IV, for which he paid $60,000. The cope disappeared in 1902 while repairs were being made in the cathedral. The Italian government is endeavoring to ascertain what Mr. Morgan will do with property which he acquired after it had been stolen.

Rev. Joseph Luccock of the Asbury Methodist Episcopal church, Milwaukee, has notified the executive board of the church that he wants his salary cut from $1,200 a year to $1,000. The reverend gentleman, who went to Milwaukee from Covington, Ky., not long ago, says he takes this action because he does not think the church can afford to pay the larger salary.

If you have anything to trade, advertise it in the This for That column in the Bee Want Ad Pages.



THE NEW BEE BUILDING BOILERS MADE BY THE OMAHA BOILER WORKS

The Bee Building has just installed two immense boilers to take the place of its old equipment. These boilers were made in Omaha, and are the work of the Omaha Boiler Works, Mr. John R. Lowrey, Proprietor, 12th and Izard Streets.

The accompanying picture shows the boilers before they were ready to be placed. These boilers are of a special design, which is the result of years of experience and study of Mr. Lowrey, who is recognized as one of the expert boiler makers of the country. Each of these boilers has a capacity of two hundred horse power. They are designed to carry a pressure of one hundred fifty pounds and are built of unusually heavy steel to meet this demand.

This particular type of boiler is adapted to meet the requirements of large power plants, and has some new features, which make it more efficient, than the old type of boilers, where large loads are carried. The same boiler can be made in units from one hundred to five hundred horse power, as the necessities of any particular plant may require.

Visitors to the city during Ak-Sar-Ben week are invited to call at the Bee Building power plant, which is in the rear across the alley from the Bee Building, and inspect these boilers. They are now in operation and any one who is interested will be given an opportunity to look them over thoroughly.