





Brainerd's Northern Pacific Railway Buildings

by Ann M. Nelson

October 25, 2019





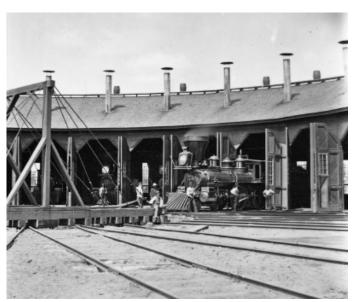




Northern Pacific Shops

In August 1870, the Northern Pacific Railroad had finally decided where the crossing of the Mississippi River was to be made; that location was at a point about seven miles north of Crow Wing in a space of wilderness populated mostly by Native Americans, jack pine, Norway and white pine. Immediately upon that announcement hundreds of people, mostly white men, descended upon the wilderness and began to build the town which eventually became known as Brainerd. In January of 1871, there were about 1,600 men working on

constructing the railroad from the Junction (Carlton) to Brainerd and the tracks were about twenty-eight miles east of the city. On March 6, the Northern Pacific was completed from Carlton to Brainerd; on March 11, a special train carrying the officials of the railroad arrived in the city; by the end of March, trains were running into Brainerd on a regular basis and in September the first regular passenger train arrived. In November 1871 the contract for building the first roundhouse in Northeast Brainerd was let to Daniel S. Childs, of Duluth, it was to consist of twelve stalls. The frame roundhouse was completed in February 1872. At about the same time, the plans, specifications and detailed drawings for the machine shops, engine house and other buildings, executed by James H. Place, were revealed; the machine shop was to be 65x240 feet; the boiler shop, 60x60 feet; the blacksmith shop, 60x60 feet. By March, these buildings were well under construction and discussions



First Northern Pacific Roundhouse ca. 1877. Courtesy of Crow Wing County Historical Society

were underway regarding the building of forty to sixty residences nearby; when built, these residences would constitute the origins of Northeast Brainerd. On March 16, 1872, Morris C. Russell, editor and publisher of the *Brainerd Tribune* wrote, "An occasional new engine for the Northern Pacific bears down upon us from the east, and comes dancing into Brainerd with all the gaiety of a new and beautiful machine...." At this time the NP had twenty-two locomotives in operation on the line. In early April, over sixty-tons of machinery had arrived and was being placed in the newly erected machine shop, which had been declared the largest and finest west of Albany, New York.

One hundred-eighty men, working ten-hour days, were employed at the machine, car and paint shops of the Northern Pacific as of July 1873 and these shops were the focal point of the hundreds of sightseers who came to Brainerd. On September 18 news reached the city of the collapse of Jay Cooke and Company, financiers of the Northern Pacific Railroad, beginning the Panic of 1873; a few days later two-thirds of the entire shop force were discharged, the Northern Pacific was bankrupt, a receiver was appointed and Brainerd became very quiet.

In June 1877, the NP shops consisted of the roundhouse, machine shop, car and carpenter shop, blacksmith shop, paint shop and foundry. One of the pieces of equipment contained in the machine shop was a huge turning lathe able to turn two drive wheels at once. It was reported to be a magnificent piece of machinery and cost some \$5,000; a hydraulic press used to press the wheels on and off the axles, capable of exerting a force of 120 tons, was also part of the machinery located there. A trip-hammer weighing 600 pounds, able to gently bend a piece of tin or smash dies to smithereens, was located in the blacksmith shop. The foundry

contained molds and castings of everything needed on the road with the exception of car and engine wheels. In the cleaning room, where the scale was removed from locomotive boilers, the punch and shears were found. Every imaginable article needed to run a railroad was found in the storehouse. In September, the *Brainerd Tribune* said, "We should judge the whistle at the shops is run by a rutabaga turnip, from the way it 'bobs' about. Can't the company afford a time piece that will keep good time and be regular in the hours? Very many



Northern Pacific Shops offices, ca. 1875. Courtesy Minnesota Historical Society

of our citizens 'go by the whistle,' and almost any of them could guess at the time better if they tried."

In May 1881, the plans for enlarging the shops were about complete. They were to be located on land adjoining and south of the existing shops; about thirty-five acres were required for the buildings, tracks, storage, etc. All of the buildings were to be constructed of brick, with substantial granite foundations. The bricks would be supplied by William Schwartz of Northeast Brainerd. By early September, the roundhouse 316 feet in diameter and

containing, at the center, a wrought-iron turntable fifty-six feet in diameter and forty-four stalls, was nearly

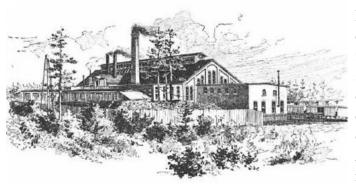
complete. As of December, the number of men employed in the shops was 503. They were classified as follows: carpenters, 175; blacksmiths, 60; machinists, 92; boilermakers, 27; tinsmiths, 14; molders, 19; roundhouse men, 38; yard laborers, 28; office clerks, etc., 13; painters, 38.

In January 1882, a new foundry for the casting of car wheels, providing employment for forty molders, was prepared for construction. The building, when completed in early spring, was 80x235 feet with brick walls and an iron covered roof. By mid-January 1882, the roundhouse was being roofed by the Detroit Bridge and Iron Works. Preparatory to putting on the roof, an iron truss framework was being placed on the new machine and



Northern Pacific Machine Shop, ca. 1877. Courtesy of Haynes Collection, University of Montana

erecting shops, in which twenty-three locomotives could be repaired or be in the process of construction at one time. Near the end of January, the iron truss for the roof of the new machine and erecting shops was nearly



Northern Pacific Foundry, ca. 1885.

complete and planks were being laid on it. In mid-February, it was announced the work of laying the slate on the roofs of those shops had begun. Tar paper was laid first and the slate was then nailed on—the same as shingles. Small holes were punched through the slate in order for the nails to be driven through. It would take the crew of men a long time to lay the slate because the roof of the 120x244 foot building was the largest in the state. At the end of April, the excavation of the grounds for the new boiler, tank and tin shops, 80x224 feet, had begun; they were built directly west of the nearly finished machine and erecting shops. Together, the two buildings

were huge; a transfer table, operating on six tracks running the entire length of the buildings, powered by a small stationary engine on one side of the carriage which moved the wheels by cogs, conveyed a locomotive into any part of the two shops. Connected with these two buildings, was an engine and boiler house 40x80 feet

within which a granite foundation was laid for carrying the 1,500 horsepower Corliss engine and the four large boilers weighing 22,000 pounds each, which furnished steam for heating the new buildings as well as for



Northern Pacific Office and Storehouse, 2005.

running the engine. A smokestack 100 feet high was erected at the side of the building. Beyond and parallel with the engine and boiler house, the boiler, blacksmith and tank repairing shops 80x197 feet were located. north of the boiler shops was the oil house; this was 45x62 feet, two stories high, containing six huge wrought iron oil tanks on each floor. Those on the ground floor had a capacity of 18,000 gallons each, while those on the second held 12,000 gallons each. Immense steam pumps were used to convey the oil from the cars to the various tanks. This brick building was as nearly fire proof as possible. Between the main track and the roundhouse a storehouse and office was built of brick with an iron truss and slate roof; it was one large building 42x282 feet, two stories high. Seventy-five feet of the west end was partitioned off to be used as offices for the superintendent of construction, master mechanic, etc. On the front, a clock tower 65 feet high was erected. It was estimated the cost of the new shops, when completed, would be \$450,000 and they would employ from 600 to 800 men. The old shops on the north side of the track were used for

car building and car repairs, while the new ones on the south were for the locomotive works. Tracks in every direction connected all the new buildings with those previously in use. According to the *Minneapolis Tribune*, the building of the shops and the roundhouse required thirty-six carloads of slate, six carloads of tarred roofing felt, one carload of glass for skylights and two carloads of galvanized iron.

The company intended to keep the old shops running as well; the old machine shop was converted into a woodworking department. All of the new machinery was purchased from the J. A. Fay & Company of Cincinnati, Ohio and included a large car sill dresser, which took a piece of timber fourteen by sixteen inches thick dressing the stick on all four sides at once; one patent planing, heading and matching machine, working on all four sides similar to the one last referred to; an automatic gaining machine for cutting



An original 12x18 inch slate shingle used on the roofs of the buildings built in 1881-1882.

Courtesy of Carl Faust

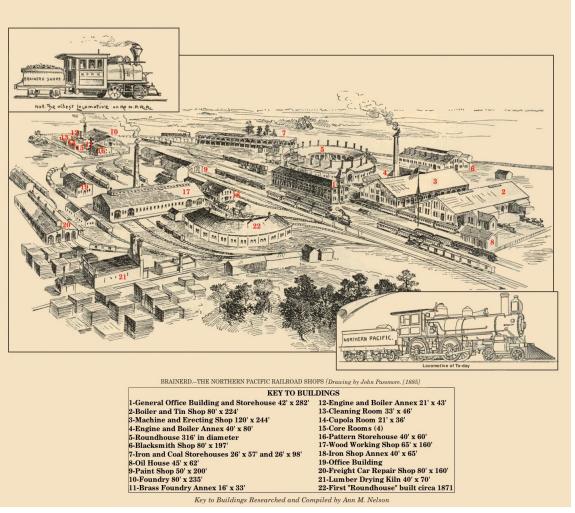
and gaining sills, etc.; a large rotary car mortising machine and one vertical mortiser for end work; a large ripsaw, a vertical tenoning machine; a large vertical car tenoning machine; a universal woodworking machine; a large re-sawing machine, with a 40-inch blade; one large patent railway cutoff saw and a large automatic knife grinder. This machinery was the best of its kind and possessed all the latest improvements; an additional force of about 275 men was required to keep it running.

On March 28, 1886, a fire, raging for several hours on the north side of the tracks, burned these frame buildings to the ground: planing mill, machine shop, pattern shop and upholstery shop of the car department as well as the old roundhouse, where the freight work was done. The buildings burned constituted the original

plant of the shops built in 1872. The main shops, six buildings built in 1881-82, standing south of the track were not damaged by the fire. The construction of the new shops on the north side of the tracks was to begin on May 1 and be completed in ninety days. The brick used in their construction was brought from Moorhead and were

cream colored; Magdalena Schwartz, ex-wife of William Schwartz, only had a few bricks on hand and it would take something like 900,000 to complete the job. The new building was 65x160 feet, with a wing attached for an engine room and boilers. It was a fireproof building of brick and iron with a slate roof, standing perpendicular to the main track and the storehouse.

In July 1888, the shops employed nearly 800 men who did most of the freight car building and locomotive repairing for the



Northern Pacific Shops, 1885.

entire Northern Pacific main line and branches east of the Rocky Mountains. The shop buildings consisted of an office and storehouse, 42x282 feet, two stories high; boiler and tin shop 80x224 feet; a machine and erecting shop, 120x244 feet; a boiler annex 40x80 feet, with a 1,500 horsepower Corliss engine; a roundhouse, 316 feet in diameter, with stalls for 44 engines; a blacksmith shop, 80x197 feet; an oil house, 45x62 feet; two iron and coal store houses, one 26x57 feet and the other 26x98 feet; a paint shop, 50x200 feet; a foundry, 80x235 feet; a wood working shop, 65x160 feet, with an annex for axle and car wheel work, 40x65 feet; a freight car repair shop, 80x160 feet and a lumber dry kiln, 40x70 feet. The monthly payroll amounted to about \$80,000.

On January 25, 1891, another fire burned the large wooden structure known as the old paint shop, which for sometime had been used as a car repair shop. This building was nearly the last of the original shops built in 1872. In this shop, there were about ninety men at work and every one of them lost their toolkits which were kept in the building when not in use. It may not be generally known that in many branches of work in the railroad business, at this time, the workmen furnished their own tools and this was one of them. On June 1, 1893, the freight repair shops, a structure 80x160 feet and the last of the old wooden shops was entirely consumed by fire. This shop employed about fifty men and all the tools of the workmen were burned averaging about \$30 a man. The cabinet shop, a building 30x46 feet, and the bolt house, 16x30 feet, were also burned to the ground. The car foreman's office, a building 20x40 feet, burned with the others. By the end of June, the

plans and specifications for the new shops to cost \$55,000 had been drawn and forwarded to New York for approval; work would begin on them inside of a month. On July 13, the ground for the mammoth building was staked and measured. The new building was "L" shaped and measured approximately 151x250 feet. In addition, a new power house was to be constructed 47x54 feet. Both buildings were built of brick. On August 3, the contract for the car shops had been let to A. Tollefson; the building was to be ready for occupancy by November 1.

Early in April 1900, the Northern Pacific installed, in the machine shop, a mammoth new wheel lathe, a magnificent machine costing \$5,000, made in Newark, Ohio, by the Neiles Tool Works. Two other very fine pieces of machinery were received, one was a bar punch and shears for the blacksmith shop costing \$3,200, the other a plate punch and shears for the boiler shop costing \$3,400. These machines were electric, operated by independent motors attached to each machine. By mid-April, plans had been drawn and approved for improving and doubling the capacity of the shops. The machine shop was to be increased 150 percent. The new portion would be two stories high and contain fifteen pits. The blacksmith shop was to be increased 90 percent and the boiler shop 100 percent. The old boiler shop, built in 1882, would be used for cab construction and paint shop. A riveting tower for hydraulic riveting was constructed on the east end. The car shops were to be increased about 80 percent. An entirely new building was to be constructed east of the current shop, with a transfer table between. The engine rooms, boiler rooms and all other portions would be enlarged to correspond with the increases made elsewhere. Work was begun on the blacksmith and boiler shops in early September. By the end of October, the brick work of the blacksmith shop was complete and ready for the roof. The concrete foundation of the machine shop was complete and the brick work on the new machine shops was very nearly complete; the foundation of the boiler shop was well underway. At the car shops, foundations for the new mill and machine shops were about complete as well as those for the pattern shop and various smaller buildings.

Early in March 1901, the shafting and machinery had been installed in the new blacksmith shop and it was ready for occupancy. The roof of the new machine shop was put on after a delay of several weeks waiting for the structural iron which composed it. The last crew of Butler & Ryan, contractors of St. Paul, left on June 6, 1901. On June 7, a large new traveling electric crane weighing twenty tons, capable of traversing both the old and new shops, was fired up.

In early April 1907, a 165 foot square addition was made to the blacksmith shop; it was built south from the west end of the existing shop. It would, it was said, make it one of the largest, if not the largest blacksmith shop, in the United States.

In April 1910, construction was begun, by W. J. Hoy Construction Company, who held the contract amounting to \$400,000, on a new foundry, power house, a pattern shop, a large pattern store house, an office, lavatory building, coal and coke sheds and other warehouses. The foundry was to be one story high, 80x250 feet; it was to have steel window frames with heavy cement foundations running through the center of the



Northern Pacific shop men walk out on strike on July 1, 1922. Courtesy of Brainerd Daily Dispatch

building upon which would be located the columns supporting the roof. The pattern shop was to be four stories, 40x100 feet. The capacity of the foundry, including both iron and brass, was over 640 tons per month. Some of the finer castings, such as engine cylinders, etc., were now cast at this foundry. By the first part of October, the pattern shop, coal sheds and the power house were complete, with the exception of some minor inside work, and men were working on roofing the foundry building.

Promptly at the stroke of 10 a.m., Saturday, July 1, 1922, the shopmen of the Northern Pacific, numbering approximately 1,250 in Brainerd, laid down their tools and went on strike; the strike dragged on until February 5, 1923, having a devastating effect on the city.

Charles Skooglun, St. Paul contractor, received the contract to build a new power house in mid-July 1924. The power house was to be 100x110 feet and cost \$250,000 including equipment; it was to be located near the old scrap dock and would stand between two 200 foot high reinforced concrete smokestacks. The building was to be 72 feet high on the North side and 45 feet high on the South. In addition to the main building there would be a coal hopper, 20x62 feet, with special trackage and equipment for unloading coal in carload lots. The power house was constructed of light colored brick. Some difficulties presented themselves in finding a suitable base upon which to build the foundation, both for the building itself and the smokestacks, because a vein of quicksand was found under this site. It was necessary to drive piling through this quicksand, in many places to a depth of 40 feet, before solid ground was reached. In addition to furnishing electric power and light to all of the railway properties in the city, this power plant furnished steam heat for the shops. In September, a steam whistle was installed in the power plant; this whistle blew at 7 a.m. and 4 p.m. and is currently located at the Crow Wing County Historical Society Museum.

In January 1926, Superintendent J. P. Anderson gave a tour explaining the equipment and workings of the new power house:

Basement

"Coal is brought up the incline by a switch engine and dumped into concrete hoppers of which there are two, with a capacity of 200 tons each. Below the concrete hoppers coal passes to the shifting table which supplies a traveling conveyor that carries coal to the coal crusher. From the coal crusher, coal drops to the traveling conveyor that takes it to overhead bunkers. It is carried by gravity through swinging spouts to hoppers in front of the boilers and is fed to the Harrington traveling grate stokers. The operator of the coal handling machine is able to start and stop the machinery from three different points by pushing a button. This is a safety precaution and also for ease of handling. The storage capacity of the concrete hoppers and overhead bunkers is about 100 tons.

Ashes

"The ashes drop from the stoker grate into ash hoppers, located in the basement. These hoppers have

doors in the bottom which are opened and closed by compressed air and ashes are dropped into cars located below the hoppers. There is a spray of water into the ash hopper which cools the ashes and keeps down dust. There is no handling of coal or ashes by manual labor in the plant. In the second section of the basement is located the water, air and low pressure steam piping. All exhaust and low pressure steam is passed through an oil separator before going out through the steam heating mains. In the third section of the basement under the engine room are located the fire pump, condenser and condenser pumps, gland water tank and stand water pump. There is also in this section a room partitioned off where all high voltage wires leaving the building are placed as are also the controllers for the power generators. All high voltage wiring is located in the plant so that only men who have experience can get at them. From the basement there is a stairway to both boiler and engine rooms. All of the stairways and platforms in the



Northern Pacific Power House, 2002.

building are Irving subway type which are considered the safest made. Special attention has been given to make everything as safe as possible in the entire plant. Special attention has also been given to the ventilation of the building.

Boiler Room

"In the boiler room there are four six hundred horsepower Badenhausen vertical tubular boilers with an overload capacity of fifteen hundred horsepower each. Harrington chain grate stokers are used with both forced and induced draft. The chain grates are operated by small upright engines and the blower fans by steam turbines. The boilers operate on both forced and induced draft. The stoker engines, draft fans and dampers at the stack are handled automatically. As the pressure of the steam increases, the fans slow down and the draft decreases; the stoker engines slow down and feed less coal and the dampers close. The water is fed to the boilers automatically, keeping a certain level of water in the boilers. If, for any reason, the water gets too high or too low, an alarm whistle blows until the condition is normal again. Water is fed to the boilers by centrifugal pumps running at 360 revolutions per minute. There is also a reciprocating pump that can be used if wanted. The temperature of the feed water is 218 degrees. On the front of the boilers are instruments showing the steam pressure, the boiler horsepower each boiler is developing and draft gauges showing the air pressure that is being used. There are five places under the traveling grates where air pressure can be applied and pressure can be regulated. At the back of the boilers, instruments are located showing the gases escaping to the stack, the temperature of the gases escaping and the pressure of the draft at the damper. This enables the fireman to know just what his boilers are doing in burning the fuel. By opening a valve at the side of a boiler, the soot is blown down from the tubes automatically. Steam leaves the boilers through an automatic valve that, in case of a broken tube in the boiler, closes the valve automatically and prevents steam from other boilers escaping through the break and, in case of a broken steam main in any part of the plant, causing a sudden flow of steam from the boilers, the valves on all the boilers in the operation will close.

Engine Room

"There are two air compressors in the engine room, one a 4,000 cubic foot uniflow steam feather valve. This is the largest air compressor in the northwest and there is only one larger in the country. There is another of 600 cubic feet for night loads when the shop is not operating. There are at present two turbine-driven power generators, with the foundation for the third which will be moved from the old power plant. This will give us 1,550 kilowatt capacity. The 750 K. W. unit is a mixed pressure turbine running condensing. This machine will operate either high or low pressure steam or both. In warm weather when we are not using the steam exhaust from other machines, it will be used to operate this turbine at three pounds pressure and will mean a great saving in fuel.

"There is a 15-ton traveling crane in the engine room which is used in making repairs to machinery."

"The switchboard for power distribution is of a special design and has several new features. It was designed by Fred Reid, chief electrician of the N. P. Ry. Co., and is considered one of the safest and most complete ever built by the Westinghouse Electric company. It is divided into twelve panels, six for the control of the power generators and exciters and six for the control of the power distribution to various departments of the shops.

"Each department is separately metered, so that power consumption can be charged direct."

In early October 1982, all of the buildings built in 1881-82 and the 1924 power house were scheduled for demolition; these were saved: the office and store house, the machine shops, the boiler shops, the blacksmith shop, the pattern shop and the power house. They were placed on the National Register of Historic Places on January 3, 1989.

Northern Pacific Headquarters Hotel

On February 17, 1872, the Headquarters Hotel was being finished up in the grandest style. Beautiful suites of office rooms had been furnished for the various railroad officials on the first floor, while the plasterers and painters, first-class artists, were still finishing the grand structure throughout in truly metropolitan style. On

February 24, 1872, a representative of the *Brainerd Tribune* was conducted, over, through, around and beneath the "big hotel," as it was commonly called, by its host, Mr. William Lytle, "The mammoth new wing was about complete, and the whole establishment—containing the equivalent of three stories and basement—with its necessary outbuildings, occupied something over two acres of ground. The *Tribune*, for want of room, did not go into the details of the grand hotel—which was built by the Northern Pacific for the accommodation, strictly, of the heads of departments on the line, their families and friends—but gave only a few items, to show its capacity, and excellent management under the accomplished and business-like administration of Mr. Lytle, who was among the very few men who could successfully and acceptably hold the reins of government over so gigantic an institution.

"There was room to comfortably seat, at the table in the new dining room, something over a hundred guests; there were between fifty and sixty beautifully arranged and commodious sleeping rooms, richly decorated in modern style, with all needed furniture, such as spring beds, wash-stands, mirrors, bureaus, clothes

presses, etc., and all handsomely carpeted. Besides these and the dining room, were parlors, offices, promenades, an immense kitchen, cook and pastry rooms, large basement and cellars, laundry, bedding presses, etc., all arranged and fitted up with every imaginary article and appliances, for "speed, safety and comfort." The whole building was to be supplied with water, by pipes leading from an elevated reservoir to all rooms in the house. The ice house—containing 700 tons—was very convenient and was planned by Mr. Lytle himself, and



Headquarters Hotel Courtesy of Minnesota Historical Society

for genuine utility was ahead of anything ever before noticed. There were several small rooms along the side of the building, entered by as many doors. These rooms were constructed so that a heavy body of ice surrounded them on every side and overhead—rendering the necessity of keeping ice in the rooms with the meats, etc., wholly unnecessary. The butter and milk room was distinct, as was the meat room and the other rooms for containing various articles, giving no chance whatever of one article flavoring the other; and the extraordinary convenience of the whole was remarkable. Notwithstanding the many fine chimneys in the hotel, there was now in use more than six hundred joints of stove-pipe. Mr. Lytle's management of this hotel was marked for its economy, courtesy and thorough business properties, rendering him deservedly popular both with the guests under his care and the general public."

In May of 1872, the hotel and its surroundings were beautified in various ways. A lot of new picket fence was built, the grounds raked up and cleared and the offices newly furnished and painted. The hotel office was furnished with a beautiful counter, designed and built by Mr. Doner, and painted by Mr. Foss, one of the very best painters in the Northwest. Mr. Foss, with his crew of artists had also given the outside of this mammoth building its final coat of paint, and to say the thing had been radically changed in appearance, did not express it; the "Headquarters" really presented an imposing appearance.

At about 9:30, on the evening of October 27, 1882, a kerosene lamp in the ladies' waiting room exploded, and the burning oil falling on the floor burned a section about four inches in diameter. The fire was put out and to all appearances no further damage was done; but the burning oil had gone through the floor, and running along the under side of the joists and flooring, was slowly eating its way up through the partition into the second floor, where it suddenly burst out shortly after midnight. Though the house was crowded and most of the inmates were asleep, all were rescued, although some had to jump from the top of the porch to the ground, while their trunks were thrown out of the windows. About half the furniture and goods in the hotel were

destroyed, the fire had instantly gained so much headway that nothing could stop its progress in the old dry structure. During the progress of the fire quite a number of articles were stolen by some miserable wretches who were sneaking around.

The building was burned to the ground, not a stick standing two hours after the fire broke out. It was 142 feet front, and the main building was 100 feet deep. It was owned by the Northern Pacific railroad. With the additions, the building cost about \$20,000. The loss in furniture and goods amounted to about \$6,000 or \$8,000 more, the whole was covered by insurance. At the time of the fire, the hotel was operated by Witt & Clayton, under a lease from the Northern Pacific.

Northern Pacific Colonists' Reception House

The Northern Pacific opened several immigrant reception houses along the line to provide free temporary lodging for newly arrived immigrants intending to purchase lands from the railroad. Numerous people traveled along the line in search of lands for themselves or for future colonies. In late June of 1872, a celebration was held at the Headquarters Hotel commemorating the opening of the Colonists' Reception House located in West Brainerd near the Mississippi River just north of the Northern Pacific tracks crossing the railroad bridge.

Sometime in the fall of 1872, the Ahrens brothers gained temporary charge of the reception house and in January of 1873 at 7:30 p.m., Brainerd's citizens decided to hold a surprise party for them in the building. The *Brainerd Tribune* reported, "...somewhere near one hundred and fifty of our best citizens, old and young, were seen gathering near Main Street [Washington Street]. Every group had in transit, baskets, bundles, buckets, and parcels of various kinds, and at a given moment the bundled-up assemblage commenced stringing out in a



Northern Pacific Colonists' Reception House, ca. 1870s. Courtesy of Carl Faust

southerly direction led by someone with a brilliant lantern. Silently, that immense concourse of youth and beauty, steadied in its proceedings by gray hairs, old in wisdom but young in spirit, followed on, many scarcely knowing whither they were going, nor what for, only sure that fun was ahead. Southerly for a time and then westward down Main Street [Washington Street], that 'head-light' wended its way, until the river was reached; then across its frigid bosom down its western shore, then up the precipitous bank, wended that long troop, 'neath the pale beams of the Goddess of Night—except that there was 'no moon, no how.' The snow banks of Cass

County proved no obstacle, whatever, but the invincible column of pioneers and pioneersses waded, scrambled, went out of sight in the beautiful snow, ever and anon but when one was lost a score of willing hands commenced the work of excavating, in a manner that would put a snow plow to the blush. The victim of the treacherous snow once above board, the column would proceed, with a few remarks apropos to the condition of things, until the head of the procession entered the capacious apartments of the magnificent Northern Pacific Reception House in West Brainerd, where the weary found rest, and refreshments mountains high. The Ahrens brothers found themselves suddenly in possession of so formidable an army, and all they could do was just what they did do—surrender with grace, and, comprehending the situation in a moment, made every effort to put all at perfect ease by a warm welcome, accompanied by every sign of true, genuine hospitality.

"After all had doffed their outer garments, the supplies had all been stored in the capacious larder, and committees had been appointed in the various departments, the great company gave themselves up to enjoyment appropriate to the occasion. In a few minutes Fretwell, Conant & Stearns' String Band appeared on the scene,

and this ends the description of what all this thing meant—it meant 'business' nothing more, nothing less. A most bountiful supper, including delicious coffee was served at 12 o'clock; the dance continued until 2 a.m.m., and then all went home again, pronouncing the whole affair the grandest success, and happiest event that ever occurred in this New Northwest."

Northern Pacific Bridge Collapse

The *Duluth Minnesotian* noted, "At about the time long before set, on Monday night, March 6, [1871] the track layers arrived with the iron road within the town precincts of Brainerd, amidst the bonfires and

rejoicings of the people, who improvised, also, an informal celebration of the event by a little champagne excitement offered to the Engineer corps at the storehouse of merchant Hill; where all went off joyfully, but soberly and in order; every one seeming to feel that a great stride in progress had been achieved. During Thursday a deep fill detained the track layers from reaching the bridge across the Mississippi; but by Tuesday night all was ready for the train to move forward; and on Wednesday morning tracks being down and the bridge across the Mississippi, seeking the farther beyond where sunset reposes. The Bridge is a handsome and substantial result of the skill of Engineers and Contractors combined. It consists of three spans of the Howe-Truss pattern of 140 feet each, with approaches of



Northern Pacific Bridge, ca. 1872. Courtesy of Crow Wing County Historical Society



Northern Pacific Bridge Collapse, July 27, 1875. Courtesy of Minnesota Historical Society

about 100 feet on the East side and sixty feet on the West—the centre span being a "through" bridge; its floor being sixty feet above the water, capable of allowing the passage of steamers under it without the necessity of a 'draw.'"

On March 11, 1871, a special train with Brainerd resident, Adam Brown as the engineer, left the NP Junction, near Carlton, bound for Brainerd 114 miles away. The special carried a number of Northern Pacific officials including J. Cooke, financier of the railroad from New York. In later years, Brown recalled the very cold weather and the fact that the engine cab was open with no curtains to block the wind and that he and the fireman suffered from the cold the entire length of the roundtrip. Since there was only a single track and no turntable, the train had to be backed-up all the way on its return trip, which took four hours.

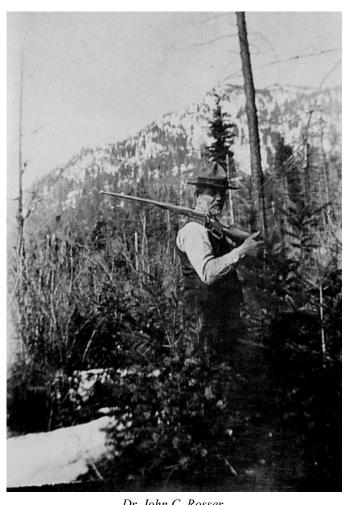
On July 27, 1875, at about eight o'clock in the morning, the bridge collapsed killing five people including James Peterkin, engineer and Richard Grandon,

fireman; Buk-quan-ja, Mrs. Magdaline Aitkin and Abbie Johnson, who died of her injuries the next day, all passengers. Five other passengers were injured but survived. The conductor and brakeman were able to jump from the train and run across the bridge as it was collapsing behind them. The central span of the bridge broke

down under the weight of the cars loaded with iron, and both ends of the train were drawn into the wreck, the engine and several cars were drawn backward and the remainder of the train forward. The central span and the two western spans of the bridge went down; the engine, tender, and two cars that were pulled backward fell on the west shore, and the remainder went into the river, which was six to eight feet deep. The crash made by the wreck was heard for a distance of three-quarters of a mile.

On July 28, Dr. John C. Rosser, the only doctor in town, called a coroner's jury to determine the cause of death of Peterkin and Grandon. Then the finger pointing, as to the cause of the collapse, began. According to the

New York Times, "...it appears that the bridge has been in an unsafe condition since May last, its condition being a subject of common talk among citizens and having been reported to Kimberley, resident engineer of the Northern Pacific, and Wallace, the bridge foreman, who examined the bridge. Wallace said in June he was going to repair the bridge, and was told by Edward White, bridge-builder by occupation, that it was time; if he didn't soon he would have a train through it. White and other witnesses swore that on account of the centre piers being low, the bridge sagged down in the centre; that one of the lower cords was dangerously rotten; that some of the braces were rotten; that the bolts needed tightening; that the foot-braces and step-iron to the braces were broken; that one of the sidebraces was two inches out of place, and that the west span had swayed two inches from its place. One witness saw the bridge swinging sideways as trains went over, and cautioned the company employees, saying it was likely to be displaced by such swinging, so that it would break down under the next following train. One passenger thought the cars were off the track when the bridge went down. All the others thought none went off the track till after the bridge broke. The company's officers and employees hold the theory that the bridge was broken by a car-brake falling down and throwing some car off the track and against the side of the bridge. The jury's verdict, however, is as follows:



Dr. John C. Rosser Courtesy of University of Virginia Library

"That the above-named persons, Peterkin and Grandon, came to their deaths on the 27 of July, 1875, by the falling of the railroad bridge over the Mississippi River at or near Brainerd, Minn., while freight train No. 5, drawn by engine No. 45, of which they were engineer and fireman respectively, was passing over; and we further find that the above train No. 5, was passing the bridge at the usual speed, about four miles per hour; that the west span of the bridge broke first, caused by its being constructed of unsuitable and unsound timber; that it broke by the actual weight of the train, and that the whole bridge was considered unsafe by persons not connected with the Northern Pacific Railroad, and several who were—men who were competent to judge of its condition; and we further find that several officials of the Northern Pacific Railroad, whose duty it was to make examination of the bridge as to its safety, were either incompetent to judge of its condition or were guilty of gross neglect in not making the necessary repairs; and we further find that the conductor of said train did not warn the passengers of their danger when he had ample time to have done so.

"The above censure of the conductor was based on his own evidence, that, after looking out from the caboose and discovering what had happened, he jumped from the car without saying anything to his passengers, who, if they had been then warned, could have easily escaped."

The *Brainerd Tribune* reported the results of the verdict commissioned by C. W. Mead, General Manager of the Northern Pacific, dated August 3, "Dear Sir:—The undersigned have to-day, in response to your request made an examination of the wreck of the Northern Pacific railway bridge at Brainerd as it lies, and of the remaining east span of the said bridge as it now stands, with the view of accounting, if possible, for the casualty. We find nothing in the appearance of the debris of the wrecked span to justify us in attributing the wreck to defective or improper materials or workmanship, or design in the original construction or to the want of proper attention and repairs since it was built. We find the east truss yet in place, and in good and safe condition. This truss was constructed at the same time and as the others were, and we are informed that it has received the same care and attention from the officers of the road. If we may judge of the condition of the other trusses from our examination of this one, they could not have been broken by the weight of any ordinary train. While we find ourselves unable to definitely describe the manner of the wreck, we are unanimously of the opinion that it was caused by some accident to one of the flat cars loaded with rails, crossing the bridge at the time by which a part of the car or a rail became entangled in the truss, thereby displacing some of the timbers nearly or immediately over the west channel pier.

"Most of us are acquainted with Mr. S. J. Wallace, the foreman of bridge repairs on the Northern Pacific road, and know him to be a competent and faithful man in the discharge of such duties.

We are, very respectfully, etc.

(Signed)

J. W. Bishop [sic], General Manager and Chief Engineer St. Paul & Sioux City Railroad

F. R. Delano, Civil Engineer St. Paul & Pacific Railroad

Chas. A. F. Morris, Chief Engineer St. Paul & Pacific Railroad

J. S. Sewall, Civil Engineer and Builder.

C. H. Prior, Superintendent Milwaukee & St. Paul Railroad"

No one was ever held accountable for the disaster.



Northern Pacific locomotive lying on the west bank of the river after the bridge collapse, July 27,1875.

Courtesy of Minnesota Historical Society

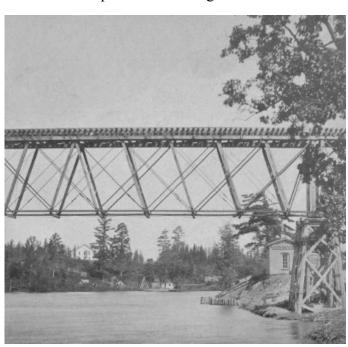
Immediately after the collapse of the bridge on July 27, plans were readied for a temporary replacement and it was reported that the temporary bridge would be up and ready for trains on August 11.

The *Brainerd Tribune* reported this account of the raising of the locomotive on September 11, 1875, after the bridge collapse, "Yesterday evening the locomotive that went down in the wreck of the bridge was finally drawn out of the river and up the steep bluff to the track, and taken to the machine shops. It was a very tedious process; a force of men have been working at it for a week or two. The bluff on the west side of the river was graded to an inclined plane, and a track laid down to the rusty and battered monster, and after getting her jacked up on to her feet again and squared about on the temporary track, a couple of powerful locomotives on top of the hill slowly and sadly drew her up to a proper level once more. She was a sad looking sight, and as she was slowly drawn across the fearful chasm on the new bridge,

and up through the city, everyone stopped and gazed on her remains, but spoke not a word as it were. She was

enabled to proceed on her own wheels, by the use of care, but the boiler, the heavy frame, and the skeleton of the cab, (wherein stood the noble Peterkin and his gallant fireman, Grandon) were all that remained and they were covered with mud and rust. The sight, on that quiet Sabbath evening, as she proceeded through the town at funereal gait, was indeed a sad reminder to those who still hear that crash ringing in their ears, and whose eyes still behold the awful wreck and the remains of their noble friends, who exchanged worlds in the twinkling of an eye." Shortly after the locomotive was hauled up the west bank of the river, the temporary track was extended out into the river and pilings were driven as a base for supporting a platform from which a steam crane was used to haul the wreckage of the cars and remaining debris from the river to be placed on waiting flat cars.

Eight months after the bridge had collapsed a newly built permanent bridge was ready to carry all the west-bound traffic of the Northern Pacific. The new bridge, completed on March 31, 1876, was immediately subjected to the most stringent stress test possible. The test consisted of a single heavy locomotive stopping in the middle of each of the five spans while deflection was measured by the foreman of the construction crew; after which, a second heavy locomotive was coupled to the first, running over the track as before, then a third heavy engine and the N. P. tool car—the heaviest car on the line —were coupled to the first two locomotives and driven over and back as was the first, making a total weight of about one hundred forty tons. The following was the result of the measurement: greatest deflection with one engine, three-fourths of an inch—return, five-eighths; greatest deflection with two engines, one inch and onefourth—return, one inch and one-eighth; greatest deflection with three engines, one and one half inches return, one inch and three-eighths, from which could be seen that the whole returned, after the weight of the three



The new Northern Pacific Bridge, completed on March 31st, 1877. Frank Jay Haynes

engines and tool car was removed, to within one-eighth of an inch of its original position, which (in a structure of that length, the longest span was 143 feet) is a very small allowance for the uniting of the joints of the timbers in finding their positive bearings; so that it was quite evident there was no permanent deflection whatever beyond that, and after the rods had been tightened up and the second test applied the deflection did not exceed three-fourths of an inch with that weight. Several "courageous" citizens, including the *Tribune* reporter, were among those who had the honor of riding over on the first engine; however, when the test of the two and three locomotives coupled together was applied, some of the faint hearted wanted to go home, but two women remained on board until the test was completed.

First Northern Pacific Depot

On February 24, 1872, the Northern Pacific unveiled its plans for the new depot at Brainerd. The building was to be 40x80, two stories high with attic. The style of architecture was Italian, with projecting turrets at each corner, 6x6, running high above the roof, and terminating with mansard roof and ornamented pinnacles, through which were to be ventilators from the closets and wash rooms of both stories below. The grand tower of the main front entrance to the building was 16x16, projecting six feet from the main part, and 60 feet from base to pinnacle, beautifully ornamented from the top of the building upward, with mansard roof, and great clock in front. The lower story was to be arranged thus: Entering the front through the main tower, one

entered a hall 14x14; to one hand is the entrance to the ladies' parlor, to the other the gents; out of this hall goes an easy and graceful stairway to the second story. On the first floor were the two passenger rooms, 32x39 each, a ticket and telegraph office in the center with openings into each of the passenger rooms, and two commodious fireproof vaults, 8x12. The passenger rooms were supplied with wash rooms and closets—in the corner turrets—provided and arranged after the most modern and improved style—the upper story being also provided in a



First Northern Pacific Depot built in 1872. Frank Jay Haynes

like manner. Ascending from the front hall one came to an upper one similar in proportion, on the one side of which was the office of the General Disbursing and Financial Agent of the N. P. R. R., and on the other the office of the General Land Commissioner of the road. These two offices were very similar in size and arrangement—being each 32x27 clear of private offices, vaults, closets, wash rooms, etc. In the center, between these two suites of rooms, and corresponding with the ticket and telegraph office below, was the office of the attorney for the road and local law agent at Brainerd. The attic story was lighted by dormer windows, and the building, throughout the inside, was supported by ornamental iron columns. In front of the building, running its full length, was an overhang providing protection, it was supported by immense brackets, and a

fine platform of ample space was constructed. At 3:00 on the morning of February 5, 1917, this depot, valued at about \$27,000, burned to the ground in a fire which began in the ladies' waiting room. The fire was first discovered at 1:15 a.m., fire extinguishers were used and the fire was believed to be put out. Twenty minutes later, it broke out again from within the walls, with great violence, the flames shooting up to the roof.

Second Northern Pacific Depot

Brainerd's second Northern Pacific railway depot, an imposing structure built of brick, costing about

\$100,000, three stories high, was formally opened on May 15, 1920. It was occupied by the Northern Pacific and Minnesota & International railway offices and other forces. The building measured 162x40 feet, had a full basement and at its east and west ends large covered platforms were provided. It was declared it one of the best depots on the whole Northern Pacific railway system. The general contractors were McManis & Tarnoski, of St. Paul. The general foreman in charge was Val Gersbach. The railway inspector was J. Lie.

The main floor was distinguished by fine artistic treatment. The floor was of reddish quarry tile, the wainscoting was of a mosaic of terra cotta shade resembling that used in all station terminals in New York, the walls were a buff shade and the ceiling, ornamentally



Second Northern Pacific Depot formally opened in May 1920. Courtesy of Crow Wing County Historical Society

beamed, was of a cream shade. At the east end, track side, was the women's waiting room 18x40 feet in size with toilet. On the opposite side was the men's smoking room 16x16 feet with toilet. In the center of the

building was the main waiting room 40x60 feet with caged ticket office, paneled in oak sides and three windows. The baggage room was 40x40 feet in size and attached to same was the baggage and express office.

The second and third floors housed the Minnesota & International railway forces. The rooms were finished in birch with tinted walls. At the east end of the second floor was the auditor clerks' room 33x40 feet in size with vault attached and nearby the auditor's private office. Men's and women's toilets adjoining. The dispatchers' office was in the center of the building overlooking the tracks. There was room for nine operators. Other offices were the bulletin room, yard clerk, roadmaster, superintendent tie treating plant and private office, general manager clerks' office, general manager's private office, trainmaster, car clerk, engineer of bridges and buildings, etc. The third floor had six offices and a large attic for storing at the east and west ends of the building.

In the basement was the steam heating plant, Keewanee tubular type. Attachment could be made at the west end to heat coaches in the yards. There were coal storage facilities, stationery storage, vault room, pipe tunnels all around the building.

The roof of the building was of Ludowici tile. Brick platforms in front of the depot measured 50 feet wide and beyond the building 16 feet wide with a total length of 600 feet. Another platform of brick extended between the first and second tracks and measured 600 feet long by 16 feet wide. There were also platforms under the covered sections at the east and west ends of the depot and also around the depot. This depot was razed by the Northern Pacific on October 15, 1968, so they could lease the land for a strip mall.



Northern Pacific Freight Depot

This depot was built of brick beginning in July of 1902 and completed in November of 1902. The building is still standing and owned by the BNSF.

Northern Pacific YMCA

In 1885 the Northern Pacific Railroad offered to provide a YMCA building "...to give aid to sons of railway men and not cause them to seek asylum and pastime in saloons." In 1887, the YMCA consisted of two reading rooms upstairs in the First National Bank building. On May 17, 1888, the basement for the new YMCA building was being excavated; and the YMCA was incorporated on September 6, 1888. The building was erected in the center of the railroad park between Fifth and Sixth Streets opposite the Towne-McFadden block. The stone for the foundation was already being hauled in early February of 1888. The building was two stories, with a 16 foot basement in which was to be located a gymnasium and bathrooms. The library, reception room and parlor were to be located in the first story; and, in the second story, the assembly room and kitchen were to be located. The gymnasium was furnished with all the latest conveniences and appliances. The bathroom was to be for the convenience of the members, who would have access to them at any and all times. The building, when completed, was estimated to cost between \$3,500 and \$4,000. Besides granting a lease for the ground free

of charge and giving \$500 a year for annual expenses, the N. P. agreed to give \$1,000 to aid in constructing the

building, provided that enough money could be raised by subscription to complete the building. This required the raising of about \$2,500 among Brainerd's citizens. The building was opened to the public for the first time, in mid-September of 1888; the entire cost was about \$5,000. In December of 1889, Henry Villard, formerly president of the N. P., gave \$2,000 to the building fund of the Y. M. C. A. This sum was amply sufficient to put in steam heating apparatus, bathtubs and gymnasium. By mid December of 1891, the Y. M. C. A. was offering large, well lighted and heated, social and game rooms, a reading room with over fifty of the leading papers and magazines on file, free to the public from 9:30 a.m. to 9:30 p.m. Membership cards costing \$5 entitled the all-male members to the use of the bathrooms with three fine tubs and one shower, hot or cold, and the use



Northern Pacific Y. M. C. A. building. Courtesy of Brainerd Dispatch

of the gymnasium with three sets of standard pulley weights, parallel bars, traveling rings, Indian clubs, dumb bells, etc. In June of 1923, the building was closed for extensive repairs; it was reopened on May 23, 1924. The date of its demolition is unknown.

Northern Pacific Hospital

The Northern Pacific Railroad organized a medical department, on February 2, 1871, with Dr. S. W.



Dr. Samuel W. Thayer, first medical director of the Northern Pacific Railroad.

Courtesy of Tim Cooper

Thayer, of Burlington, Vermont as medical director. In order to fund it, fifty cents a month was deducted from the pay of its employees; this deduction was regularly paid into a fund set up by the company. In the beginning, this deduction was unpopular and was opposed by many employees but the company persisted; as employees began to receive medical aid, often benefitting them far more than the amount of money they had paid for coverage, its benefits and advantages were sought after and acknowledged by all. During the summer of 1871, a hospital car was fitted up with beds, bathing facilities and dispensary; it was accompanied by a nurse and under the constant care of a competent physician. On the mainline of the Northern Pacific, Dr. C. P. Thayer, of Brainerd, presided over the section between Carlton and Oak Lake, including the medical dispensary located in Brainerd. Dr. J. C. Rosser, of Fargo, took care of the section between Oak Lake and Chevenne, Dakota Territory; in case of illness or accident medical aid could be procured at once. By early July of 1872, the railroad had made known its intention to erect a hospital at some point along the line where employees could obtain essential care in case of sickness or accident.

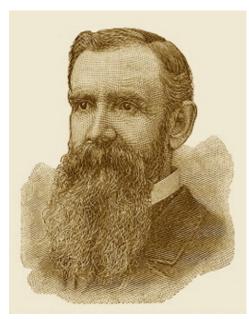
In early August of 1872, it became known that the Colonists' Reception House, opened in West Brainerd in June of 1872 and located just north of the railroad tracks crossing the Northern Pacific bridge, was

to be converted by the Northern Pacific, into a hospital for all its employees, where the sick or wounded of the entire road could be properly cared for medically and in every other way. This institution was to be under the

immediate supervision of the Drs. Thayer—Dr. Samuel Thayer, Medical Director, who was assisted by his son,

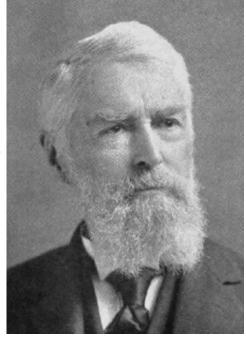
Dr. C. P. Thayer. In late July of 1873, Dr. Samuel Thayer returned to Vermont.

In early March of 1880, General Manager, Herman Haupt, of the Northern Pacific, sent a sixteen-page prospectus to all employees outlining, among other things, the organization of an association, which became known as the Northern Pacific Beneficial Association (NPBA). All officers and employees of the Northern Pacific railroad were to become members; the original amount of dues was to be two cents a day or fifty cents a month; but any member, by paying an increased amount of dues, would have a proportionate amount of benefits in case of accident or illness. The amount of benefits to be paid in case of sickness or disability was to be determined by a board of managers who supervised



Dr. David P. Bigger, first chief surgeon, Northern Pacific Hospital in Brainerd.

the association, a majority of whom were to be elected by the contributors themselves; dues were to be deducted from monthly wages, but no payment was required when wages were not earned. Monetary relief was to be provided in case of temporary



Herman Haupt, General Manager of the Northern Pacific Railroad.

disability caused by accident; permanent disability caused by accident; death by accident; injuries or sickness from causes other than accident while on duty; and death from causes other than by accident while on duty. The compensation in these and in other cases was to be set by the board of managers.

On September 13, 1882, Dr. David Proudfoot Bigger of Omaha, Nebraska, former Civil War surgeon, was appointed Chief Surgeon in charge of the Northern Pacific Beneficial Association

(NPBA) Hospital in West Brainerd, owned jointly by the company and its employees; at that time, the hospital was providing medical and surgical care for the entire line of the road. Dr. Bigger arrived in Brainerd on September 23, 1882, along with his assistant, Dr. Werner Hemstead, also of Omaha.

About midnight on January 22, 1883, the original Northern Pacific Hospital, housed in the old Colonists' Reception House, burned to the ground. According to Dr. Hemstead's eyewitness account, "The fire started in a wainscoted partition behind a coal heating stove in a lean-to-wing used as an office and examination room, besides the office it contained two small rooms, one used as a pharmacy and the other was my sleeping room. The night watchman pulled me out of bed, I was dazed



Dr. Werner Hemstead, assistant to Dr. Bigger at the Northern Pacific Hospital in Brainerd.

and suffocated by the smoke. We at once aroused everyone in the building and phoned for help. Soon one of the N. P. switching crews with two baggage cars and men from the Brainerd Fire Department arrived and gave us effective and efficient assistance. By this time the fire had made such headway that efforts to save the building

were abandoned. In the meantime we had carried our twenty-one patients, in their beds, to the front entrance on the first floor and began loading them into the baggage cars for transportation to an empty shop building which



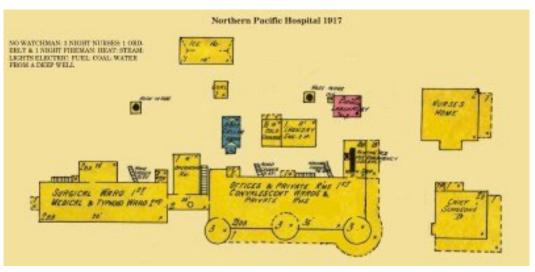
Northern Pacific Hospital, chief surgeon's residence and nurses' residence, 1900s. Courtesy of Carl Faust

had hurriedly been cleaned and made ready for use, the patients remained in the cars until morning. The night was very cold, the temperature way below zero [-40°].

"The stoves in this shop building gave off some heat, but within a few days water and steam pipes were conducted into the building from the company's water and steam plants, after that the wards were warm and comfortable. All but one of the patients made a good recovery, a pneumonia patient died, the exposure and disturbance caused by the fire was too much for him. Arrangements were made with the Mahlum House, located south of the shop yard, for meals, food from there was carried in heated containers for bed patients but the ambulatory patients walked to the hotel for meals.

"Of course we were handicapped to give proper medical and surgical service, all our medical supplies and equipment had been consumed in the fire. The Officers of the N. P. B. A., with the supervision of the Chief Surgeon, arranged to take care of the sick and injured employees in their homes and in local hospitals along the line as much as possible, however, our wards were filled to capacity most of the time. Plans for building a new hospital were immediately begun and before the end of the year a new building had been erected on that previous site, equipped and we moved in."

In his annual report for the Northern Pacific Beneficial Association (NPBA), covering the eight months ending June 30, 1883, Dr. D. P. Bigger reported, "The number of patients admitted during the eight months was 952, of whom 284 required surgical treatment and 668 were sick. Of this number, 207 were 'hospital' patients, 89 'athome' patients, and 656 'office' patients. The total number discharged cured



Northern Pacific Hospital and grounds, 1917. 1917 Sanborn Fire Map

was 870, of which number 257 were from the surgical department and 613 were sick. The number discharged improved was eighteen and the number who died was twelve. Six died in the surgical department and six died of sickness. The youngest patient receiving treatment was sixteen years of age and the oldest was seventy-one. The nativity summary, not including office patients, was as follows: Americans 125, Irish 34, Swedes 33, Finlanders 23, Germans 22, Canadians 17, English 15, Norwegians 13, Scotch 8, Danes 5, French 1.

"The report makes a remarkably good showing of the efficiency of the service, and the reader can only wonder that notwithstanding the serious disadvantages that Dr. Bigger and his assistants have contended with, there is a such a wonderfully small number of deaths. During a portion of the time there were reasonably good

accommodations at the old hospital, but that building was consumed by fire in mid-winter, and since then the comfort of the patients has only been secured by the close attention given and interest taken by those in charge."

By August 1883, the new hospital building, designed by twenty-four-year-old Cass Gilbert who lesigned the Minnesota State Capitol in St. Paul in 1895.

designed the Minnesota State Capitol in St. Paul in 1895. was underway; it was located in the same place as the first. The cost of the building and equipment was between \$25,000-\$30,000. The new hospital was described as magnificent and visitors were agreeably surprised to see the ample accommodations, the elegance of the building and surroundings, and the neat and tidy appearance of every detail in and about the premises. It consisted of two buildings—the two-and-one-half story wood frame shingle-style hospital building with decorative shingle work, towers and a roof that did not project beyond the shingle-covered exterior walls of the upper floors. This building was 35x120 feet, costing \$11,500. The second bare bones and smaller, two-story hospital ward building cost \$4,800. The plumbing contract was separate and cost \$6,000 for both buildings.



Chief surgeon's office in the Northern Pacific Hospital in Brainerd. Courtesy of Crow Wing County Historical Society

The hospital was one of the best of its kind, being new, having plenty of light and air, and supplied with every modern convenience. Besides taking care of railroad employees who were injured or ill, private patients were admitted for treatment at a reasonable cost, and the superior advantages offered, made it a very desirable resort

for those in need of medical aid.

In late September of 1885, Dr. Bigger's grizzly bear, which had been confined in an enclosure on the hospital grounds, succeeded in escaping by digging his way out and was never heard from again. The bear was a gift brought from Yellowstone National Park and was highly prized by him.

Dr. Bigger assumed control of the hospital culinary department in October of 1886 and the *Brainerd Dispatch* noted, "If the medical and surgical staff at the [hospital] raise the standard of the culinary department to a par with the balance of the institution it will as a whole indeed be a grand success." By early July of 1888, the hospital was treating all patients east of Helena, Montana and during 1887, 1,050 patients were



Visitors' room in the Northern Pacific Hospital, ca. 1900s. Courtesy of Crow Wing County Historical Society

treated with thirteen deaths and of those five did not reach the hospital and three were mortally wounded.

After serving six years as Chief Surgeon at Brainerd, Dr. Bigger was transferred to St. Paul on September 25, 1888, and was replaced by Dr. Walter Courtney. The *Dispatch* reported in early March 1889 that Dr. Bigger had been residing in St. Paul in "needy circumstances for several months" and that he had raised \$1,000 against his life insurance policy; the *Dispatch* stated further, "consequently the genial doctor and his affectionate son, will be in clover for some time." In failing health, Dr. Bigger died in Kansas City, Kansas on June 23, 1889, he was 75 years old. One of his three sons was taken to the Fergus Falls State Hospital by the

Crow Wing County Sheriff in September of 1891, pronounced hopelessly insane in December of 1893 and died there in February 1901.

After the departure of Dr. Bigger, a *Dispatch* writer had occasion to call at the N. P. Hospital near the end of March 1889 to visit one of the patients and, "While there, Dr. Courtney, the chief surgeon in charge,



Operating Room, Northern Pacific Hospital, ca. 1900s. Courtesy of Crow Wing County Historical Society

kindly showed us through the various wards and departments of the building, and we were deeply impressed with the excellent manner in which the institution is conducted. The entire building from basement to garret has been recently renovated and repainted, and a great many convenient and necessary articles of furniture have been added. The entire building from the laundry and kitchen in the basement, to the upper wards is at all times kept scrupulously neat and clean, and in perfect order. Everything seems to have a place, and is always to be found in that place. There are now about thirty patients in the hospital, all of whom are getting along nicely. This, we were informed by the doctor, is about the average number of patients on hand. The hospital is capable easily of accommodating seventy-five patients, and on a pinch room could be

made for at least a hundred. All employees of the company east of Helena are brought here for treatment in case of sickness or injury. Private individuals, that is, persons not employed by the company, desiring treatment can

enter, the charge being only one dollar a day for nursing and lodging, and a doctor's fee of fifty cents per day. Employees of the company having homes in the city and who do not care to go to the hospital are attended by the physician in charge at their homes and all the medicine and drugs necessary for their treatment can be obtained at the hospital dispensary without additional cost. As one passes through this institution and observes the model manner in which it is conducted, and notes the air of cleanliness and order that pervades the whole institution, he cannot help but be impressed with the wisdom of such an institution and the manner in which it is sustained."

Sometime in 1898, a new operating room and laundry were added to the hospital; and as of



Laundry, Northern Pacific Hospital, ca. 1900s. Courtesy of Crow Wing County Historical Society

January 1, 1900, the employees of the Brainerd & Northern Minnesota Railway [Minnesota & International Railroad] became members of the Northern Pacific Beneficial Association (NPBA), thereby gaining admission to the N. P. Hospital services for fifty cents a month. The hospital treated patients, other than railroad workers and in May of 1900 little four-year-old Charley Wintersteen, who had swallowed a tin whistle two weeks before, was brought to the hospital where the recently acquired x-ray "apparatus" was used to locate the whistle. Unfortunately, Charley died on the morning of the day his surgery was scheduled.

In September 1901, the Northern Pacific engaged architects Read & Stern, of St. Paul, the firm that designed the Grand Central Terminal in New York City, to design the quarters of the nurses who would enroll in its new three-year nurses' training program to be conducted in conjunction with the hospital; Charles B. White, of Brainerd, was the contractor. The first class of young women who entered in 1902, graduated in 1905 and the last graduated in 1921. Although neither the exact number of classes nor the total number of graduates is



Northern Pacific nurses on duty in the hospital ward, ca. 1890s. Courtesy Crow Wing County Historical Society

known, it is believed that by the time of the last graduation, well over one hundred young women had received their diplomas from this nursing school. Those known to have received diplomas were: Mary Strickler, Nellie Agina Caulfield, Bessie Irene Koyl, Martha Bradley Perry, Florence Emily Miller, Bessie Marie Borgers, Mary Lulu Armstrong, Ruth Muriel Armstrong, Georgiana Marie Messier, Alice May Lyddon, Dorothy Harriet Burrell, Esther Marie Zakariasen all of Brainerd; Harriet G. Bradley, Osage, Minnesota; Anna Pearl Wright, Hubbard, Minnesota; Edith Blanche Fraser, Margaret Cudahy, Laura Maud Watson, all of Aitkin, Minnesota; Edith Mable Pederson, Duluth, Minnesota; Olga Pauline Landahl, Lila Mae Heath, both of Little Falls; Katherine Helen

McCarville, Deerwood, Minnesota; Anna E. Rundquist, Winnipeg Junction, Minnesota; Vorine Annabelle Taylor, Bertha Alice Todd, both of Glendive, Montana; Dora Lorraine Reller, Grand Forks, North Dakota; Evelyn Rose Tougas, Cooperstown, North Dakota; Louise Welbanks Case, Toronto, Canada; Katherine Letitia

MacFarlane, Peterboro, Ontario, Canada; Margaret Louise Buchanan, Susan Vivian Miles, Mary Agnes Gavin, Elinor Elizabeth Rose, Nellie Amelia Kling, Mollie Blanche Matheson, Ethel Marion Dodd, Marie Clary, Margaret E. Brady, from whence they came is unknown.

When one thinks of the horrific accidents involving railroad employees, seldom, if ever, does one think of women; however, on December 27, 1905, twenty-four-year-old Emma Peterson, head cook, was kneeling in front of the oven in the hospital kitchen checking on some bread she was baking when the stove exploded. She was blown across the room by the violent explosion and her back and extremities were badly burned. Before anyone could reach her, she ran outdoors in flames. Tablecloths were thrown over her to



Nurses relax in the music room at their residence, ca. 1900s. Courtesy of Crow Wing County Historical Society

extinguish the flames, but it was too late; Emma died two days later. The cause of the explosion was thought to have been from the excessive accumulation of coal gas in the stove.

The annual report of the Northern Pacific Beneficial Association (NPBA) for the fiscal year ending in 1911 showed that 2,106 cases of illness or accident had been treated at Brainerd.

In 1914, after 25 years as Chief Surgeon of the N. P. Hospital in Brainerd, Dr. Walter Courtney retired and was replaced by Dr. Arthur W. Ide. Dr. Courtney died in St. Paul on June 23, 1924, at the age of sixty-nine.

In January of 1916, Brainerd citizens became very agitated when rumors began to circulate that the Northern Pacific Hospital at Brainerd, the largest on the line, was to be moved to the Midway district in St. Paul; however, at the NPBA board meeting held in February, it was decided to build a new \$100,000 hospital at Missoula; thus, there would not be money to build the new hospital in St. Paul for at least four more years. In August of 1921, the Northern Pacific announced that its new, 225 bed hospital, costing \$600,000 and located at Charles Street and Simpson Avenue in St. Paul, would be open for patients on September 1. It was a three-and-four-story structure occupying an entire block. When the hospital was opened for public viewing, August 26 to



Cooking in the hospital kitchen, ca. 1890s. Courtesy Crow Wing County Historical Society

28th, 10,000 visitors registered at the desk and inspected the institution. This new hospital became the base hospital for the entire Northern Pacific railway system. The company had branch hospitals at Glendive and Missoula, Montana; Tacoma, Washington; and Brainerd and Staples, Minnesota. The hospital at Brainerd had been the base, and with its removal to St. Paul, Dr. Arthur W. Ide became the Chief Surgeon in charge there.

A special train of six coaches including two sleeping cars and a baggage car left Brainerd at 8:50 on the morning of August 31, 1921, bound for St. Paul. It carried the Northern Pacific railway hospital staff of doctors and nurses, a number of employees and sixty patients. It marked the closing of a wonderful hospital which, for half a century, had flourished in Brainerd, had

established a national reputation in cases successfully handled and which, during that period, had three chief surgeons, Drs. David Proudfoot Bigger, Walter A. Courtney and Arthur Wheaton Ide. So long had this hospital been an institution in Brainerd that it was difficult for its citizens to become accustomed to the loss. Brainerd people stood on the depot platform and tears were shed as the train sped out. On board were Dr. Ide, chief surgeon, Dr. J. A. Evert and one other doctor whose name is unknown. Also on board was the nursing staff led

by Miss Irene English, superintendent of nurses; Miss Bessie Borgers, night supervisor; Miss Ethel Howard, x-ray technician, and Miss Margaret Brady, supervisor. The nurses in training included the Misses Alice Anderson, Germaine Emerson, Ida Mattson, Mabel Ordahl, Mayme Northridge, Frances Brown, Kathleen Wise and Selma Krogstad. Eight other nurses-in-training had preceded the train to St. Paul several days before. Nurses and other employees on the train numbered forty-five. The special's engineer was George Johnson, fireman John Smith, conductor George Patterson. At the deserted hospital in Brainerd two employees remained, a day and a



New Northern Pacific Hospital built in 1921 in St. Paul led to the demise of the Northern Pacific Hospital in Brainerd, ca. 1925.

night watchman. Arrangements were made in Brainerd for handling emergency cases and those were taken care of by local hospitals. Surgeons in Brainerd hitherto having charge of emergency eye and other cases continued to do so. "Our organization goes to the new general hospital at St. Paul complete," said Dr. Ide. "Not a maid, orderly or doctor of the Brainerd staff has been left in Brainerd."

Upon their arrival at 1 p.m. in St. Paul, the train was stopped at Snelling Avenue, near the new Northern Pacific Hospital, and was met with ambulances and vans. When the patients arrived at the new hospital, they were greeted by bouquets of flowers which had been placed at the head of every bed in the wards and in every private room. The flowers were the gift of employees of the general office of the Northern Pacific railroad there.

The exact date the Brainerd Northern Pacific Hospital buildings were torn down is not known; however, a handwritten notation appearing on the 1917 Sanborn Fire Insurance Map alleges the buildings were torn down in 1922. The only two buildings that remained were the nurses' residence and the residence of the chief surgeon. On March 7, 1923, a fire of unknown origin started in the roof of the former residence of the chief surgeon, either from sparks from the chimney or a passing train, or perhaps from defective wiring in the attic. It burned through the second and first floors, leaving only a shell of the first story standing. The fire department was much hampered in its work, due to the fact that there was no water service in West Brainerd. Two thousand feet of hose was required to reach from the nearest hydrant at the corner of Second and Laurel Streets across the Laurel Street bridge to the scene of the fire. Since only fifteen hundred feet was carried on the fire truck, an extra trip back to the station for more hose was necessary. The hydrant used was at the end of the mains, where water pressure was always very poor, and by the time the water had been carried through two thousand feet of hose, no pressure remained with which to fight the flames. Chemicals were also pressed into service, but little could be done with them in a fire that had gained the headway that this one had attained.

On April 16, 1923, the Alumni Association of the Northern Pacific Hospital's Nurses' Training School held its annual meeting in Brainerd; at the time, the membership exceeded one hundred. The only building currently remaining of the Northern Pacific Hospital complex is the nurses' residence located south of the Riverside School.

Northern Pacific Tie Plant

It is thought that the work of building the tie plant in West Brainerd commenced sometime in early 1907. In April, a warehouse and temporary office 20x30 feet was under construction at the site in West Brainerd, near the corner of Florence and Tenth Streets, southwest. Apparently the tie plant was having difficulty hiring and retaining employees so in July they installed boarding cars to accommodate the men employed at the tie plant



Tie plant, ca. 1912. Postcard

working at unloading and peeling ties. The men had been complaining for some time about the distance they needed to go for food, many made that an excuse for quitting the job. Yet, when boarding cars were installed and preparations made to serve supper not a single man stayed, all came to town. The railroad also shipped men in for work at the plant, but soon discovered the men were not interested in working there for more than a couple of days—they were only interested in a free ride to Brainerd. The plant was built for the Northern Pacific by the Columbia Creosoting Company; C. A. Ackerman superintended the work. Andrew Gibson, of Missoula, Montana, was to be in charge of both of the N. P. tie

plants. The second plant was built at Paradise, Montana at about the same time as the Brainerd plant. Gibson stated that the crew for both plants would average about one hundred twenty-five and the plant at Brainerd would run nearly the entire year. He thought it might be necessary to shut the plant down for the three coldest months of the year, but, if it was possible to keep the material used in processing the ties from freezing, the plant would remain open the year around. Even before the plant opened, the railroad was looking to purchase more land to store the ties. By the end of September, the company had about fifteen men boarding there with

space for about one hundred. The Columbia Creosoting Company was to furnish a man to run the plant for six days before it was accepted and paid for by the railroad company. The company provided its own electrician who was in charge of the electric railroad at the plant. It was said there were over 140,000 peeled and piled ties west of the plant and there were a large number, probably 50,000, unloaded west of the plant awaiting peeling and a yard nearly as large east of the plant was well filled. The work of unloading ties went on all the time.

There were two or three crews working by the day while a number of men were working by the piece. The company paid \$1.75 per hundred for unloading birch ties and two men working together unloaded eight hundred in one day. It was hard work, but paid well for the times. The men engaged in unloading wore heavy pads, usually horse collar sweat pads, double, on their shoulders to protect them. The trolley line, which would handle the ties in the plant was complete and the motor cars were on the premises. The track was a narrow gauge and the cars were of iron built especially for tie plant work. A train of sixteen cars was pushed into each retort. Retorts are like long horizontal boilers with a door on one end that bolts closed. Rails run into that end and the raw ties are delivered on narrow gauge cars for treatment at one time. All the buildings were of corrugated steel or steel framework and were as nearly fireproof as possible. The



Bucking Ties Birney Wilkins Collection Courtesy of Crow Wing County Historical Society

big storage tank had been filled with creosote—ten tank cars of it had been received. It was pumped by steam pumps, from the tank cars, into the storage tanks and from the storage tanks, by the same method, into the retorts.

A representative of the *Brainerd Dispatch* was present at the tie preserving plant when the first train load



Loading ties, ca. 1925. Courtesy Minnesota Historical Society

of treated ties was hauled from the retort on October 14, "The retorts in which the ties are treated, to which the rest of the plant is auxiliary, are immense cylinders of boiler steel about eight feet in diameter and over one hundred thirty feet long. They rest horizontally on cement foundations, one end being closed while the other is fitted with an immense circular door held in place by a large number of two-inch bolts carrying heavy nuts, by which the door is hermetically sealed. The ties are loaded on cars each capable of carrying fifty ties. These cars are of steel and iron and are fitted with racks so shaped that the outlines of the load closely follow the shape of the retort. The capacity of each retort is sixteen cars, or eight hundred ties to the retort and two retorts are used, making 1600 ties treated at one time.

"The process consists in forcing a liquid creosote into the pores of the ties, which should be well seasoned, under a heavy pressure, after which the creosote is drawn off into tanks below the retorts and a vacuum created, which draws the surplus creosote from the ties. They are then hauled from the retort and the work repeated with another bath. The actual time for treatment is about four hours.

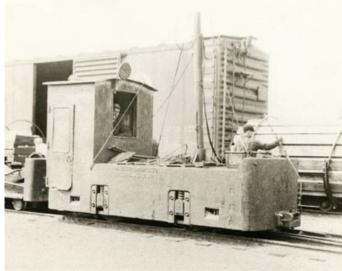
"The cars, which are narrow gauge, are hauled or pushed, as may be necessary by an electric motor having a draw bar power of fifty tons and capable of easily handling 16 cars with their load of 800 ties. The

current is supplied by a volt dynamo geared direct to a 50-horse-power engine, and making 300 revolutions per minute.

"The ties when they enter the retort are clean looking and sweet smelling, but when they emerge, they are black as an old hat and the odor, faugh! The entire place smells as if all the women in Christendom had stored their furs there and liberally supplied them with moth balls.

"In addition to, or rather auxiliary to the retorts, are the big steam pumps which force the liquid into the ties under heavy pressure, and the immense air pumps for use in creating a vacuum. There is also an immense storage tank outside, and two smaller ones which stand on their ends over the center of the retorts. The creosote, after being drawn into the tanks below the retorts, is again pumped into the upper tanks to be used again.

"...the local plant is under the charge of Lowry Smith, formerly with the Columbia Creosoting Co., the owners of the patents covering the process, and builders of the plant. There is also an electrician and engineer and



Electric Locomotive
Birney Wilkins Collection
Courtesy of Crow Wing County Historical Society

of the plant. There is also an electrician and engineer and a time keeper employed at the plant, besides the large number of men required to unload, peel, handle and reload the ties.

"The institution is one that will mean no small thing for the upbuilding of Brainerd and its starting is of much more significance than many think."

The first shipment of ties from the tie preserving plant was made on October 21 and the ties were to be shipped as fast as possible from then on. The fact that they were very flammable after treatment made it inadvisable to keep them stored in large quantities,



Locomotive Number 8
Birney Wilkins Collection
Courtesy of Crow Wing County Historical Society

especially in close proximity to the tie plant.

By early January 1908, the old log landing dock on the West side of the Mississippi River below the M. & I. bridge had been removed and logs were unloaded directly from the tie plant spur. The C. A. Smith Lumber Company expected to land about two million feet there during that winter.

In early October 1921, a crew of from forty to fifty men were employed at the tie plant. The daily output



Dinky engine used to handle ties at the Tie Plant, now located at the fairgrounds.

Courtesy of Crow Wing County Historical Society

of ties treated with creosote was 3,000. Material on hand to be treated, including ties, switch ties, bridge material, the plugs, etc., insured a steady run of eight months. Levi Johnson was the superintendent of the plant,

G. H. Stone was foreman, Carl Anderson engineer and electrician, Bert Edwards treating engineer, Frank Roberts motorman, Seymour Clark, boiling and adzing machine operator, C. D. Clark helper. Other workers were the firemen, laborers, the handlers, etc.

In November 1935, fifty men were at work at the Northern Pacific tie treating plant. It was thought seventy-five or eighty men would be employed when the operations reached their peak. The payroll was estimated to be between \$6,000-\$8,000 per month. Approximately 500,000 ties would be run through the local plant. Raw stock, estimated at 572,000 ties, had been contracted for and was arriving daily.

In May 1971, about fifty men were employed at the tie plant. In 1982, it was estimated that the tie plant spent about a thousand dollars a month in Brainerd.

It was announced, on January 23, 1986, that the tie plant, then owned by the Burlington Northern Railroad, would close by the end of the year. The closure would result in the layoff of fourteen of the plant's twenty-four workers. The reason given was that the railroad no longer replaced as many ties as it had in the past and that the railroad preferred hardwood ties rather than softwood ties. The tie plant closed on September 19, 1986. The dismantling of the plant began on October 2, and was to continue for six weeks. Cleanup of the area was to continue for six years, after which grass and trees were to be planted. The cleanup was necessitated by the plant's use of creosote, a liquid preservative used to treat the railroad ties. Because this is a Superfund site, the EPA and the Minnesota Pollution Control Agency have conducted several five-year reviews of the site's remedy. The most recent review, completed in 2016, concluded that response actions as implemented at the site are protective of human health and the environment in the short term. However, the review recommended additional investigation and evaluating remedial alternatives for contaminated groundwater and source areas, updating the remedy for the site, and adding institutional controls to ensure that future land use is protective. These actions are underway. At its peak, the stockyard contained up to a million ties and produced 700,000 treated ties annually.

ENDNOTES

- (1) Brainerd Tribune, September 29, 1877, p. 1.
- (2) Minneapolis Tribune, January 1, 1882, p. 6.
- (3) Brainerd Daily Dispatch, January 27, 1926, p. 7.
- (4) Brainerd Tribune, January 25, 1873, p. 1.
- (5) Duluth Minnesotian, March 11, 1871.
- (6) New York Times, August 6, 1875, p. 2.
- (7) Brainerd Tribune, August 7, 1875, p. 1.
- (8) Brainerd Tribune, September 11, 1875, p. 1.
- (9) As I Remember, Dr. Werner Hemstead, Works Progress Administration autobiography.
- (10) Brainerd Dispatch, August 2, 1883, p. 3.
- (11) Brainerd Dispatch, June 28, 1889, p. 4.
- (12) Brainerd Dispatch, December 22, 1893, p. 4.
- (13) Brainerd Dispatch, March 29, 1889, p. 4.
- (14) Brainerd Dispatch, October 15, 1907, p. 3.

Cover photo, Ron V. Nixon Collection, Image Record-RVN15038, June 28, 1949. 2-8-2 Mikado, Number 1764, with auxilliary tender, in Brainerd, Minnesota yard, with the iconic concrete water tower in the distance.

Ann M. Nelson is a researcher, genealogist, and writer who has been chronicling the history of Brainerd for over 25 years. Her grandfather, Martin Henry Nelson (1870-1950), worked for the Northern Pacific for nearly 55 years, retiring in 1941 as Superintendent of the Brainerd shops. Her family has nearly 150 years of combined service with the Northern Pacific beginning in Duluth about 1869.

Parts of this article appeared in *A Brief History of Early Northeast Brainerd*, by Ann M. Nelson, June 18, 2016; *Along the Mississippi from Rice Lake to Boom Lake*, by Ann M. Nelson, August 9, 2018; and "Brainerd's Northern Pacific," *The Mainstreeter*, Northern Pacific Railway Historical Association, Summer 2019, Volume 38, Number 2.

More Information About Brainerd History Can be Found Here

Crow Wing County Historical Society Website

http://www.crowwinghistory.org

• A Brief History of Early Northeast Brainerd

http://www.crowwinghistory.org/downloads/BriefHistoryOfEarlyNortheastBrainerd.pdf

• A History of the Northern Pacific Railroad in Brainerd

http://www.crowwinghistory.org/nprr.html

• Along the Mississippi from Rice Lake to Boom Lake

http://www.crowwinghistory.org/downloads/AlongTheMississippiFromRiceLakeToBoomLake.pdf

• Brainerd City Bands

http://www.crowwinghistory.org/brainerd bands.html

• Brainerd: City of Fire

http://www.crowwinghistory.org/brainerd fires.html

• Brainerd Newspapers

http://www.crowwinghistory.org/brainerd newspapers.html

• Brainerd Papermills

http://www.crowwinghistory.org/paper mill.html

• Brainerd Street Views

http://www.crowwinghistory.org/brainerd street views.html

• Brainerd Utilities

http://www.crowwinghistory.org/brainerd utilities.html

• Bridges, Dam, Jumps, Steamboats and Ferries

http://www.crowwinghistory.org/brainerd stuff.html

• Buildings & Parks of Some Historical Significance to Brainerd

http://www.crowwinghistory.org/buildings.html

• Downtown Brainerd: Then and Now

http://www.crowwinghistory.org/brainerd downtown buildings.html

• Early Accounts of Brainerd and its Surrounds

http://www.crowwinghistory.org/early accounts.html

• Happenings in Brainerd in 1914

http://www.crowwinghistory.org/brainerd 1914.html

•N. P. R. R. 1888 Directory

http://www.crowwinghistory.org/nprr_directory_1888.html

• Northside History Walk Booklet

http://www.crowwinghistory.org/downloads/NorthsideHistoryWalk2015.pdf

• Sheriffs of Crow Wing County 1865-Present

http://www.crowwinghistory.org/downloads/CrowWingCountySheriffs.pdf

Soiled Doves Roost in the City of Pines

http://www.crowwinghistory.org/soiled doves.html

• Evergreen Cemetery Burial Records

http://www.evergreencemeterybrainerd.com/dotd.html

Crow Wing County USGenWeb

http://crowwing.mngenweb.net

• City of Brainerd Historic Newspapers, Maps, etc.

http://www.ci.brainerd.mn.us/documentcenter

• Brainerd History Group

http://fertfaust.wixsite.com/brainerd-history

© 2019 Ann M. Nelson

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law. For permission requests, write to the publisher, at the address below:

Administrator/Executive Director Crow Wing County Historical Society P. O. Box 722, Brainerd, Minnesota 56401