



Nebraska History posts materials online for your personal use. Please remember that the contents of *Nebraska History* are copyrighted by the Nebraska State Historical Society (except for materials credited to other institutions). The NSHS retains its copyrights even to materials it posts on the web.

For permission to re-use materials or for photo ordering information, please see:

<http://www.nebraskahistory.org/magazine/permission.htm>

Nebraska State Historical Society members receive four issues of *Nebraska History* and four issues of *Nebraska History News* annually. For membership information, see:

<http://nebraskahistory.org/admin/members/index.htm>

Article Title: Nebraska City's Steam Wagon

Full Citation: William E Lass, "Nebraska City's Steam Wagon," *Nebraska History* 79 (1998): 24-33

URL of article: <http://www.nebraskahistory.org/publish/publicat/history/full-text/NH1998SteamWagon.pdf>

Date: 2/22/2013

Article Summary: Promoter Joseph Brown brought the first self-propelled vehicle, a steam wagon, to Nebraska City in 1862. Although his machine broke down and had to be abandoned only a few miles west of town, it did inspire trail improvement in Otoe County and beyond.

Cataloging Information:

Names: Joseph "Joe the Juggler" Renshaw Brown, David L Osborn, Charles B Sloat, James Lawrence, John A Reed, Beers Johnstone, Isaac Coe, Edward S Gregg

Place Names: Nebraska City, Nebraska; Fort Kearny, Nebraska; Henderson, Minnesota; Denver, Colorado

Keywords: "prairie motor," Hudson's Bay Company, Great Central Airline Route (Steam Wagon Road), Union Pacific Railroad, Fort Kearny Trail, *Mazomanie*, Joseph Brown, John A Reed, Edward S Gregg

Photographs / Images: the steam wagon after its arrival in Nebraska City, 1862; Joseph Brown; pen and ink drawing of the steam engine by an unknown artist; Nebraska City street scene sketched by Alfred Matthews in 1865; Isaac Coe; Otoe County steam wagon road bond, 1863; steam wagon marker dedicated in 1914

Nebraska City's STEAM WAGON

By William E. Lass

Monday, July 14, 1862, was a memorable day in the history of Nebraska City, Nebraska, the Missouri River port, which was then the nation's leading overland freighting center. When a steamboat arrived from downstream St. Joseph, Missouri, it carried on its deck a massive steam wagon. This noisy, smoke-belching machine was immediately run off the boat under its own power and steered about a mile northwestward from the levee across a rock ford on South Table Creek and up the Sixth Street hill to the town's center. As the first self-propelled vehicle in Nebraska, which at that time was immersed with talk about the planned transcontinental railroad, the steam wagon or "prairie motor," as it was dubbed by the local press, attracted throngs of curious spectators, who were delighted by its shrill whistle.¹

The imposing machine, which weighed about ten tons when its 472.5-gallon water tank was full, was powered by four ten-horsepower oscillating engines, and had rear wheels ten feet two inches in diameter with rims eighteen inches wide and front wheels with a diameter of six feet. The water tank comprised most of its length, with the upright boiler at the rear. The steering wheel, which was similar to that used on steamboats, was near the front ahead of the furnace.²

Accompanying the steam wagon on its long trip from New York City was a party of five men led by its proprietor Joseph Renshaw Brown of Minnesota. The three men who drove the wagon were experienced railroad locomotive engineers David L. Osborn and Charles B. Sloat, and James Lawrence, the fireman. They all had worked previously for John A. Reed, the machine's builder. The fifth man was Daniel Dangerfield, a black male nurse who was brought along to care for the fifty-seven-year-old Brown, who was suffering from erysipelas, a painful, infectious skin rash.³

Although Brown was always somewhat of a mystery man in Nebraska City, he was a celebrity in Minnesota where he had played a major role in the region's development. Brown entered Minnesota in 1820 as a fifteen-year-old army musician at Fort Snelling, which had been established as the nation's northwesternmost military post only a year before. After achieving the rank of sergeant he left the army in 1825 to pursue the fur trade. While trading he earned the distinction of being Minnesota's first wheat farmer and first exporter of log rafts. In 1840 he was instrumental in organizing St. Croix County, Wisconsin Territory, which as the first governmental unit in later Minnesota included all of the land between the St. Croix and Mississippi rivers. As the first representative from St. Croix County in the Wisconsin Territorial Legislature, Brown succeeded in having his claim of Dacotah (present-day Stillwater) named the county seat.

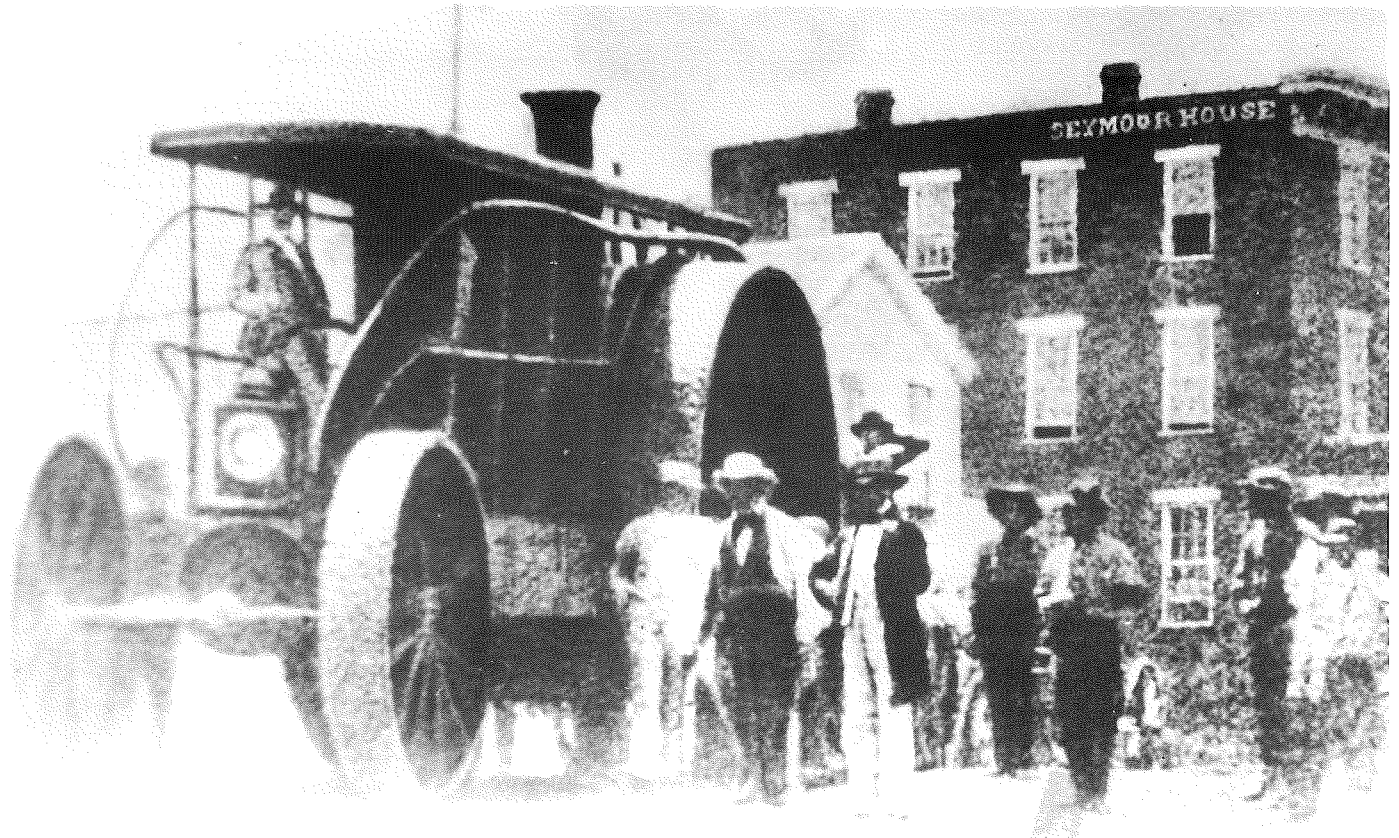
As a power in Democratic Party politics Brown dominated the Stillwater

Convention of 1848, the meeting that stimulated the organization of Minnesota Territory the next year. During the brief territorial period, 1849–58, he served as the first clerk of the House of Representatives, a member of the Council, and as territorial printer. He was generally credited with having led the way in codifying the territory's laws and in writing numerous important bills. Almost frenetically active, outside of the legislature he edited the *St. Paul Pioneer*, the territory's major Democratic newspaper, founded the community of Henderson in the newly opened Minnesota River valley, and while serving as the agent to the Dakota (i.e. Santee or Minnesota Sioux) Indians, plotted to develop Dakota Territory with its capital at Sioux Falls and to connect Minnesota and South Pass on the Oregon-California Trail by a northern route.⁴

With a reputation for connivance Brown, who was commonly called "Joe the Juggler," was a frequent target of Republican critics, who saw him as the best symbol of the old, conservative Democratic Party. Although critics thought he was unscrupulous, Brown was also seen by contemporaries as hard-working, enterprising, thoughtful, and extremely intelligent. His last major public role underscored his importance. In 1857 while representing the Henderson area in Minnesota's highly contentious constitutional convention, he served on the committee that produced the final agreement on the state's constitution. After his close friend and former fellow fur trader Henry Hastings Sibley was chosen as the state's first governor, Brown was named a major general in the state militia.

William E. Lass is professor of history at Mankato State University, Mankato, Minnesota. His publications include From the Missouri to the Great Salt Lake: An Account of Overland Freighting, published by the Nebraska State Historical Society in 1972.

Steam Wagon



The steam wagon after its arrival in Nebraska City, 1862, with the Seymour House hotel in the background.
NSHS-S800:1-1

Despite his impressive background Brown was almost universally regarded as a gadfly whose flitting from venture to venture precluded him from major financial successes. To friends and critics alike the best evidence of his impractical side was his dream of revolutionizing overland transportation by using steam wagons. While the "Prairie Motor" was new to Nebraska Citians it was actually the second steam-powered vehicle financed by Brown.⁵

Among his Henderson activities Brown, in 1856, started the *Democrat*, a typical boosterish frontier newspaper. Probably because of his newspaper career Brown became acquainted with the *Scientific American*, a magazine devoted to promoting technology. It regularly carried reports about experiments with steam carriages and other vehicles in both England and the United States.⁶

Brown was certainly aware of this new technology by 1859 when the Hudson's Bay Company re-routed its freight shipments to Fort Garry (present-day Winnipeg, Manitoba, Canada) from the Hudson Bay route through the Great Lakes and St. Paul. Seeing an opportunity to participate in this business by replacing the traditionally used Red River carts with a steam wagon, Brown negotiated with Reed to have such a machine built in New York.⁷

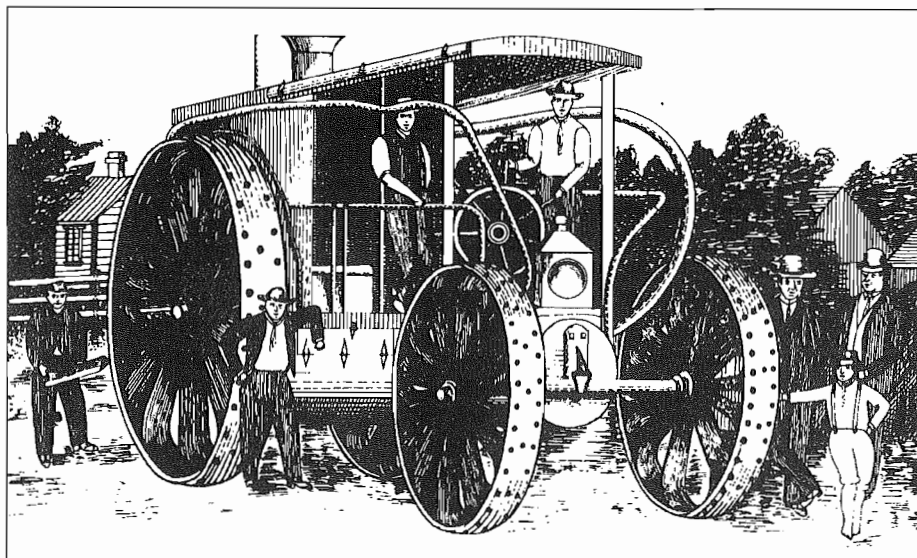
Brown paid Reed \$4,000 to make the wagon, which was shipped partially assembled as far as Red Wing, Minnesota, on the Mississippi in 1859. It was finally unloaded from the steamboat *Eolian* at Henderson on May 19, 1860. Reed and Sloat traveled to Henderson to repair some broken and bent parts and completely assemble and test the wagon, whose wheels had a unique tricycle-like

arrangement with two rear driving wheels eight feet in diameter and a three-foot diameter front steering wheel. The driving wheels appeared to be wheels within wheels, because the actual six-foot diameter driving wheel was connected by cog wheels and spokes to a broad metal rim a foot and a half wide that was intended to provide a firm surface so the geared wheel would never directly touch the ground.⁸

Assisted by Beers Johnstone, a mechanic in Brown's employment, Reed and Sloat made the wagon's inaugural run on July 4, 1860. As part of Henderson's Independence Day celebration it chugged up and down Main Street carrying eager passengers to the loud cheers of a watchful crowd. While this performance seemed to satisfy many observers who were apparently willing to bet that it would not move at all, it did not satisfy



Joseph Renshaw Brown. NSHS-P853



This pen and ink drawing of the steam wagon by an unknown artist was based on a now-lost photograph. NSHS collections

Brown, Reed, or Sloat, because it moved too slowly. After weeks of work adjusting the gears Reed and Sloat finally were able to achieve a speed of about two and one-half miles per hour, about that of mule-drawn wagons and only slightly faster than ox-drawn freight wagons.⁹

In the meantime Brown, who had failed in his effort to transport Hudson's Bay Company goods, decided to send the wagon to Fort Ridgely, about forty miles west. In tests the machine was navigated up Fort Hill, the long incline leading from river bottom Henderson to the prairie that stretched off to the west. Finally, in October, *Mazomanie*, christened by Brown with a Dakota Indian name meaning "Walking Iron," was started for the fort with Johnstone in charge. After twenty-eight frustrating days, replete with the necessity of building plank roads across sloughs, Johnstone and the machine (less a towed wagon that had to be abandoned in a mudhole) reached a creek about four miles east of Fort Ridgely. There the iron monster bogged down on the eve of the season's first heavy snow that drifted it in for the winter. It was still there when Brown arrived in Nebraska City with his second wagon.¹⁰

After their dismal experience with *Mazomanie*, Brown and Reed concluded that their second wagon should be faster, lighter, and have four wheels with the rear driving wheels running directly on the ground. According to Brown the Nebraska City machine could move at four and one-half miles per hour, but in Nebraska City it was reported to have speeded to about eight miles per hour down steep Main Street (present-day Central Avenue).¹¹

The Nebraska City wagon purportedly had been tested successfully on hills in New Jersey, before being shipped intact from New York City. Osborn recalled that it created a sensation in New York City, where its noisy run from the factory to the railroad depot frightened horses and caused the mayor to ban any further daytime movement with it. Its five-week passage from New York City to Nebraska City was by rail to Quincy, Illinois, on the Mississippi, by way of Elizabeth, New Jersey, Harrisburg and Pittsburgh, Pennsylvania, and Chicago. From Quincy it was carried by steamboat to Hannibal and from there across Missouri on the Hannibal and St. Joseph Railroad. Brown's total costs to his arrival in Ne-

braska City, including \$5,950 for the wagon's construction, were \$7,583.62.¹²

Recognizing the need to curry public favor the congenial Brown grandly put on a steam wagon show for delighted Nebraska Citizens. To demonstrate the newly repainted wagon's capability Osborn, Sloat, and Lawrence ran it across South Table Creek to Kearney Heights, the hilliest part of Nebraska City. After ascending Kearney Hill (present-day Kearney Park) they maneuvered the machine through unbroken prairie sod and brush copses for about half a mile. Later with the Stars and Stripes fluttering above the steam wagon, they gave rides around town to men, women, and children in towed wagons. A good time was had by all, with the possible exception of David J. Goff, whose straw hat was set on fire by a spark from the smokestack. After the rides Brown, his crew, and some of Nebraska City's principal citizens celebrated with a banquet in the Seymour House, amidst animated conversation about the wagon's pending trip to Denver.¹³

Although neither Brown nor his steam wagon had really proven themselves in Nebraska City they were enthusiastically supported by the town's two newspapers, the Democratic organ—the *News*—

Steam Wagon

and the Republican *People's Press*, which usually had difficulty agreeing on anything beyond the time of day. In Brown, the editors, who had led the way in ballyhooing Nebraska City's superiority as a Great Plains shipping point, saw a new opportunity to promote their town's advantages. They had traditionally advocated improvement of their town's much proclaimed "Great Central Airline Route" to Fort Kearny on the Oregon-California Trail, which was within a mile and a half of being due west of Nebraska City. Trail improvement was important to overland freighters, merchants, and settlers between Nebraska City and the western edge of settlement at Salt Creek (near present-day Lincoln). They correctly sensed that Brown's monstrous steam wagon would require a good road. Beyond the immediate goal of trail improvement the editors naturally recognized that the Nebraska community that became the starting point of the projected Union Pacific Railroad would become the regional metropolis. When Brown appeared in Nebraska City the railroad had been authorized, but its eastern terminus had not been fixed. Thus, Brown was promoted as an endorsee of the proclaimed superiority of the Nebraska City route west.¹⁴

Brown, as a veteran journalist and

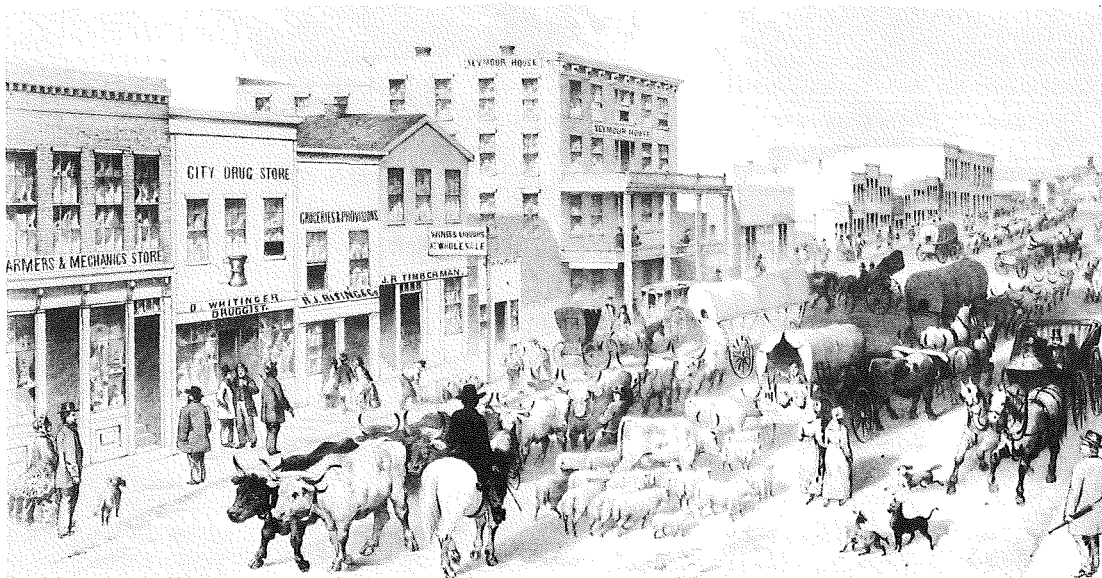
politician, was certainly no stranger to promotion whose half truths and deceptions played on wishful thinking. To Nebraska Citians he was "General" Brown. He apparently liked the sound of the title. It is somewhat strange that with his numerous accomplishments he chose to be recognized by his rank in the Minnesota militia. But during the Civil War the title of "general" sounded important, especially without any accompanying explanation of Brown's real status. As portrayed in the Nebraska City newspapers "General" Brown's sagacity in choosing the Great Central Airline Route for his steam wagon's run to Denver proved it was the best possible one for the Union Pacific.¹⁵

Despite the near euphoria about Brown's pending great adventure both newspapers tried to temper expectations. The *People's Press* cautioned that a quick passage to the Rockies was unlikely because Brown was undertaking a trial trip to establish water and fuel stations and improve stream crossings. Subsequent trips with lighter wagons, the editor opined, would reach Denver from Nebraska City in only about four days. Hedging its bets the *News* advised the citizenry to take the long range view by suggesting, "The present machine *may* not be entirely successful. If it is not, its

failure will not prove the system a failure; it will instead demonstrate the problem of what is wanted to make it successful, and lead to the adoption of new applications of the principle involved."

By the time the steam wagon expedition set out for distant Denver on July 22 the venture had really become a community enterprise. Joseph S. Phebus recalled that the merchants of Nebraska City vowed to show their support for the undertaking by sending their best men and wagons along. Phebus, hired by Robert Hawke, a prominent merchant and freighter, even had the opportunity of briefly steering the steam wagon. The excitement over the wagon's pending run carried along the trail all the way to Denver, where veteran freighter Eugene Munn recalled that the wagon's anticipated arrival was the most popular topic of conversation. Along the trail Munn and other freighters feared the puffing contraption would spook their animals.¹⁶

Munn need not have worried. The wagon's trip fell far short of expectations. When Osborn steered the wagon out of downtown Nebraska City it was pulling three wagons. The largest was used as a tender and the other two were loaded with a total of perhaps four tons of flour. Soon Osborn and his crew were troubled by foamy water being ejected from the



Nebraska City street scene sketched by Alfred Mathews in 1865. Compare with the photograph showing the steam wagon parked near the Seymour House. NSHS-N361-6

boiler into the engines before it could be converted into steam. Reed later estimated that this problem reduced the wagon's power by at least half. As Osborn guided the wagon past the northwest corner of J. Sterling Morton's farm (Arbor Lodge) and out along the freighting road it was unable to pull its train up relatively gentle inclines. He was forced to run the steam wagon alone to the tops or downsides of slopes and then pull the wagons up with a long rope. This procedure certainly did not bode well for reaching Denver any faster than ordinary wagon trains, which usually took about five weeks.

The steam wagon's struggles ended abruptly when a crank on one of the engines broke only about three miles west of Morton's farm, which, in turn, was about a mile northwest of downtown. Without local repair facilities Brown knew immediately that he had to have the part fixed by Reed in New York City. He was careful, however, not to rush quickly out of town. First he had to secure vital community support. Town leaders, apparently undaunted by the breakdown, organized a community meeting on July 27, five days after the wagon was halted.¹⁷

General Isaac Coe, the district commander of the Nebraska militia and the partner of a leading freighting company, took charge. After he called the meeting to order, John H. Croxton, a territorial legislator and the attorney for Nebraska City, was elected chairman. The unspecified number of people attending the "mass" meeting expressed their satisfaction with the demonstrated performance of the steam wagon and affirmed their belief that it would bring their town within three days travel of Denver, about 535 miles away. Believing that Brown's plans would "prove to be a great blessing to the traveling community and of untold advantage to the Territory," they unanimously approved a resolution asking that the Otoe County commissioners authorize the building of a public road to the county's western boundary. Brown, for his part, was expected to establish a



Isaac Coe. NSHS-P853

regular steam wagon service to Denver, which would entail the building of an additional wagon.¹⁸

Before leaving Nebraska City, Brown regaled his audience with a detailed plan of future steam wagon service that far exceeded the community's expectations. He would not only build an additional wagon, he promised, but would, in fact, have six new ones built and also have the Nebraska City wagon repaired as well as renovated and move overland the abandoned Minnesota wagon. Brown intended to deliver the first new wagon to Nebraska City in October 1862, and the second two months later with the sixth and last to arrive in April 1863. Brown pledged to provide winter-time transportation in 1862–63 with the first two new wagons. Once his complete fleet of eight wagons was on hand, he said, he would regularly run the six new wagons between Nebraska City and the mouth of the Cache la Poudre River only thirty-five miles from Denver, with the two old wagons providing the Cache la Poudre-Denver service.¹⁹

Brown's projections were predicated on the assumption he would successfully organize a steam wagon company that would attract major investors and show a profit of \$30,000 by June 30, 1863. He estimated the company's freight business to that time at 1,200 tons, the equivalent of six hundred ox-drawn wagons and not quite one-third of Nebraska City's annual business.

The outpouring of community support and Brown's optimism about future business proved that the steam wagon's short, abortive run was not seen as a failure, but rather as a great success. The astute Brown evidently realized that all he had to do in Nebraska City was demonstrate his wagon.

Despite his self-promotion it is quite unlikely that Brown ever intended to run the wagon all the way to Denver. He obviously knew it was too heavy and lacked power. Furthermore, he had not established wood and water stations along the trail. With a machine that consumed a cord of wood every four hours, even with the towed fuel tender he would have required extensive stockpiles. Nebraska Citians, well-acquainted with the problems of trail life, knew there was but scant timber in the 130-mile stretch from Salt Creek to Fort Kearny. As for water, Brown's engineers, who had much difficulty generating power in using the muddy waters of the Missouri, could hardly have seen better prospects in either the Platte River or the alkali-laden ponds west of Fort Kearny. Obviously, in order for the wagon to proceed in a timely fashion it would have been necessary to have numerous water tanks along the trail, because the wagon's tank had to be refilled after only about three and one-half to four hours of operation. Interestingly, in the plan Brown elaborated after the mass meeting, he meticulously showed estimated costs for wood and water tanks.²⁰

Leaving Nebraska Citians with the promise of a rosy tomorrow Brown went to New York City to have the crank repaired and make arrangements for the construction of new wagons and the or-

Steam Wagon

ganization of a steam wagon company. All interested parties, including Osborn, Sloat, and Lawrence, whom he left in Nebraska City, assumed he would return soon. In New York Brown and Reed agreed to become equal partners in the planned steam wagon company. Their grand plan had everything but money. Essentially, Brown contributed an idea and Reed mechanical knowhow, but they needed to attract investors. Ultimately, the unwillingness of New York capitalists to fund what appeared to be a bizarre scheme doomed the construction of more steam wagons. Part of the steam wagon mythology includes the belief that Reed could not work on the wagons because of his wartime commitments to a defense contractor. There is not a scintilla of evidence in the Brown-Reed correspondence that supports that notion. Rather, Reed, for about a year after the Nebraska City trial, enthusiastically worked with Brown to raise capital in New York City and never mentioned his other work as a deterrent.²¹

Within a matter of days after reaching New York City Brown realized that new, lighter wagons could not be rapidly funded and built. So he and Reed developed a contingency plan of first repairing the Nebraska wagon and then completely renovating the Minnesota wagon and driving it overland to Nebraska City by November 1, 1862. As Reed started working on new wheels, tank, and other parts for the Minnesota wagon, Brown left for home in the expectation that Reed would join him near Fort Ridgely to make the necessary alterations on *Mazomanie*. But his plans were soon dashed.

As Brown was traveling by steamboat up the Mississippi toward St. Paul he learned of the outbreak of an Indian war in Minnesota. On August 18, 1862, some of the reservation Dakota attacked the Lower Sioux Agency (near present-day Redwood Falls). Brown's immediate concern was for the safety of his mixed-blood wife and children who were living at his recently constructed

stone house—Farther and Gay Castle—just across the Minnesota River from the Indian reservation.²²

Hurrying home he overtook the army that was advancing from Fort Snelling near St. Paul to Fort Ridgely. Brown was commissioned as a major in that force and added to the staff of its commander, Henry Hastings Sibley. Contrary to early reports of their deaths at the hands of hostile Indians, Brown's wife and children were taken prisoners, but later rescued. Brown's new house, however, was destroyed.

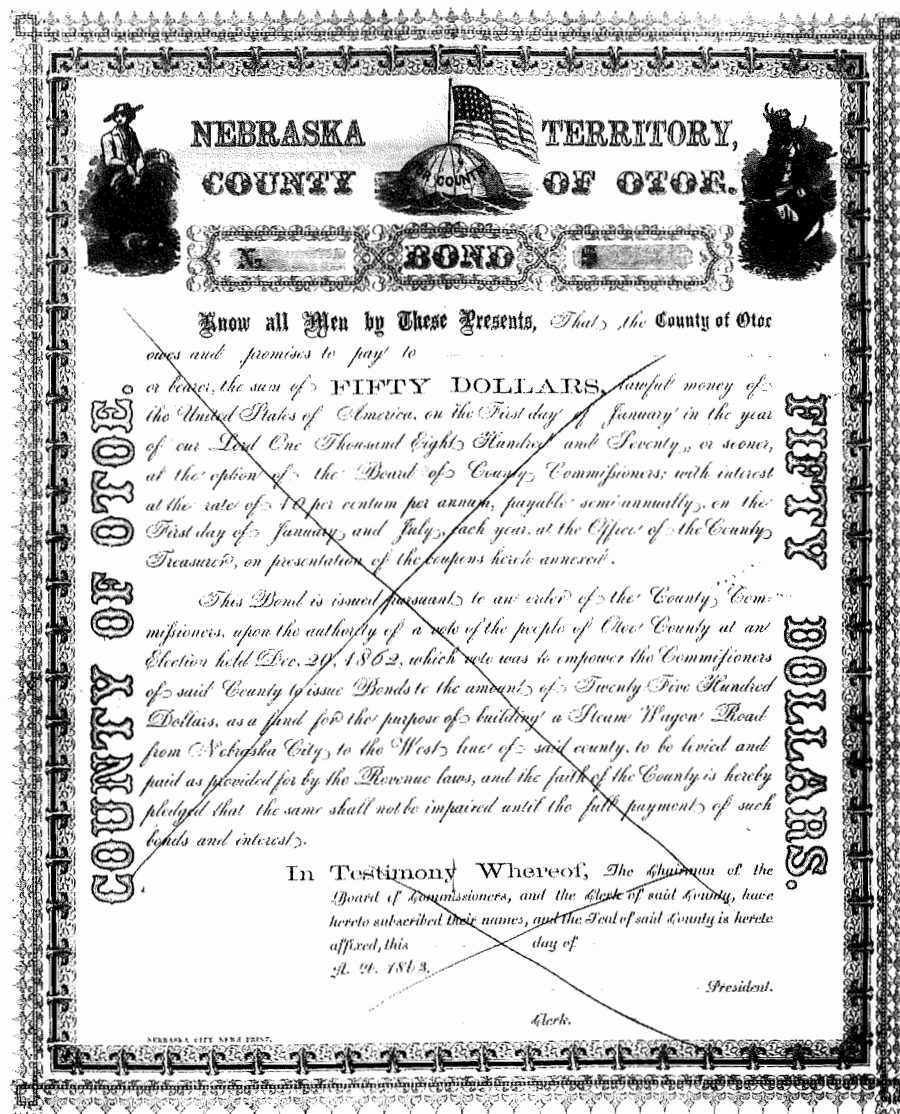
Brown subsequently served in the Minnesota campaign against the Indians and in 1863 participated in the army's expedition into Dakota Territory. From active campaigning he moved to the position of supervising the apprehension of fugitive Indians and organized a unit of pro-white Dakota scouts based at Fort Wadsworth in present-day northeastern South Dakota. After leaving the army in 1866 Brown organized a trading company, Joseph R. Brown & Sons, based at Lake Traverse, Minnesota, which was renamed Browns Valley in 1872 in his honor. While trading in association with some of his former Henderson partners he extended his operations to places as distant as Devils Lake, in present-day northeastern North Dakota. Most of Brown's trade was with the Sisseton and Wahpeton bands of the Dakota, who generally had not participated in the Minnesota conflict. Brown as their legal representative was instrumental in negotiating the creation of a new reservation for them.²³

For about a year after the Minnesota hostilities devastated his steam wagon scheme, Brown hoped to renew the venture despite his lack of funds and the failure to attract investors. Through Reed, Osborn, and Sloat he received news from Nebraska City. In September 1862 Osborn, Sloat, and Lawrence, who had the wagon running again, thought Brown would soon rejoin them. Not only did Brown not return, but he was extremely tardy in corresponding with them and paying their monthly wages of

\$50 each as well as their daily board bills of fifty cents each at the Seymour House. After frequent pleas from Osborn for money and instructions and duns from Albert Tuxbury, the proprietor of the Seymour House, he reluctantly met his obligations. Sloat left Nebraska City and returned to New York City sometime early in 1863, but Lawrence and Osborn stayed, firm in their conviction that they needed to continue to represent Brown's Nebraska interests.²⁴

Osborn became involved with the trail improvement matter. Responding to the mass meeting's resolution the Otoe County commissioners authorized the sale of \$2,500 worth of county bonds to improve the freighting road from Nebraska City to the western boundary of Otoe County pending approval by voters in an election. After a legal technicality in publishing a timely notice precluded the road referendum from being placed on the ballot for the regular general election in the fall of 1862, the commissioners authorized a special election. Several months before the special election of December 29, 1862, the commissioners began officially to refer to the route as the "Steam Wagon Road" and commissioned Frederick C. Morrison, an experienced surveyor, to lay out its course. Morrison completed his survey that fall. No tally of the special election is extant, but Otoe County's voters overwhelmingly approved the bond issue, which was funded by a special property tax of one mill per dollar of assessed valuation.²⁵

In mid-March 1863 the county commissioners authorized Silas E. Smith, the Otoe County treasurer, to sell steam wagon road bonds. To raise the requisite \$2,500 Smith sold fifty \$50 bonds, which were redeemable at face value no later than January 1, 1870. Until they were redeemed the bonds bore annual interest of 10 percent payable in \$2.50 installments on the first day of January and July beginning with July 1, 1863. When the commissioners approved issuing the bonds they also appointed William E.



Otoe County steam wagon road bond, 1863. From Joseph R. and Samuel J. Brown Papers, M595, Roll 2, Frame 0443, Minnesota Historical Society

Hill, a carpenter who had built a bridge over the Big Blue River on the Fort Kearny route in 1861, as road superintendent. Hill, assisted by Osborn among others, promptly started trail improvement. By early May his crew, which had nearly reached the western edge of the county, had built six bridges. As this work was being done Osborn, evidently acting on Brown's orders, reconnoitred the freighting road west of Otoe County to the Big Blue River with the aim of ob-

taining desirable timber and water sites for steam wagon stations.

Trail improvement in Otoe County was only part of Brown's goal. He also wanted territorial support to better the road west of the county. Osborn closely monitored the prospects for legislative action, which was deferred until the lawmakers were convened in 1864. By a law approved on February 15, 1864, the territorial legislature named Hill, Osborn, and Anderson Davis of Seward County as

commissioners to locate a territorial road westward from the western line of Otoe County to Walnut Creek in Seward County, where it would intersect an existing territorial road to Fort Kearny.²⁶

The continuing presence and activities of Lawrence and Osborn seemed to assure Nebraska Citizens that Brown was on the verge of returning to resume his steam wagon expedition. When Brown's son, Samuel J., visited Nebraska City in May 1863, while serving as an interpreter during the steamboat transfer of Dakota Indians from Minnesota to the upper Missouri, he talked with either Osborn or Lawrence and also reported to his father that "the people of Nebraska City are anxious to know when you are to make your appearance in this country."²⁷ Some Nebraska Citizens presumed that Brown would bring six more wagons when he returned. Although he certainly knew better, the younger Brown told people in Nebraska City that his father would probably be in Nebraska City by July or August.

Because of their correspondence with Reed, Lawrence and Osborn knew that no new wagons were being built and that Brown would not soon return to Nebraska City. In disgust, Lawrence left Nebraska City in July 1863 to return to his wife in New York. However, the thirty-five-year-old Osborn, who opened a blacksmith shop, stayed and never returned to the East. He probably was chiefly responsible for the steam wagon's last hurrah. On July 4, 1864, it was fired up and run from Morton's farm to a downtown parade. It soon broke down again and was hauled back to Morton's place by horses. In the 1870s while living in Ashland and Lincoln Osborn displayed his mechanical ability by inventing a windmill and a railroad grader.²⁸

As time passed with no resumption of steam wagon activity, Brown lost most of his promotional value to Nebraska City. Even well before the December 2, 1863, announcement that Omaha had won the Union Pacific prize the local press had turned its attention from Brown to the Fort Kearny Trail, the one great thing that

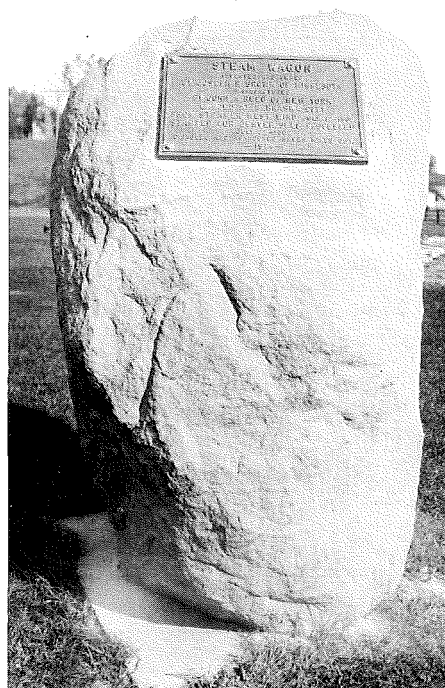
Steam Wagon

proved Nebraska City excelled the hated Omaha. An enduring legacy evolved from trail advertising. In 1863 Nebraska City's newspapers, obviously influenced by aspiration rather than accomplishment, started heavily promoting the entire former Great Central Airline Route to Fort Kearny as the Steam Wagon Road. The new name, illustrative of people's fascination with what had become their steam wagon, not only lasted to the end of overland freighting in 1866, but endures as the name of a Nebraska City street and the several miles of a county road leading from it to the site where the wagon broke down.²⁹

Despite two failures Brown persisted in his dream that steam wagons could be significant in an increasingly technological society. While trading at Lake Traverse he saw an opportunity to run wagons from a projected railroad terminus on the Bois des Sioux River northward through the Red River valley to Winnipeg. In 1868 while initially contemplating this plan he traveled to Nebraska City to inspect the abandoned wagon on Morton's farm. After the two men examined the badly rusted vehicle Brown authorized Morton to sell it for him. Morton was never able to find a buyer and finally it was dismantled in 1889.³⁰

While representing the Sisseton and Wahpeton in Washington, D.C. in 1869 and 1870, Brown was paying Reed to build his third wagon. Customarily short of money Brown paid Reed in installments and Reed worked on the project only after receiving a payment. Thus, Brown's hopes to have a wagon running in the Red River valley by the fall of 1869 were not realized, and without a completed wagon he could not attract investors to his proposed International Steam Wagon Company. When Brown died suddenly in New York City on November 9, 1870, Reed and Brown's heirs were left with a partially completed steam wagon and some vivid memories of a dreamer and schemer who has continued to be an object of fascination in both Nebraska and Minnesota to the present day.³¹ Visitors to Nebraska City

will soon notice the special niche the steam wagon has in the city's history and lore. Reminders of it abound. The prominently marked Steam Wagon Road is the most obvious. Since 1914 a stone marker commemorating the steam wagon's appearance has stood next to the now abandoned Chicago, Burlington & Quincy Railroad depot



Steam wagon marker dedicated in 1914.
NSHS-S800-5

and since 1929 the site where the steam wagon broke down on the steam wagon road 2.8 miles west of Arbor Lodge has been marked by a metal tablet set in a large boulder. The erection of the second monument was inspired mainly by Edward S. Gregg, Nebraska City's leading promoter in perpetuating the steam wagon tradition. Gregg's interest in the steam wagon dated at least from 1891 when he obtained a cylinder from one of its engines from a Nebraska City foundry. As the proud owner of this relic Gregg researched the wagon's history and came to be recognized as the local expert. The cylinder was passed on to Gregg's son, Stanton, whose estate

donated it to the Otoe County Historical Society in 1993. In 1951 artist Frank Zimmerer, a former Nebraska Citian, painted a steam wagon mural on an interior wall of the *Nebraska City News-Press* Building at 123 South Eighth Street. The mural is still in place, but the site is now occupied by a coffee shop. Nebraska City's celebration of the steam wagon centennial in 1962 featured a re-enactment of the steam wagon's run by a restored steam tractor owned and driven by Lyman Knapp of Blackwell, Oklahoma. Naturally, Knapp's machine had a mock breakdown near the point where the steam wagon had been forced to stop.³²

Not surprisingly, outside of Nebraska City the novelty of the steam wagon attracted the attention of the press, the public, and the Nebraska State Historical Society. Publicity was particularly intense when the Nebraska City monuments were dedicated in 1914 and 1929. Then another round of newspaper coverage was set off in 1932 by N. C. Abbott's chance discovery of a second steam wagon relic. After obtaining a forty-pound, three-foot-long part of the front axle in Cass County, Abbott, a board member and former president of the Nebraska State Historical Society, donated it to the Society. Clarence S. Paine and Addison E. Sheldon, while each was serving as the director of the Nebraska State Historical Society, collected steam wagon records. Paine was also instrumental in having the Nebraska City depot marker erected and Sheldon in 1938 considered publishing a book on the steam wagon.³³

In Minnesota Brown's place in the state's history as a frontier celebrity is secure. Aspects of his career have been covered in all of Minnesota's general histories, and he remains the leading personage in Henderson's history. In 1910 the state of Minnesota, using legislatively appropriated funds, erected and dedicated a monument at Brown's grave in Henderson. In 1992 the Minnesota legislature designated the old Sibley County Courthouse in Henderson as the site of a

proposed Joseph R. Brown Interpretive Center. The center was planned by the Joseph R. Brown Interpretive Center Task Force, which has been succeeded by the Joseph R. Brown Heritage Society. Currently, the society with funding from the Legislative Commission on Minnesota Resources, a Minnesota state bond program grant, and the city of Henderson is remodeling the courthouse. The society intends to exhibit a model of Brown's first steam wagon in the completed interpretive center.³⁴

Without question, it was Brown's steam wagon experiments that distinguished him from his contemporaries and elevated his historical stature. Unusual things always command public attention. The country's rich tradition of mechanical inventiveness includes a fascination with quaint, unworkable devices and machines. Brown's colleagues respected him as an intelligent pragmatist, but they were openly skeptical of his steam wagon schemes. To them he seemed to be uncharacteristically pursuing a bizarre notion of transporting freight with a motor vehicle in a roadless prairie wilderness. Hence, there was a certain natural tendency to laugh at him while marveling at his presumed ingenuity. The people who knew him best never fathomed his serious dedication to the steam wagon and never really understood his role.

Thus, the history of Brown's steam wagon in Nebraska City contained an element of folklore from the start. During his Nebraska City appearance, at the time of his death, and in some later accounts, Brown was sometimes credited with having invented the steam wagon. Unfortunately, the myth of Brown as the steam wagon's inventor has also been reinforced by the inscriptions on the Nebraska City markers, which identify him as the wagon's "owner and inventor."³⁵ These erroneous designations naturally leave the impression that this Minnesota frontiersman, without benefit of mechanical training, was a genius far ahead of his time. But the historical record is clear. Brown was not an inven-

tor, but a planner and promoter, and his steam wagon was very much a creature of its day and certainly in keeping with Civil War-era technology.³⁶

Acknowledgments

The author thanks Eric B. Asboe and Byron W. Oldham of Nebraska City and R. Eli Paul, senior research historian of the Nebraska State Historical Society, for their assistance during the research on this article. Mr. Asboe helped locate materials in the Otoe County Historical Society and pointed out some local sites. Mr. Oldham was a guide of Nebraska City and environs during a later research trip and sent other details about current Nebraska City geography. Mr. Paul promptly responded to inquiries, provided information from somewhat elusive sources, and encouraged me to proceed with the study.

Notes

¹ *People's Press* (Nebraska City), July 17, 1862; *Nebraska City News*, July 19, 1862. The name of the steamboat that carried the steam wagon to Nebraska City is indeterminable. In 1862 the Missouri River Packet Line ran two boats—the *Omaha* and *West Wind*—from St. Joseph to upstream Missouri River ports in connection with the Hannibal and St. Joseph Railroad. The *Nebraska City News* reported that the wagon was transported on the *West Wind*, and the *People's Press* stated that it arrived on the *Omaha*. A search of the *St. Joseph Herald* failed to resolve the different versions, because that paper did not report the departure of the steam wagon or regularly publish a schedule of steamboat arrivals and departures.

² *Nebraska City News*, July 19, 1862; freight contract between Chicago, Burlington & Quincy Railroad and Joseph R. Brown, June 24, 1862, in Joseph R. and Samuel J. Brown Papers, undated, 1838–1916, Minnesota Historical Society, St. Paul (hereafter cited as Brown Papers); John A. Reed to Brown, July 30, 1862, as quoted in "A Steam Wagon Invented by an Early Resident of South Dakota," *South Dakota Historical Collections* 10 (1920): 378.

³ *Nebraska City News*, July 19, 1862; Joseph R. Brown's journal, 1849–1865, vol. 14, 107–9, Brown Papers.

⁴ For biographical information on Brown, see Nancy and Robert Goodman, *Joseph R. Brown: Adventurer on the Minnesota Frontier 1820–1849* (Rochester, Minnesota: Lone Oak Press, 1996); William E. Lass, *Joseph R. Brown and His Times* (Henderson, Minnesota: The Henderson Independent, May, 1995); Augustus B. Easton, ed., *History of the St. Croix Valley* (Chicago: H. C. Cooper, Jr. & Co., 1909), 1:283–84; William Watts Folwell, *A History of Minnesota*, 4 vols. (St. Paul: Minnesota Historical Society, 1921–1930), 1:231; 2:418–21, 3:348–

57; T. M. Newsom, *Pen Pictures of Saint Paul, Minnesota* (St. Paul: Privately published, 1886), 201–9; George E. Warner and Charles M. Foote, eds., *History of Washington County and the St. Croix Valley* (Minneapolis: North Star Publishing Co., 1881), 219–20, 318; and J. Fletcher Williams, "Memoir of Joseph R. Brown," *Collections of the Minnesota Historical Society* 3 (1880): 201–12. On Brown's role in developing Dakota Territory, see William E. Lass, "The First Attempt to Organize Dakota Territory," in William L. Lang, ed., *Centennial West: Essays on the Northern Tier States* (Seattle: University of Washington Press, 1991).

⁵ Lass, *Brown and His Times*, 19, 22–23; obituary of Brown by Joseph A. Wheelock in the *St. Paul Press*, Nov. 12, 1870.

⁶ George S. Hage, *Newspapers on the Minnesota Frontier 1849–1860* (St. Paul: Minnesota Historical Society, 1967), 157; *Scientific American*, Apr. 5, 1856, 235; Nov. 8, 1856, 69; Aug. 8, 1857, 378; and Nov. 27, 1858, 1, 92.

⁷ Brown's statement on steam wagon plans, Oct. 18, 1869, Brown Papers; Alvin C. Gluek, Jr., *Minnesota and the Manifest Destiny of the Canadian Northwest: A Study in Canadian-American Relations* (Toronto: University of Toronto Press, 1965), 140–50.

⁸ Brown's journal, 1849–65, 79; *Henderson Democrat*, May 12, June 16 and 23; July 14, 1860.

⁹ *Henderson Democrat*, July 7, 1860; Brown's statement on steam wagon plans, Oct. 18, 1869.

¹⁰ *Henderson Democrat*, Oct. 6, 1860; *St. Paul Pioneer Press*, Mar. 26, 1906; *Henderson Independent*, Oct. 14, 1910. On the name *Mazomanie*, see Stephen Return Riggs, *A Dakota-English Dictionary*, edited by James Owen Dorsey (Reprint ed.; St. Paul: Minnesota Historical Society Press, 1992), 308–9; Virgil J. Vogel, *Indian Names on Wisconsin's Map* (Madison: The University of Wisconsin Press, 1991), 63; and "The Meaning of Mazomanie," in *JRB News*, (Henderson, Minnesota) 1 (Nov. 1996): 2–3.

¹¹ Brown's statement on steam wagon plans, Oct. 18, 1869; *People's Press*, July 17, 1862.

¹² *Nebraska City News*, July 19, 1862; *Daily Tribune* (Nebraska City), Jan. 29, 1906; Brown's journal, 1849–65, 107. (The 1998 equivalent of Brown's expenses would be approximately \$75,836.)

¹³ *People's Press*, July 21, 1862; Mrs. Edmund E. Woolsey to Clarence S. Paine, Nov. 6, 1912, and Ella S. Larsh to Paine, Nov. 8, 1912, both in Steam Wagon Road envelope, Vertical File, Nebraska State Historical Society, Lincoln (hereafter cited as Steam Wagon Road envelope); copy of talk by Edward S. Gregg to the Otoe County Historical Society, Apr. 24, 1939, in Steam Wagon envelope, Vertical File, Nebraska State Historical Society (hereafter cited as Steam Wagon envelope); *Daily Tribune*, Jan. 29, 1906.

¹⁴ For detailed coverage on the publicizing of the Nebraska City-Fort Kearny Trail, see William E. Lass, *From the Missouri to the Great Salt Lake: An*

Steam Wagon

Account of Overland Freighting (Lincoln: Nebraska State Historical Society, 1972), 91–92, 115. *Nebraska City News*, July 19, 1862; *People's Press*, July 17, 1862; James C. Olson, *History of Nebraska* (Lincoln: University of Nebraska Press, 1955), 118.

¹⁵ Here and below, see *Nebraska City News*, July 19, 1862; *People's Press*, July 17 and 28, 1862.

¹⁶ *People's Press*, July 24, 1862; *Daily Tribune*, Nov. 21, 1905; *Nebraska City Weekly News*, July 21, 1914.

¹⁷ *Daily Tribune*, Nov. 21, 1905; Reed to Brown, July 30, 1862, in *South Dakota Historical Collections* 10:378; *Nebraska City News*, Aug. 2, 1862; *People's Press*, July 28, 1862. For biographical information on J. Sterling Morton, the founder of Arbor Day and later U.S. Secretary of Agriculture, see James C. Olson, *J. Sterling Morton* (Lincoln: University of Nebraska Press, 1942).

¹⁸ *People's Press*, July 28, 1862. For biographical information on Coe and Croxton, respectively, see *Portrait and Biographical Album of Otoe and Cass Counties, Nebraska* (Chicago: Chapman Brothers, 1889), 696–97; and Raymond E. Dale, "Otoe County Pioneers: A Biographical Dictionary," unpub. ms. in the Nebraska State Historical Society.

¹⁹ Here and below, see Brown's financial statement about the steam wagon project, Aug. 1, 1862, Brown Papers.

²⁰ Reed to Brown, July 30, 1862, as quoted in *South Dakota Historical Collections* 10:378; Brown's financial statement about the steam wagon project, Aug. 1, 1862.

²¹ Here and below, see contract between Brown and Reed, Aug. 12, 1862, Steam Wagon envelope; Brown to the editor of the *Nebraska City News*, Aug. 16, 1862, in *Nebraska City News*, Aug. 30, 1862; Reed to Brown, Mar. 24, May 12, June 6 and 9, 1863, all in Brown Papers.

²² Here and below, see June Drenning Holmquist and Jean A. Brooklins, *Minnesota's Major Historic Sites: A Guide*, 2d rev. ed. (St. Paul: Minnesota Historical Society, 1972), 130–31; Brown's statement on steam wagon plans, Oct. 18, 1869.

²³ Lass, *Brown and His Times*, 24–25; Folwell, *History of Minnesota*, 2:267n; Roy W. Meyer, *History of the Santee Sioux: United States Indian Policy on Trial* (Lincoln: University of Nebraska Press, 1967), 152, 199–200, 328.

²⁴ Osborn to Charles Hubner, May 7, 1896, in Steam Wagon Road envelope; Charles B. Sloat to Brown, August 25 and 29, 1862, both in Doane Robinson Papers, 1880–1946, in *South Dakota State Historical Society, Pierre*; Reed to Brown, Sept. 22, 1862, as quoted in *South Dakota Historical Collections* 10:378; Osborn to Brown, February 14 and 21, Mar. 15, June 15, July 16, Aug. 1, 1863; Albert Tuxbury to Brown, Jan. 31, Apr. 27, June 15, Dec. 2, 1863, all in Brown Papers.

²⁵ Otoe County Commissioners Record, vol. 1, County Clerk's Office, Otoe County Courthouse,

Nebraska City, 149, 151–53, 155; sketch of Morrison in Dale, "Otoe County Pioneers"; *People's Press*, Jan. 1, 1863.

²⁶ Otoe County Commissioners Record, vol. 1, 156, 160; printed steam wagon road bond certificate in Brown Papers; sketch of Hill in Dale, "Otoe County Pioneers"; Osborn to Brown, June 15, 1863, and Reed to Brown, May 12, 1863, both in Brown Papers; *Laws, Joint Resolutions and Memorials, Passed at the Ninth Session of the Legislative Assembly of the Territory of Nebraska*, 1864, 267.

²⁷ Samuel J. Brown to Joseph R. Brown, Aug. 19, 1863, Brown Papers.

²⁸ Kate Winslow Davis, "Neighbor to the Mortons," introduction by Paul D. Riley, *Nebraska History* 53 (Spring 1972): 23; sketch of Osborn in Dale, "Otoe County Pioneers"; Osborn to Brown, Feb. 14, 1863, and Reed to Brown, July 23, 1863, both in Brown Papers.

²⁹ Olson, *History of Nebraska*, 118; Lass, *From the Missouri to the Great Salt Lake*, 116; *Plat of Nebraska City, Otoe County, Nebraska* (Wahoo, Nebraska: Johnson Erickson O'Brien & Associates, 1992); author's tour of Nebraska City and environs with Mr. Byron W. Oldham, Mar. 6, 1997.

³⁰ Joseph R. Brown to Samuel J. Brown, Sept. 18, 1868, and Joseph R. Brown to Morton, May 25, 1869, both in Brown Papers; statement of Brown dated "Nebraska City Sept. 30th 1868," in J. Sterling Morton Papers, 1849–1902, Nebraska State Historical Society, microfilm roll 3, frame 002972; Gregg talk to Otoe County Historical Society, Apr. 24, 1939, Steam Wagon envelope.

³¹ Brown's most comprehensive statement about his Red River valley plans for his projected third wagon is that of Oct. 18, 1869, in the Brown Papers. For other details on work on this wagon, see Joseph R. Brown to Samuel J. Brown, Sept. 21, Oct. 5 and 20, Nov. 12, Dec. 16, 1869; May 31, July 29, Aug. 21, Sept. 23, Oct. 5, 1870, and Reed to Brown, Jan. 25, Feb. 10, Mar. 9, May 31, June 11, 1870, all in Brown Papers. For obituaries of Brown, see *St. Paul Pioneer*, Nov. 15, 1870, and *St. Paul Press*, Nov. 12, 1870.

³² F. T. Darrow to Clarence S. Paine, May 4, 1914, in Steam Wagon envelope; inscription on depot monument; *Nebraska Daily News-Press* (Nebraska City), May 26, 1929; sworn statement of Edward S. Gregg, Jan. 31, 1919, in Old Freighters Museum, Otoe County Historical Society, Nebraska City; *Nebraska City News-Press*, May 21, 1993; *Omaha World-Herald Magazine*, July 29, 1951, 3G; Byron W. Oldham to William E. Lass, Sept. 11, 1997, letter in possession of author; *Nebraska City News-Press*, July 23, 1962; *Lincoln Sunday Journal & Star*, July 22, 1962, sect. B, 1, and *Sunday World-Herald Magazine* (Omaha), July 15, 1962, sect. G, 5.

³³ *Nebraska City News-Press*, June 19, 1932; *Nebraska History Magazine* 13 (April–June 1932): 98,

126; Mrs. C. S. Paine, librarian of the Nebraska State Historical Society, to Doane Robinson in *South Dakota Historical Collections* 10:378n; Charles Hubner, editor of *Nebraska City News*, to C. S. Paine, Nov. 9, 1912, June 28, 1913, in Steam Wagon envelope; Sheldon to George G. Allanson (a grandson of Brown), Nov. 15, 1938, Steam Wagon Road envelope.

³⁴ *Saint Paul Pioneer Press*, Sept. 28, 1910; "City of Henderson Historic Structures Report" [1994], 5, copy in possession of the author, who served as the task force's historical advisor; *JRB News*, 1 (Nov. 1996): 1.

³⁵ The monument inscriptions contain other errors as well. The depot marker has the wrong date for the steam wagon's arrival in Nebraska City and also states that the vehicle reached a point "seven miles out," which would be nearly twice the distance the machine achieved. Both the arrival and departure dates on the monument west of Arbor Lodge are wrong and the attributed arrival date does not even agree with that shown on the depot marker.

³⁶ Other experiments with steam powered vehicles during Brown's time clearly indicate that there was considerable interest in this technology and a public level of mechanical ability to develop it. In 1856 Obed Hussey, a Baltimore, Maryland, reaper manufacturer, exhibited a steam plow at the Indiana State Fair and Joseph W. Fawkes of Lancaster, Pennsylvania, demonstrated steam plows at the Illinois state fairs in 1858 and 1859. On July 4, 1860, a steam wagon built in St. Louis, Missouri, by Thomas L. Fortune was paraded about Atchison. The twenty-foot-long wagon with wheels eight feet in diameter broke down on its trial run and was never resurrected. Fortune apparently hoped to use it for overland trail transportation. On December 4, 1863, a "steam horse" built by Jesse Frye of New York City made a demonstration run in Brooklyn suburbs. Frye, whom Brown and Reed regarded as their main competitor, subsequently was instrumental in forming the Fort Riley & Santa Fe Steam Traction Engine Company. In 1866 the company unsuccessfully tried to obtain a congressional land grant to subsidize the establishment of steam wagon service on the Santa Fe Trail. Reynold M. Wik, *Steam Power on the American Farm* (Philadelphia: University of Pennsylvania Press, 1953), 62; Cora Dolbee, "The Fourth of July in Early Kansas (1858–1861)," *The Kansas Historical Quarterly* 11 (May 1942): 159; Frank A. Root and William Elsey Connelley, *The Overland Stage to California* (Topeka: Privately printed, 1901), 430–33; *The Fort Riley & Santa Fe Steam Traction Company: Transportation by Steam Across the Plains, from the Missouri River to the Rocky Mountains* (New York: Lange & Brother, 1866). This is a sixteen-page pamphlet.