

A Dam for Nauvoo: An Attempt to Industrialize the City

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During the winter of 1838–39 a handful of Mormons recently expelled from Missouri made contact with a gentleman known as “Doctor” Isaac Galland, a resident of Commerce, Illinois. Galland was a landholder of some consequence and claimed title to various pieces of property along the Mississippi River between Montrose and present-day Keokuk, Iowa. Having lived along that portion of the river since 1829, he had become familiar with the supposed advantages of the area, one of which was that the current in this part of the river could be harnessed as a source of waterpower. He subsequently sold a large tract of his Iowa holdings to the Mormons and favored their purchase of land across the river in Illinois. Most of the land acquired by the Latter-day Saints on both sides of the river was situated near the head of what was designated the “Lower” or “Des Moines” Rapids, where the “river flow[ed] with great velocity over an irregular bed of blue limestone.” This twelve-mile stretch of water had a vertical drop of nearly twenty-five feet, and long before the Mormons settled in the vicinity had been viewed as a “location well suited for industry.”¹

As early as 1830 the state of Missouri had petitioned Congress for permission to annex the southeastern limits of the Iowa Territory,² which, had the request been granted, would have given that state access to the rapids. The memorial affirmed that “that [segment] of water in future times . . . would be of immense importance to the commerce of the whole western valley” and would, because of the “inexhaustible power of the mighty stream,” be the impetus which would give rise to a “commercial city” which would serve as the “great entrepot of the Upper and Lower Mississippi.”³ That the Saints viewed the rapids as a source of power

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¹United States Congress, House of Representatives, *Letter from the Secretary of War Transmitting the Inspection Report of Colonel S. H. Long, and the Report of Lieutenant Warren of his Operations During the Past Year on the Des Moines and Rock River Rapids, in the Mississippi River*, 33rd Cong., 1st sess., 1854.

²That portion of Lee County known as the Half-Breed Tract.

³Jacob van der Zee, “The Half-Breed Tract,” *Iowa Journal of History and Politics* 13 (April 1915):160–61.

from which industry could be developed is apparent from the June 1840 article in the *Times and Seasons* which emphasized that the city was “situated on a beautiful point of land on the Mississippi” which because of its proximity to the rapids “afforded good privileges for all kinds of machinery in consequence of the rapidity of the current.”⁴

In succeeding issues of that periodical, more was written about the use that could be made of the river for hydraulic purposes. However, it wasn’t until early 1841, with the anticipation that a host of converts from England would soon be arriving, that the need to industrialize the city began to loom large. Sensing the urgency of the situation, Joseph Smith gave the following instructions to Church officials in England:

There are great numbers of the Saints in England who are extremely poor and not accustomed to the farming business, who must have certain preparations made for them before they can support themselves in this country, therefore, to prevent confusion and disappointment when they arrive here, let those men who are accustomed to making machinery, and those who can command a capital, though it be small, come here as soon as convenient, and put up machinery and make other such preparations as may be necessary, so that when the poor come on they may have employment to come to.⁵

In this communiqué, as in another written two weeks later to “The Saints Scattered Abroad” in North America, the Prophet noted the significance of Nauvoo’s position on the river. The city has advantages, he said, for “manufacturing and commercial purposes, which, but few other [communities can] boast of” as the “waters of the Mississippi [can] be successfully used for manufacturing purposes to an almost unlimited extent. . . .”⁶ These remarks paved the way for what shortly thereafter became the central theme for industrializing the city—the construction of a dam to turn the current of the Mississippi to Nauvoo’s use.

On 3 February 1841, the city’s first mayor, John C. Bennett, proposed in his inaugural address that a dam and ship canal of extensive proportions be constructed. He suggested that the dam be built at the north end of the promontory occupied by Nauvoo where there were a ravine and a small inlet of the Mississippi. The dam was to project west into the river. The ship canal, he con-

⁴*Times and Seasons* 1 (June 1840):122–23.

⁵*Times and Seasons* 2 (1 January 1841):259.

⁶Journal History of The Church of Jesus Christ of Latter-day Saints, 14 January 1841, Church Historical Department, Salt Lake City, Utah.

cluded, should run from the inlet down the middle of Main Street, terminating in a grand reservoir on the south side of the promontory. The dam would ensure that water would be made available to raise and lower boats that passed through the locks of the canal and would also allow for a good head of water capable of "propelling any amount of machinery for mill and manufacturing purposes." The new mayor considered that when the work was finished, the "future greatness of Nauvoo would be placed upon an imperishable basis," as it would not only promote industry but would "afford the best harbor for steamboats, for winter quarters on the Mississippi."⁷

The city council was prompt to consider the recommendation. According to his history, Joseph Smith, one of the city's nine councilmen, "reported a bill for the survey of a canal through the city." This bill was accepted and the Prophet "was appointed to contract for its survey."⁸ Alanson Ripley, the city surveyor, was selected to conduct the study, and in less than a week he made his findings public. They were not encouraging, however, for the survey revealed that the northern end of Main Street was undercut by a massive layer of limestone which, if the suggested waterworks programs were pursued, would require the removal of more than half a million cubic yards of earth and stone.⁹

The prospect of chiseling through a layer of stone more than a mile long must have been uninviting to most, as the only other notice in the *Times and Seasons* mentioning Bennett's grandiose scheme was unfavorable: "In the infant state of the . . . city . . . the agitation of the subject [is] premature."¹⁰

The heavy loss of property so recently suffered in Missouri had placed the Mormons in financial difficulties and the lingering tremors of the Panic of 1837 made the Saints cautious about starting large-scale projects during their early months in Illinois. For the time being Nauvoo had to be content with the economic growth that came from the development of small private businesses. The town attracted a great variety of trades, but there were only a few converts who took the Prophet's suggestion to establish manufactories which could be powered by the current of the

⁷*Times and Seasons* 2 (15 February 1841):318.

⁸Joseph Smith, Jr., *History of The Church of Jesus Christ of Latter-day Saints*, ed. B. H. Roberts, 7 vols. (Salt Lake City: Deseret Book, 1972), 4:297 (cited hereafter as *HC*).

⁹Donald L. Enders, "The Des Moines Rapids: A History of its Adverse Effects on Mississippi River Traffic and its Use as a Source of Water Power to 1860," (Master's Thesis, Brigham Young University, 1973), p. 177.

¹⁰*Times and Seasons* 2 (15 February 1841):319.

stream. In 1842 Newell Knight, to name one, was granted the privilege of "running a wing [dam]"¹¹ into the river; and his mill, built adjacent thereto, operated throughout the Mormons' residence in the state. At least one citizen of the community found Knight's mill a welcome establishment. In 1844 William Adams, newly arrived in the "City of the Saints," wrote that by

selling and trading some . . . clothing and other things that . . . could best be done without I was enabled to buy some shorts [a mill by-product of bran and meal or flour] from Bro. Newell Knight who owned a small grist mill on the bank of the Mississippi River, run by the power of the stream.¹²

Mill privileges similar to those offered Newell Knight were granted to other members of the community, though the actual number of mills subsequently constructed is not known. Whatever the number may have been, it appears they did little to strengthen Nauvoo economically. Throughout the next two years Nauvoo experienced tremendous growth, and by early 1844 the population was probably in excess of 8,000, about double what it had been in mid-1842. The increase was likely a significant factor motivating the city fathers to reconsider Nauvoo's economic situation, and probably helped rekindle enthusiasm in promoting a community-wide waterworks project.

An article printed in the *Times and Seasons*, 1 January 1844, at the request of the city council, announced that "a charter [had] been . . . granted by [that body] for the erection of a dam upwards of a mile long," which they considered would "afford the best mill privileges in the western country." The dam, unlike the one proposed by Bennett, was to "commence some distance below the Nauvoo House," move in a westerly direction across the river, "and intersect with an Island" opposite the little village of Montrose, thus leaving the channel of the river open to boat travel. Mentioned in the city council minutes, though not noted in the *Times and Seasons*, "a dam, pier, or breakwater" was to project north for a short distance from the island where the main dam was to terminate. This would create a sizeable harbor for boats.¹³

To ensure that construction and operation would run smoothly, the charter specified that "Joseph Smith and his successors"

¹¹"A Charter Granted to Newell Knight to Erect a Wing Dam in the Mississippi, April 9, 1842," Records of the City Council of the City of Nauvoo, Illinois, Commencing A. D. 1841, Church Historical Department.

¹²Journal of William Adams, 1844, p. 10, Church Historical Department.

¹³"An Ordinance to Erect a Dam in the Mississippi River, December 8, 1843," Records of the City Council of the City of Nauvoo, Illinois, Church Historical Department.

were appointed to manage the waterworks, although the power to regulate tolls regarding the use of the dam, its wharves, and its landings, would be retained by the city council.¹⁴

Weeks in advance of the announcement of the charter, at least one idea had been considered for financing the project. On 23 November 1843, Joseph Smith recorded that he met "in council" and then walked to the river where he "suggested the idea of petitioning Congress for a grant to make a canal over the falls, or a dam to turn the water to the city. . . ."¹⁵ But the fact that nothing was mentioned regarding the subject at the time the charter was made public and for many weeks thereafter indicates that the federal government was probably not approached concerning the matter.

The realization that missionaries were continuing to reap a substantial harvest of converts in England turned attention to support for the project in that direction. Sensing that money might be available among the British Saints who had not yet emigrated to America, Brigham Young and Willard Richards sent a letter to the British members to determine whether they could help fund the project. "Could five, six, or seven thousand dollars be raised to commence the dam at its lower extremity," wrote Young and Richards, "a large amount of machinery might be propelled by water."¹⁶

Six weeks later, however, Joseph Smith was shot to death at Carthage. The excitement and fear surrounding the martyrdom were slow to subside and the promotion of the waterworks project was discontinued for a time both in England and Nauvoo. Many felt that the death of the Prophet would lead to a rapid deterioration of the Mormon city, especially since it was rumored that its charter would soon be repealed. In spite of that concern the Quorum of the Twelve, which provided leadership for both the Church and the community after Joseph's death, agreed that the development of the city must continue. "Nauvoo must be built up," they stated through the *Times and Seasons*, 15 August 1844, and it must "be supported by the gathering of those who have capital, who are willing to lay it out for the erection of every branch of industry and manufacture."¹⁷

¹⁴Ibid.

¹⁵HC, 6:80.

¹⁶Journal History, 3 May 1844.

¹⁷*Times and Seasons* 5 (15 August 1844):619.

The admonition of the Twelve stirred some interest among the craftsmen of the city, and during the next few weeks a sizeable number organized themselves into the Trades Meeting Association (TMA) to promote industry in Nauvoo. At their 2 December gathering in the Masonic Hall on Main Street, interest was revived in the charter for the dam granted the "late General Joseph Smith."¹⁸ Though most of December and the early weeks of the new year were spent in grappling with the troublesome issue of how to finance the dam, by mid-February the problem appeared to be resolved. Encouraged by the Twelve, the TMA invited the residents of the city to "subscribe twelve thousand days work," which was anticipated sufficient time to "put a dam in the river." It was estimated that the project would cost \$250,000, but by acquiring the work force on a "subscribed" basis, gathering some revenue from selling stock, and having much of the material needed for the waterworks already in its possession in the form of stone and timber, it was calculated that "Nauvoo [would] yet make some use of the rapids for manufacturing."¹⁹

But there were still other problems to solve, and one of some consequence concerned the martyred Prophet. During the few short years of his life in Nauvoo, Joseph Smith had been involved in a variety of activities. Most frequently he acted as agent for the Church in acquiring properties and promoting business, but occasionally he negotiated for land and pursued business on a personal basis. Following his death, it became clear that legally it would not be an easy matter to prove where his personal involvements left off and the Church's began. Rather than be frustrated in its attempt to maintain control of the waterworks, once in operation, the city council nullified the ordinance granting Joseph Smith and his successors the privilege of erecting a dam in the Mississippi.²⁰ But feeling that there was a need to give the waterworks program some legal footing, the Twelve proposed that control of the project be shifted from the TMA to another of the city's trades unions, the Nauvoo Agricultural and Manufacturing Association, whose charter had been granted by the state. The idea had hardly been discussed when the Illinois legislature repealed the city's char-

¹⁸*Nauvoo Neighbor*, 8 January 1845, p. 3.

¹⁹*Ibid.*

²⁰"An Ordinance to Amend 'An Ordinance to Erect a Dam in the Mississippi,' December 4, 1844," Records of the City Council of the City of Nauvoo, Illinois.

ter. The question then became one of "the priority of acting under [the Nauvoo Agricultural and Manufacturing's] charter at all," since it was feared that it too would be rescinded, "after only two or three of the [dam's] piers had been built."²¹

Under these circumstances, the TMA resumed control of the project. Feeling, however, that some restructuring of their organization would better facilitate its efforts, John Taylor, an active participant in the scheme since its inception, suggested a "plan of organization . . . something like the Priesthood." Let there be a "living constitution" appointed, Taylor said, composed of "twelve men," with a "President, Secretary, &c., to take the lead in the concern."²²

Apparently no objection was raised to the idea, for within a few days twelve men were selected and officially dubbed "The Living Constitution." Credit is due them for completing arrangements for the land where the dam would commence, which piece of ground was fairly extensive as one member of the group noted. He further informs us that, in addition to a previous desired amount, title to forty rods of river frontage was obtained.²³

About the same time the Trades Meeting Association was being revamped, the Saints were contriving a plan to obtain federal government approval of the waterworks. A petition composed and signed by citizens of Nauvoo requesting the "privilege of erecting a dam on the Mississippi River at the head of the Des Moines Rapids" was hand-carried to Washington by Representative Joseph P. Hoge. It was not a plea for a subsidy but rather a request for permission to build the structure since any alteration of the river's course needed the sanction of Congress.²⁴

After submitting the petition, the Latter-day Saints apparently felt free to pursue their objective, as they began construction of the dam before hearing from Washington. However, their proposal suffered a fate similar to that of many other internal improvement petitions sent to Congress during that decade. On 19 February 1845, after it had been read before Congress, the memorial found its way into the hands of the Committee on Roads and Canals. From that point it probably went the route of a good

²¹*Nauvoo Neighbor*, 5 February 1845, p. 2.

²²*Ibid.*

²³Journal of Daniel Spencer, 18 February 1845, Church Historical Department.

²⁴"Petition of the Citizens of the City of Nauvoo, Illinois, Praying Congress to Grant Them the Privilege of Erecting a Dam in the Mississippi, February 19, 1845," photocopy in files of Nauvoo Restoration, Inc., Salt Lake City, Utah.

many other proposals: tabled and then forgotten with the adjournment of Congress.²⁵

In spite of the setback, the many months of planning and preparation seemed about to bear fruit. Arrangements had been made for the land, the stone, the timber, and the work crew needed for the dam's construction; even the federal government, it was supposed, had been appeased on the matter. Feeling confident that the time was ready for work to begin, members of the TMA and interested shareholders gathered near the river on Wednesday, 26 February 1845, and organized what for a brief period would be "The Nauvoo Water Power Company."²⁶

The following day the waterworks project was commenced. "Many of the principal [residents of the city] proceeded to the contemplated location." About 9:00 A.M. amidst fanfare and speeches, John E. Page, the waterpower company's new president, dedicated the "land, water, men, and means to Almighty God." The brief ceremonies were concluded with a few remarks by Brigham Young about the benefits the dam would bring the community, after which construction began.²⁷

Enthusiasm for the project continued to mount and during the next few days a "large [number of men were put] to work in the stone quarry" and a company was sent north to the pine forests of Wisconsin "for timber for the piers." The 5 and 12 March 1845 issues of the *Times and Seasons* printed lengthy editorials respecting the dam and announced that those who could furnish themselves with "wheelbarrows, picks, shovels, and crowbars" could "find employ." Each of the articles also emphasized the need for "CASH." In an effort to draw some from those who may have a little on hand, supposed advantages for the city were again extolled:

Here is the proud and gallant Mississippi, with her rapid current, rumbling to the broad Atlantic, seeming to say (as she quickens her pace over the rugged rocks of the lower rapids, just opposite our beautiful Nauvoo), only improve my shores and banks, ye saints . . . and I will propel your mills, cottons and woolen manufactories, by which your laborers can find employ, and your poor can be adorned after the similitude of a palace.²⁸

²⁵*Register of Debates in Congress*, vol. 8, part 2 (Washington: Gales and Seaton, 1832-), pp. 1437-41.

²⁶*Nauvoo Neighbor*, 5 March 1845, p. 3.

²⁷*Ibid.*

²⁸*Nauvoo Neighbor*, 12 March 1845, p. 2.

In spite of the benefits which the waterworks hopefully would bring the city, its extensive size aroused serious questions concerning its practicality. The Mormons had already proven they could achieve some rather amazing results from united effort, hard work, and almost no money, so the expense could likely have been coped with, but to think of building a structure upwards of a mile in length, constructed chiefly of earth and stone and to expect it to withstand the combined force of a strong current, frequent heavy rains, and winter's intermittent periods of freezing and thawing, were all considered by some to be "as idle as it [was] ignorant."²⁹

After only nineteen days, work on the dam was stopped. It was first rumored that construction of the waterworks would be postponed only until the next winter, but on 16 July the *Nauvoo Neighbor* announced that some prized property was for sale.

Lots belonging to the Nauvoo Water Power Co.—the cheapest and best in the city, are offered for sale on as moderate terms as a purchaser can reasonably ask. The lots are beautifully situated on the bank of the river, where the most business part of the city will eventually be.³⁰

There was simply no time remaining to think about industrializing the city. Another surge of anti-Mormon sentiment had manifested itself in Hancock and surrounding counties; within a short time the Latter-day Saints would be forced to abandon their beloved Nauvoo. It is an interesting paradox that the Mormons, who had made a noticeable effort to tap the resources of the rapids, should, besides their other purported crimes, be accused of hindering the development of industry along that portion of the river. But so it was charged in the *Warsaw Signal*:

We believe that capital could be profitably invested in turning the water power of the rapids to manufacturing purposes and, now that there is a prospect of getting rid of the Saints, we hope that monied men will turn their attention to the subject.³¹

The rapids, however, would continue to run their course, untamed, for another sixty-seven years. Not until 1913, when the Keokuk hydroelectric power dam was completed, could it be boasted that at last the Des Moines Rapids had been harnessed as a source of waterpower.

²⁹*Latter Day Saints' Messenger and Advocate* (Pittsburgh, Pennsylvania), 1 February 1845, p. 101.

³⁰*Nauvoo Neighbor*, 16 July 1845, p. 2.

³¹*Warsaw Signal*, 20 May 1846, p. 3.