

Bitter Sweet: John Taylor’s Introduction of the Sugar Beet Industry in Deseret

By MARY JANE WOODGER

Since the mid-1800s, rumors have circulated that Church of Jesus Christ of Latter-day Saints president Brigham Young and his successor, John Taylor, did not get along. This position could be supported by the record of a heated discussion that took place during a meeting on March 17, 1853. The minutes reveal that Young accused Taylor of knowing no more of business “than a mere stranger,” not knowing “that a million dollars is worth a red cent,” being as “wild in [his] calculations as a man can be,” and “manifest[ing] the spirit of an old English lord.” After Young hurled these accusations, Taylor rebuffed, “I am as independent as any other man in my way, and I know the respect that is due to your office and calling in the Kingdom of God; but, no man has the authority, in any position that he may hold, to cram a thing down my

Notes and drawing probably made by John Taylor showing sugar-making equipment he had studied in France.

Mary Jane Woodger is assistant professor of Church History and Doctrine, Brigham Young University.

throat that is not so.”¹

The story that brought this argument to a head began in 1849. During the church’s general conference in October, Young called forty-two-year-old Taylor to open France to the spreading of the Mormon gospel, translate the Book of Mormon into French, and look for “new ideas, new enterprises, and new establishments...that could be organized in Utah.”² Despite Taylor’s many achievements on his ensuing European mission, his introduction of the sugar beet industry to America is often considered a dark spot within a life of accomplishment.

The Saints needed sugar, and there was a scarcity. During the early years in the Salt Lake Valley, the pioneers used parsnips, carrots, beets, watermelons, and juice from cornstalks for sweetener.³ In 1849 Louis Vasquez “opened a store of goods in Great Salt Lake City and quickly sold all his sugar at 3 pounds for \$2.”⁴ The next year, in September, the church’s First Presidency stated:

Sugar is not only a beverage, a luxury, but it is, in its nature and substance, one of the component parts of our animal structure; and a free use thereof is calculated to promote health; and could the Saints have a more abundant supply, they would need less meat. Should every person in Deseret consume one-third of an ounce of sugar per day through the coming year, it would require about one hundred and twenty tons, more than has [been] or will be brought by our merchants this season.⁵

The First Presidency estimated that the Saints would need three hundred tons of sugar per year. At forty cents per pound, the cost would be \$240,000. Young, calling this expense “suicidal,” determined that the Saints should find their own sweetener resources.⁶

Just two weeks after being called as a missionary, on October 19, 1849, Taylor headed for Europe. On June 15, 1850, the *Millennial Star*, a Mormon newspaper published in England, announced, “Elder John Taylor, one of the Quorum of the Twelve Apostles, with Elders John Pack, Senior President of the Eighth Quorum of Seventies; and Curtis E. Bolton, High Priest, arrived in Liverpool on the 27th of May in good health.... These brethren are on a mission to France to preach the Gospel.” After a brief stay in England, Taylor arrived at Boulogne-sur-mer, France, on June 18.⁷

¹ “Minutes of the Deseret Manufacturing Company with President Young, March 17, 1853,” MS 14280, fds 9 and 12, Church of Jesus Christ of Latter-day Saints Archives (Church Archives), Salt Lake City, Utah.

² Philip De La Mare, “The Deseret Manufacturing Company, 1908,” MS 3079, Access No: 28882-ARCH-88, Church Archives.

³ Leonard J. Arrington, *Great Basin Kingdom* (Cambridge, MA: Harvard University Press, 1958; reprint, Salt Lake City: University of Utah Press, 1993), 116.

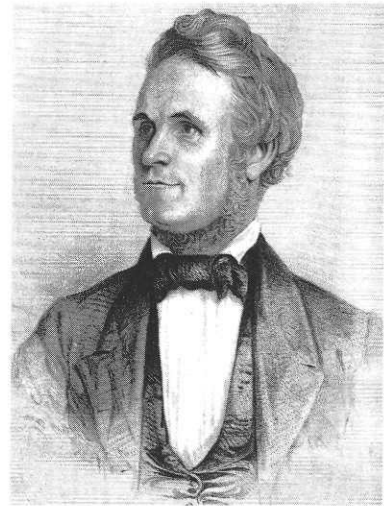
⁴ Journal History of the Church of Jesus Christ of Latter-day Saints, November 21, 1849, Church Archives (hereafter Journal History).

⁵ “Fourth General Epistle, September 27, 1850,” in James R. Clark, ed., *Messages of the First Presidency of the Church of Jesus Christ of Latter-day Saints, 1833–1951*, 5 vols. (Salt Lake City: Bookcraft, 1965) 2:57.

⁶ “Governor Young’s Message to the State of Deseret’s Legislative Assembly, 1850,” cited in B. H. Roberts, *A Comprehensive History of the Church of Jesus Christ of Latter-day Saints*, 6 vols. (Salt Lake City: Deseret News Press, 1930) 3:490.

⁷ Francis M. Gibbons, *John Taylor: Mormon Philosopher, Prophet of God* (Salt Lake City: Deseret Book,

In mid-October 1850 Taylor visited Jersey Island, where he met a young convert, Philip De La Mare. Taylor asked the young man to accompany him to Paris and help translate the Book of Mormon. De La Mare, a journeyman and blacksmith, willingly accepted the call. He would not only be invaluable in the mission field but would also become instrumental in bringing the beginnings of the beet sugar industry to Utah. Utah-Idaho Sugar Company executive Fred G. Taylor said of De La Mare, “He was well on his way to a successful engineering career. But the call of the gospel dwarfed all other things.”⁸



John Taylor.

Three months after the Book of Mormon translation was completed, Taylor received a letter from Young urging him to get “ideas and machinery if necessary” to build up Deseret’s industries.⁹ Taylor shared Young’s vision of an independent Deseret, and he suggested in December 1850, “There is nothing we require but we can manufacture ourselves.... We need sugar, the sisters won’t like to get along without their tea; I care nothing about it without the sugar myself. How must we get that? We are going to raise beets, the same as they do in France.”¹⁰

By March 1850, Deseret’s delegate to Congress had obtained enough sugar beet seed to plant two acres in the Salt Lake Valley. By the end of the season, a satisfactory crop of both seed and beets had been raised. This led church officials to announce that attempts would be made to “relieve the sugar market” by cultivating and refining sugar beets. Seth M. Blair and Joseph Young attempted to extract beet juice, but, lacking necessary information and expertise, they failed.¹¹ To Brigham Young, the matter was becoming more urgent, and in a message to the legislature that December he discussed the soaring freight rates of sugar importation.¹²

1985), 106; *Millennial Star*, June 15, 1850; Roberts, *A Comprehensive History*, 3:392.

⁸ Leon R. Hartshorn, “Philip De La Mare, Pioneer Industrialist” (M.S. thesis, Brigham Young University, 1959), 15; Fred G. Taylor, *A Saga of Sugar* (Salt Lake City: Deseret News Press, 1954), 29.

⁹ Philip De La Mare, “Deseret Manufacturing Company.” Taylor is credited with translating the Book of Mormon into French with the help of his first Paris convert, Louis A. Bertrand, a writer on economic questions. However, Taylor’s companion, Elder Bolton, stated emphatically that Taylor “never had anything to do with it [the French translation of the Book of Mormon] at all, except to raise part of the money for its publication.” Bolton, desiring credit for the work, wanted the “facts to be known...for the benefit of posterity.” He recorded that he himself was responsible for the translation; see Curtis E. Bolton journal, July 20, 1850, French Paris Mission Records, LR 29782, reel, Church Archives.

Deseret was the Mormons’ name for their theocratic “kingdom.” By the time Taylor received the letter, however, the name and the kingdom had been supplanted; Congress formed Utah Territory in September 1850.

¹⁰ *Millennial Star*, December 1, 1850.

¹¹ “Sixth General Epistle, September 22, 1851,” in Clark, ed., *Messages*, 2:8–83.

¹² Arrington, *Great Basin Kingdom*, 116.

Young and his counselors wrote to ask Taylor to remain in France another year: "It is our wish that the presidency in England, France and other places should search out such practical operators in the manufacture of sugar as fully understand their business, and forward them to this place, with all such apparatus as may be needed and cannot be procured here."¹³ This counsel sent Taylor, De La Mare, and Curtis Bolton to northern France in search of sugar industry experts. A factory in Arras, Pas-De-Calais, France, produced from two to three million pounds of sugar per year, and these three men investigated the soil and plants of the area. Taylor was satisfied that Deseret's conditions were comparable to Arras's soil and climate, and that the industry could thrive in Utah.¹⁴

Despite Taylor's optimism and energy, Bolton tired, complaining that he was giving all his time and attention to sugar manufacturing. On October 7, while visiting a sugar refinery that was housed inside the Barriere Passy convent, Bolton interpreted for Taylor for more than three hours. He wrote, "[John Taylor] runs me to death. My ankle pains me at night so I can scarcely sleep." Three days later the pair took a seven-hour railroad ride to "a number of other sugar manufactures." Bolton lay down complaining of pain. Filled with a sense of urgency about the project, Taylor told Bolton to "rise in the name of the Lord," and Bolton did as he was commanded. In Arras, Taylor met for two weeks with Mr. Crespel, the managing partner of the plant. While Bolton complained that his mission president "never would be hurried by anybody," Taylor drew plans of the plant so they could duplicate the system in Utah.¹⁵

Plans that seem to fit this description are found in the LDS archives. A small book of plans, with the date October 17, 1851, inscribed on the front page, is entitled "Plans and models of Manufacturing of Sugar from the beet root at Crespel-Delisse at Arras." The book contains fifty-one pages of notes and twenty rough sketches of machinery and processes. It also includes one large colored drawing of sugar beet machinery. In 1853 Taylor told Young, "I made the plans for the machinery and sent them [from] France."¹⁶ Such records indicate that the book of notes and sketches was made by Taylor.

Taylor now dedicated himself to implementing his plans in Deseret. The first hurdle was to obtain capital. Taylor and Philip De La Mare found two other investors in England, and the four became partners with equal shares in a new company. The stock was valued at 50,000 pounds sterling, equal to

¹³ Ibid.

¹⁴ Ibid. De La Mare contracted typhoid fever in France, remaining seriously ill for over a month. He left Paris for his home on February 25, 1851. While Taylor and Bolton continued to explore the sugar industry, De La Mare attended a mission conference in London on June 6, 1851, assisted in preparing the LDS periodical *L'Étoile du Deseret*, and helped his father construct the Victorian Pier on the Isle of Jersey; see Hartshorn, "Philip De La Mare, Pioneer Industrialist," 21–24.

¹⁵ Bolton journal, October 7–25, 1851.

¹⁶ "Minutes of the Deseret Manufacturing Company, March 17, 1853."

a quarter of a million dollars.¹⁷ A cash book reports the receipts and disbursements as follows:

Recapitulation of Deposits to Deseret Manufacturing Company¹⁸

Joseph H. Russell	£4999 10 11 1/2
John W. Coward	£1000 0 0 1/2
John Taylor	£ 223 4 2
Philip De La Mare	£ 350
Interest	£ 724 _____
Total Amount	£6645 9

Coward was a salt dealer and recent convert to the LDS church from Liverpool; Russell was the Scottish shipbuilder who had constructed the *Brooklyn*, the ship that carried Sam Brannan's company to California.¹⁹ The four partners signed articles of co-partnership on April 4, 1851, forming the Deseret Sugar Works (later the Deseret Manufacturing Company). The partners agreed to

enter into a co-partnership for the purpose of purchasing machinery and lands, erecting buildings, and fitting up and establishing a sugar manufacturing in the Territory of Deseret, or Utah territory. The object is to manufacture sugar from the beet root and also molasses, spirits, oil and such other things as we may deem expedient.

The agreement also clarified that Taylor was not "to engage to do anything that [would] interfere with his official duties in his office and calling."²⁰

After signing the contract, Taylor wrote Young:

You in your epistle speak about manufacturing sugar, etc. Since then I have organized a company to manufacture sugar at home instead of having the merchants carry it to the valley; but I will need a little of your counsel and assistance in the matter. The company will bring out apparatus and machinery to manufacture from 150 to 300 tons of sugar in the fall.²¹

Taylor then contracted Fawcette, Preston, and Company of Liverpool to manufacture the equipment. The cash book records three receipts to Fawcette and Co., with £2,500, or \$12,500, paid.²² The equipment manufactured was identical to the Arras Sugar Company's, with one exception. Arras's hydraulic press cylinders were made of cast iron. To lessen transportation weight, Taylor suggested that the cylinders be replaced with

¹⁷ B. H. Roberts, *The Life of John Taylor* (Salt Lake City: Bookcraft, 1965), 240; Gibbons, *John Taylor*, 129.

¹⁸ [John C. Coward], "Cash Book of the Deseret Manufacturing Company (1851-1853)," cited in Hartshorn, "Philip De La Mare," 31.

¹⁹ Hartshorn, "De La Mare," 32; Gibbons, *John Taylor*, 129.

²⁰ "Articles of Co-partnership of the Deseret Sugar Works," Deseret Manufacturing Company, MS 14280, Fd 13, Church Archives.

²¹ John Taylor to Brigham Young, March 13, 1851, cited in Samuel Taylor and Raymond Taylor, *The John Taylor Papers: Records of the Last Utah Pioneer* (Redwood City, CA: Taylor Trust Publications, 1984), 169.

²² "Minutes of the Deseret Manufacturing Company, March 17, 1853"; [Coward], "Cash Book."



Philip De La Mare.

wrought iron.²³ The production of the new factory equipment was reported in the *Millennial Star*: “This machinery [is] in every respect of the best quality that could be procured...and such is its weight, that it will require about fifty teams and wagons to convey it from Council Bluffs to Great Salt Lake City.”²⁴ The company ordered twelve hundred pounds of “the best French Beet seed,” at £2,500, and made other preparations, including “finding European brethren who might know the mechanics and chemistry of beet sugar manufacturing.”²⁵

The need to find skilled engineers to go to Salt Lake Valley was constantly on Taylor’s mind. For instance, at a conference held in Carpenters’ Hall, Manchester, England, in October 1850 Taylor called for “the emigration of mechanics to the Valley...that we may manufacture our own materials.” Mechanic Elias Morris was called at Holywell on September 28, 1851, to the sugar venture. Morris, along with three brothers, John, William, and Joseph Nuttall, whom Taylor had converted in Liverpool, were in charge of getting the equipment to America. After organizing the company, securing equipment production, purchasing and shipping seed, and finding trained manpower, Taylor sailed for America on March 6, 1852, aboard the *Niagara*, arriving at Boston twelve days later.²⁶

In January 1852 Joseph Russell and Philip De La Mare, accompanied by his family, left Europe on the ship *Kennebeck*. They were heading for St. Louis, where they planned to secure wagons and teams for hauling the equipment across the plains. On March 28 Utah’s first sugar beet factory headed for America under Morris’s charge aboard the *Rockaway*, arriving eight weeks later at New Orleans. Mr. Vernon, Mr. Mollenhauer, Mr. Bollwinkel, and Mr. Conner, sugar experts employed by the Deseret Manufacturing Company (DMC) to eventually assemble the factory equipment, also sailed on the *Rockaway*.²⁷

The DMC’s first setback of many took place in New Orleans, where officials charged Morris \$4,056 duty on the machinery. The church ended

²³ Philip De La Mare, “Why the First Efforts at Sugar-making in Utah Failed,” 1893, cited in Hartshorn, “Philip De La Mare,” Appendix 1.

²⁴ *Millennial Star*, April 1, 1852.

²⁵ *Journal History*, March 6, 1852; *Ibid.*, March 13, 1851; *Deseret News*, April 19, 1851.

²⁶ *Millennial Star*, December 1, 1850; Andrew Jenson, *Latter-day Saint Biographical Encyclopedia: A Compilation of Biographical Sketches of Prominent Men and Women in the Church of Jesus Christ of Latter-day Saints*, 4 vols. (Salt Lake City: Andrew Jenson History Company and Deseret News, 1901), 1:355; Philip De La Mare, “Deseret Manufacturing Company”; *Journal History*, March 6, 1852.

²⁷ *Journal History*, January 10, 1852; Jenson, *Latter-day Saint Biographical Encyclopedia* 1:355; [Lydia De La Mare], “Biography of Philip De La Mare,” MS, n.d., Church Archives.

up paying the fee, and the company proceeded up the Mississippi River by boat to St. Louis and then up the Missouri River to Fort Leavenworth, Kansas.²⁸ However, Taylor was convinced that a conspiracy lay behind the excessive tariff charges. He visited Col. Thomas L. Kane in Philadelphia, then proceeded to Washington, where he tried to have the government tariff rescinded and the money returned to the church. Although Taylor met with Utah's territorial delegate to Congress, John M. Bernhisel, and Senator Stephen A. Douglas, he was not able to get the charges reversed.²⁹

At every turn, the machinery shipment seemed to be doomed. If something could go wrong, it did. When the machinery arrived in the U.S., Philip De La Mare was trying to find, purchase, and break to the yoke 600 oxen to pull the wagons and also trying to buy 100 head of cattle. Russell, meanwhile, was supervising the construction of fifty-two wagons at Omaha, Nebraska. Neither of these tasks proved to be easy. De La Mare recorded that in trying to find and purchase enough oxen he traveled on foot more than 1,000 miles, carrying the great weight of \$6,000 in gold in a money belt around his waist.³⁰ But he found only 400 animals, mostly untamed, which he purchased from more than 100 sellers. Philip's son, Thomas De La Mare, records that his father felt the task was "almost beyond the power of man to accomplish."³¹ When she was ninety-two years old, Alice De La Mare Gowans remembered, "Father worked hard. He was gone from his family most of the time fixing a broken wagon wheel or a broken axle or shoeing an ox. The greatest hardship was in Wyoming where there was a terrific blizzard and not much to eat. It stormed so badly they couldn't keep a fire."³²

While livestock problems kept De La Mare occupied, Joseph Russell was working with wagons. Russell had experience in shipbuilding, but this knowledge did not transfer over to wagon making. The wagons he constructed "proved to be absolutely worthless and completely unable to sustain the weight of the machinery." Most fell apart and had to be discarded or were donated to destitute LDS pioneers. De La Mare then met Charles H. Perry, who was willing to let the DMC purchase forty Santa Fe wagons on credit. De La Mare also purchased flour on credit, but the flour turned out to be full of worms and plaster of paris, and it had to be replaced at church expense.³³

On July 4, 1852, the Santa Fe wagons, each pulled by eight yoke of oxen and carrying five to eight thousand pounds of machinery, started the

²⁸ Arrington, *Great Basin Kingdom*, 117.

²⁹ Roberts, *Life of John Taylor*, 240–41; Gibbons, *John Taylor*, 132–33.

³⁰ Philip De La Mare, "The Deseret Manufacturing Company, 1908," MS 3079, Access No: 28882-ARCH-88, Church Archives.

³¹ Thomas De La Mare, "The Life of Philip De La Mare" (Grantsville, UT: Leland S. Tate, 1943), 4. Cited in Hartshorn, 37.

³² Alice De La Mare Gowans, interview by Leon R. Hartshorn, 1959, cited in Hartshorn, 39.

³³ Philip De La Mare, "The Deseret Manufacturing Company, 1908," MS 3079, Access No: 28882-ARCH-88, Church Archives.

journey. The trip went without major incident until the Sweetwater River, 200 miles east of Salt Lake City, where catastrophe struck: the company encountered two feet of early snow and temperatures below zero. In addition, cholera spread throughout the camp, and De La Mare lost one of his daughters to the dreaded disease. However, the worst leg of the trip came later. Elias Morris, who traveled to meet the company, explains:

We found a foot of snow and but very little provisions in camp.... [Q]uite a percentage of the poorest [cattle] had laid down in the brush to rest for the last time. Of those that were found dead we cut out their tongues and hearts, which were cooked and thus satisfied our own hunger. When we gathered in all the other cattle we could find we had just about enough left to take the family wagons to Green River.... On the first night from Green River, they took a stampede and were either lost or stolen by the Indians.

When we left camp with the families we left six single men and supplies such as shotguns, rifles and ammunition, to hunt the lost cattle, as well as game for their own support as we had no provisions to leave with them. The second day they found the cattle. They followed us the next day. As they were all strangers to the road and our tracks were covered with snow, they took the wrong road by mistake.³⁴

In Salt Lake, Taylor began to worry about the delay and sent Joseph Horne and Abraham O. Smoot with fresh supplies. After Smoot found the camp, company members told him of their ordeals. Smoot noticed three large white letters, "DMC," painted on the boilers and asked what the letters stood for. When no one answered immediately, Smoot told the company, "If you don't know I think I can tell you. DMC in this case means Damn Miserable Company."³⁵

Along with provisions, Horne brought money to purchase cattle from fur trappers. These relief wagons kept the equipment moving; however, near Bear River, steep mountains forced the company to leave heavier non-essential pieces of machinery behind. This machinery did not reach Salt Lake until the next spring. The rest of the equipment arrived in Salt Lake City on November 10, 1852.³⁶ Young wanted to build the sugar plant near Temple Square, but he deferred to Taylor's wish to build it in Provo, where Taylor maintained there were "excellent facilities for power." Typical of the DMC's luck, though, snow and bad weather delayed the machinery's arrival in Utah Valley another three weeks.³⁷

Ten cases of 500 pounds of beet seed each, packed in large tin boxes, had arrived in Salt Lake Valley more than a year before, on September 25, 1851.³⁸ Taylor assured the Saints he had sent "the best French beet seed.... [and that] the average crop in France is 35,000 lbs. of beets to the acre." The crop, Taylor predicted, would "pay better than any other kind."³⁹ The

³⁴ *Deseret Weekly*, March 26, 1898.

³⁵ Journal History, September 30, 1852; *Deseret Weekly*, March 26, 1898. According to Arrington, *Great Basin Kingdom*, 117–18, the members of the company themselves came up with the epithet.

³⁶ Philip De La Mare, "Deseret Manufacturing Company."

³⁷ Arrington, *Great Basin Kingdom*, 118.

³⁸ "Sixth General Epistle, September 22, 1851," in Clark, ed., *Messages*, 2:94.

³⁹ Taylor and Taylor, *The John Taylor Papers*, 170.

next spring much of the seed was planted on the church farm south of the city.⁴⁰

While the territory had awaited the slow-moving equipment, Taylor remained enthusiastic about the project. In the Salt Lake Tabernacle on August 22, 1852, he announced:

We will make you sugar enough to preserve yourselves in. We can have as good sugar in this country as anywhere else; we have as good machinery as is in the world. I have seen the best specimens of it in the World's Fair, but there was none better than this; there is not any better on the earth, nor better men to make sugar than those who are coming.⁴¹

On September 4, 1852, Young reassured the legislature, "The arrival in our territory, of the machinery for the manufacture of sugar, from the beet," along with the most "energetic enterprising, and able men.... [will] doubtless soon furnish an abundant supply of that article, for the wants of the people."⁴²

Without machinery, however, beet farmers began to feel the pinch. To alleviate their concern, Taylor published the following in the *Deseret News* on October 16, 1852:

As many people who have raised beets are desirous of knowing whether the sugar factory will commence this season or not; I take this opportunity of informing the public that our machinery is expected to arrive in eight or ten days from this date; that our buildings are progressing as speedily as possible and that we anticipate being able to commence the manufacturing of sugar in five or six weeks from this time.

As we have not yet tested the saccharine properties of the beets, we are not prepared to give an accurate estimate of their value, or of the amount of sugar that we can give per ton, but we can expect to be able to give from six to eight hundred weight of sugar for the amount of beets that would grow on an average acre of ground, (estimating that at twenty tons to the acre, which is a very low estimate) delivered at the factory.... [The mill is to be in] Provo city.... Furnish us with the beets and you shall have one hundred tons of sugar this season.

Despite the optimistic public statements, cumulative frustrations with the project had been causing friction. Joseph Russell, whom Taylor had criticized for building defective wagons, in turn shared his negative views of Taylor with Young. Russell's complaints spurred two meetings. On November 1, 1852, a DMC meeting called to discuss the wagon fiasco began with Young declaring, "Now make your sugar.... If I were to spend my whole life in making this one thing I shall have done a deed worthy of praise." Then the complaints began. Russell accused his three partners in the business, Taylor, John Coward, and De La Mare, of withdrawing from his society for ten days. Coward then charged Russell with complaining about Taylor. Taylor remarked that it would have been better if they had

⁴⁰ Arrington, *Great Basin Kingdom*, 117.

⁴¹ Brigham Young, et al., *Journal of Discourses*, reported by G. D. Watt, 26 vols. (Liverpool: F. D. and S. W. Richards, 1854), 1:25.

⁴² *Deseret News*, September 4, 1852.

never seen Russell's wagons. Russell contradicted, "It was by [Taylor's] statements that this thing started and...there has been extravagance." Coward told Russell that he had treated Taylor and himself condescendingly, that he "manifested a bad spirit and would never approve of anything." Mid-meeting, Russell did an about-face and denied charging Taylor with neglecting his duty. In general, Young seemed to sympathize with Russell's arguments. He put his hand on Russell and cajoled, "We have been acquainted with Brother Russell for many years and he can manage business"—but he made no such validation of Taylor or the others. Taylor offered to let "any person examine the books," and the meeting adjourned.⁴³

Though the minutes offer no conclusions, Young subsequently reversed his decision about the plant's location. The machinery was returned from Provo to Salt Lake City in early December and partially set up on the northeast corner of Temple Square in a carpenter's shop.⁴⁴ After two months of experimentation with the equipment that had made it to the valley, the "energetic, enterprising, and able men" could only produce a small quantity of inedible molasses.⁴⁵ Nonetheless, on February 19, 1853, the *Deseret News* prematurely announced, "The sugar works situated on Temple Square are now in successful operation, persons having beets that are desirous to exchange for sugar can now be accommodated."⁴⁶

The factory was then moved four miles southeast of Temple Square to Kanyon Creek, in an area that became known as Sugar House.⁴⁷ But repeated attempts to make sugar were in vain; the company failed to produce an edible product. Finally, Young took control of the DMC. The following notice appeared in the *Deseret News* on March 5, 1853:

The machinery of the Deseret Manufacturing Company, having passed into the hands of the trustee in trust; this is to notify all persons interested that Orson Hyde, will hereafter take the superintendence and control the department allotted for making sugar from beets and all those holding equitable claims against the company, are hereby informed, that arrangements will be made to cancel them as soon as circumstances will permit.

Brigham Young

The affair came to a head on March 17, 1853, when Young held another meeting with the DMC. Those in attendance were Brigham Young, John Taylor, Heber C. Kimball, Orson Hyde, Daniel H. Wells, George D. Watt,

⁴³ "Minutes from a meeting at the Governor's Office, November 1, 1852," Deseret Manufacturing Company, MS 14280, fd 8, Church Archives.

⁴⁴ De La Mare, "Why the First Efforts at Sugar-making in Utah Failed."

⁴⁵ Arrington, *Great Basin Kingdom*, 118.

⁴⁶ *Deseret News*, February 19, 1853.

⁴⁷ In 1930 a monument was erected in memory of this event in what is now known as the Sugar House area of Salt Lake City. An inscription reads, "Erected in recognition of the first efforts to manufacture beet sugar in Western America. With dauntless perseverance through severe hardships the machinery was brought from Liverpool, England, to this place, where, in 1853, the sugar mill was constructed. May the spirit of this courageous venture continue to characterize this community. To the founders of a pioneer industry as a tribute to the heroic efforts of Brigham Young, John Taylor, Philip De La Mare, Elias Morris,

Joseph Russell, and John Coward. First, Young demanded a statement of “the fundamental loyalties of the people in the company.”⁴⁸ Although Philip De La Mare was not listed among those attending, he told his granddaughter Isabel De La Mare about a conversation that took place at the meeting. According to Isabel, he said,

Several of those who had lost money in the sugar beet manufacturing venture were grumbling about the failure of the undertaking. Brigham Young confronted them and asked, “What did you come to the valley for?” They replied, “We came to benefit ourselves.” President Young said to them, “Well, you had better go back.” Then he turned to Philip De La Mare who had lost more in the venture than they all and said, “Why did you come?” Philip answered, “I came for my religion.” Brigham Young patted him on the shoulder and said, “You’ll be all right; we won’t need to worry about you.”⁴⁹

Two sets of minutes exist for a DMC meeting on this date. The minutes are not identical, although some information appears in both. One set of minutes records the meeting at the governor’s office, while the other states that the group met in the Legislative Hall. The secretary who set the governor’s office minutes was George D. Watt; the other secretary is unidentified, but the handwriting indicates that the secretary was probably John W. Coward.

In piecing together Watt’s and Coward’s notes we find the following conversation. Young made it clear he would “assume no personal obligations but only act in his role as Trustee-in-Trust for the Church.” Russell blamed Taylor for the faulty wagons, for going ahead to Salt Lake and not staying with the company, for bringing the machinery to Deseret for his own personal profit, and for signing a paper and then trying to “creep out of it.” Russell demanded that Taylor return the machinery to Russell and Young in good order. Taylor replied he was “prepared any day to do [so].” Taylor asked Coward if “Brother Russell’s mind was not forgetful of things talked over twenty times.” Coward supported Taylor. But Young sided with Russell, accusing Taylor of such DMC blunders as the faulty wagons and of incurring debt for the church, making personal profit, and not paying workers. As recorded previously, during this meeting Young’s statements about Taylor’s business sense were negative. Taylor defended his abilities and reminded Young that he had done business in Nauvoo. Then the following interchange took place:

Young: You got up a business [in Nauvoo] and ruined many a
 poor family and I know it!
Taylor: I deny it!
Young: What business did you do there?
Taylor: I attended to my own printing office.

Abraham O. Smoot, and others who here laid the foundation of the beet sugar industry in the West from which event this immediate industrial and business center derives its name, this monument is erected A. D., 1930”; see Hartshorn, “Philip De La Mare,” 46.

⁴⁸ “Minutes of the Deseret Manufacturing Company, March 17, 1853.”

⁴⁹ Isabel De La Mare, interview by Leon R. Hartshorn, Tooele, Utah, June 12, 1959, cited in Hartshorn, “Philip De La Mare,” 49.

- Young: Yes and we put it up which cost us rising on \$7,000 which we never got one cent of to this day!
- Taylor: I had property there!
- Young: You had not.
- Taylor: I received my business in Nauvoo under Joseph Smith's directions myself!
- Young: There is the man that transacted that business (referring to Heber C. Kimball).
- Taylor: I beg your pardon sir, he did not!
- Young: And do you know the reason why Joseph Smith did not do it? It was because of the thorns that pierced him and the troubles he had to endure through that Printing Office, it was that, that made him not care about it.... If we were to let you take your own course one year instead of gaining by this business you would involve the works in debt.

When Young told Taylor, "I shall free you from any responsibility as it respects this matter," Taylor replied that he was glad to be rid of it. After such a dialogue one would assume there would be hard feelings between these two leaders. However, the conclusion of the minutes shows the maturity of both. Young made an important distinction: "It is nothing against your moral or religious character.... A man's judgement in temporal matters has nothing to do with religion.... I can go with Bro. Taylor into the Holiest of Holies and pray with him, but that does not say he knows anything about business.... I have no feelings but what I freely tell."⁵⁰

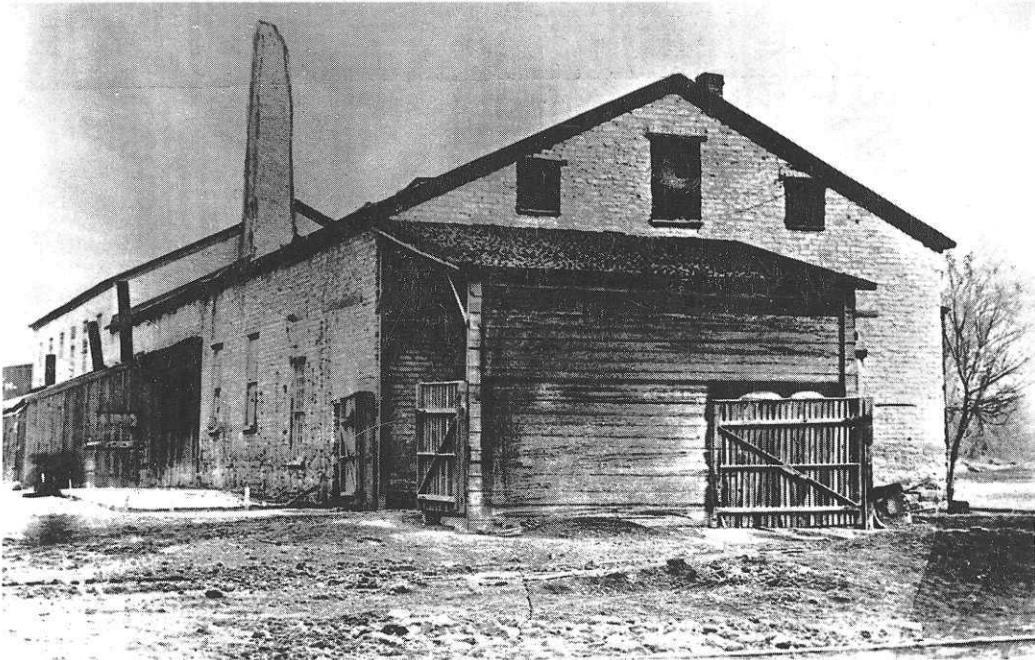
Though he was dismissing Taylor from his position with the DMC, Young declared, "Bro. Taylor and I are just as good friends as we were twelve months ago." Taylor responded that he "would go and fight for Brother Brigham today." Young replied, "And I would do everything for him." Taylor agreed, "I am thankful I can swim in the same stream with men who know what is right." The discussion ended with the men's relationship intact. Taylor was relieved of all DMC responsibility, and Orson Hyde, whom Young called a smug businessman, was appointed to supervise the construction of the sugar plant building.⁵¹ It is interesting that though Young had been critical of Taylor's part in DMC, Young ultimately recognized Taylor's seniority in the Quorum of the Twelve, ensuring that he would succeed Young as president.⁵²

The passing of the company to Orson Hyde marked the DMC's terminal illness; its death took place four months later. On July 14, 1853, the Deseret Manufacturing Company officially passed out of existence when the church assumed company debt. The cashbook shows these figures and explanations:

⁵⁰ "Minutes of the Deseret Manufacturing Company, March 17, 1853."

⁵¹ Ibid.

⁵² Susan Easton Black, *Who's Who in the Doctrine and Covenants* (Salt Lake City: Bookcraft, 1997), 144.



UTAH WRITERS PROJECT PHOTO, USHS

Amount advanced over funds deposited by the shareholders to pay debts, contracted by the agents of the company:

	\$ 4,531.11
Church Amount	<u>9,786.91 3/4</u>
Total amount overpaid the funds of the company	\$ 14,318.02 3/4

G. S. L. City, June 14 1853⁵³

After the church assumed financial responsibility for the sugar factory, the enterprise did not fare any better. Since there were no architectural plans, Truman O. Angell's expertise was called upon to design the plant, but he was unfamiliar with factory construction. His efforts, assisted by British experts, resulted in the construction of a 103 x 40-foot, three-story adobe structure, with two adjacent machine houses funded by tithing labor. The research of LDS economic historian Leonard Arrington shows that men were credited with \$1.50 per day for construction work, or \$3.00 per day if they brought teams; with the credit the men could obtain flour, feed, and other supplies out of tithing storehouses. Approximately \$45,000 worth of labor, produce, and supplies were donated to the Sugar House factory, and the church used an additional \$5,000 cash from tithing resources for construction.⁵⁴

Sugar factory in Sugar House built in 1853 on the southeast corner of 2100 South and 1100 East.

Planting, weeding, thinning, and harvesting

⁵³ Hartshorn, "Philip De La Mare," 44.

⁵⁴ Arrington, *Great Basin Kingdom*, 118.

beets was labor-intensive work. Farmers continued to plant sugar beets; while the factory was under construction, two planting seasons went by. The *Deseret News* carried editorials and feature articles encouraging the farmers to persevere.⁵⁵ Young was emphatic that beet cultivation continue: “We are sanguine that this can be done, and it is our purpose to continue our labors in this enterprise until it is fully accomplished.” The First Presidency sought “the blessing of the Lord, that no failure of the kind will again thwart our wishes, and that we shall soon be able to furnish, from the beet, sugar sufficient for home consumption.”⁵⁶ The farmers’ dedication to cultivating beets can be seen as “a measure of their faith and obedience.”⁵⁷

In 1855, when the building was complete, 300 acres in cultivation had produced 3,000 tons of beets ready to refine. Over a seven-week period the factory ground more than 22,000 bushels of beets into molasses, but the production of sugar was a complete failure. The juice turned black, soured, and fermented. Hogs would not even eat the stuff. Adding to difficulties, the crop failed in 1856 because of drought and grasshoppers. After the fall of 1856, attempts to produce sugar ceased, at a loss of \$150,000 to the church, investors, and beet raisers. The equipment was salvaged and used to manufacture linseed oil, paper, iron, and wool; the building housed wool-carding machines, a machine shop, and paper factory.

Young then advocated the culture of sorghum cane, distributing free seed to farmers and organizing the Deseret Agricultural and Manufacturing Society to promote sorghum. The cane grown throughout the territory furnished molasses, which remained the principal sweetener in Deseret until Utah’s first successful beet sugar factory opened in Lehi in 1890.⁵⁸

Historians still debate the cause of the failure. Administrative, chemical, mechanical, and financial problems have all been cited. One early critic of the DMC administration was Judge Henry H. Rolapp of Ogden. In the *Deseret Evening News* on September 24, 1891, Rolapp criticized the early sugar venture, stating that it had been “operated by men wholly unskillful in its manipulations.” Rolapp was especially critical of Taylor. Architect Angell agreed with Rolapp and stated that the DMC’s greatest need was “a set of strangers to run said factory.”⁵⁹ In defense of Taylor’s management, it is important to remember that De La Mare’s experience never lessened his esteem for John Taylor. According to historian B. H. Roberts,

In fact and in memory [De La Mare and Taylor] remained friends; and when in the course of events some would attempt to blame “his chief” or censure his judgment or charge him with bringing to Utah and installing faulty or inferior machinery, or defects

⁵⁵ *Ibid.*, 119.

⁵⁶ *Deseret News*, December 10, 1856.

⁵⁷ Arrington, *Great Basin Kingdom*, 119.

⁵⁸ *Ibid.*, 119–120; Wayne Stout, “The Mighty John Taylor” (1977), 81, MS, Special Collections, Harold B. Lee Library, Brigham Young University, Provo, Utah.

⁵⁹ Arrington, *Great Basin Kingdom*, 120.

in his undertaking, or that superior workmen had not been secured for the manufacture of sugar, Philip always defended him.⁶⁰

De La Mare responded to Rolapp in the *Deseret News*:

I discover some errors which I desire to correct, in justice to President John Taylor.... Being the only surviving member of the original company, and as my days may not be long upon this land, I desire to write this much in behalf of the honor of President John Taylor, and the other few men that spent their time and money so freely to try to establish the first sugar factory in Utah.⁶¹

De La Mare held that the DMC critics were not in possession of all the facts and their criticisms were colored with prejudice. Instead of the managers, he blamed the soil in which the beets had been cultivated. The alkali in western American soil produced juice requiring different processes than European methods, he said. Most seed was planted on lowlands, and De La Mare maintained that the juice was dark because it was filled with minerals. He and one of the sugar experts from England, a Mr. Mollenhauer, also found that “retorts” had not been ordered, since they were not included in Crespel’s plans. Retorts were “the cast iron ovens wherein bones were burned to make the animal charcoal that had to be used in clarifying and purifying the juice of the beet before it could be granulated and made into sugar.” De La Mare and Mollenhauer did gather

a few bones together and burned them in a charcoal pit, and from the few bones [they] burned...clarified a few bottles of black beet syrup until it was as clear as crystal; and satisfied [themselves] that the sugar could be made, and all that was needed was an abundance of animal clarifying matter, and had [they] secured that, Utah would have made beet sugar twenty years ahead of any other part of the United States.⁶²

De La Mare was sure that retorts would have saved the company, but by the time the lack was discovered, there was opposition to any further expense. Others disagree that having the retorts would have made a difference. Arrington writes that the French plans lacked “sufficient detail to ascertain how all of it fitted together,” and he doubts that “individual items were numbered and classified.” On the other hand, De La Mare declared that Taylor’s plans were so detailed and complete that he “even had a still made in Liverpool to work up the refuse of the juice into alcohol.” De La Mare added that in the fall of 1853 the machinery ran “all right and filled every reasonable expectation.”⁶³

Others suggest that the machinery was doomed before it ever landed on

⁶⁰ Roberts, *Comprehensive History*, 3:411–13.

⁶¹ De La Mare, “Why the First Efforts at Sugar-making in Utah Failed.”

⁶² *Ibid.*

⁶³ Arrington, *Great Basin Kingdom*, 118–19; De La Mare, “Why the First Efforts at Sugar-making in Utah Failed.” A sample of Taylor’s notes gives a sense of the way he explained the details: “Carbonic acid gas is made in cast iron retorts, it is made of coal coke and wood coke of nearly equal proportions but generally more of coal than wood. There are two small air pumps 17 inches long by 6 inch diameter and a small balance wheel 4 and 1/2 feet diameter at the rim is 3 and 1/2 by 1 and 1/2 inches. This is to force the gas from one retort to the other.” Found in Philip De La Mare, “The Deseret Manufacturing Company, 1908,” MS 3079, Access No: 28882-ARCH-88, fd. 1, Church Archives.

American soil. In the history of American sugar beet manufacturing there were sixteen failed attempts in seventy-seven years. During this same period there was continual commercial success in Europe.⁶⁴ The vice president of the Utah–Idaho Sugar Company, Fred G. Taylor, declared, “Master(s) in the art of sugar making jealously guarded their secrets from others, particularly from prospective competitors.... Nowhere does the record show that [Taylor] obtained any information regarding the chemistry or chemical controls.” Taylor biographer Francis Gibbons also suggests that French manufacturers omitted key elements from the plans and/or formula to protect their interests.⁶⁵

A final deterrent to success was the need for more capital. Arrington concludes that Latter-day Saints were crippled in completing projects because finances were nonexistent; the sugar industry would have “achieved more of traditional financial success if knowledgeable private interests had been allowed a freer hand in the day-to-day direction, and a stronger voice in the making of basic decisions.”⁶⁶ If the sugar industry had been controlled by private investors and businessmen rather than by church leaders, it may have succeeded. Also, because Utah’s territorial economy was self-contained it had no outside capital and was therefore unable to support such an enterprise.

Though the DMC failed to produce sweetener, some historians, including B. H. Roberts, have considered Taylor’s introduction of France’s sugar industry to Deseret to be laden with achievement. First in the line of accomplishments is his hunch that sugar beets could be raised in Utah. Intermountain farmers proved him correct. His judgment that Deseret’s soil and climate were akin to France’s was vindicated, and the attempt stirred interest and pointed the way for the church’s successful sugar manufacturing in the 1890s. According to Roberts, the venture also produced men with financial, moral, and physical courage who possessed progressive views; and the character of the men involved with the manufacturing—furnishing capital, conveying the equipment, or building the plant—demonstrates the high level of integrity of church converts.⁶⁷ Arrington adds that the development of the sugar factory also encouraged efforts that led to some of Utah’s major private industries. It helped establish the economic foundations of an independent religious commonwealth that utilized European immigrants’ skills. At the same time, LDS businessmen learned the “concept of collective entrepreneurship and administration,” which served them well in later undertakings.⁶⁸

In addition, it is important to note that the site of the factory that closed

⁶⁴ Taylor and Taylor, *The John Taylor Papers*, 175n11.

⁶⁵ Taylor, *A Saga of Sugar*, 55; Gibbons, *John Taylor*, 134.

⁶⁶ Arrington, *Great Basin Kingdom*, 129.

⁶⁷ Roberts, *The Life of John Taylor*, 401–402; De La Mare, “Deseret Manufacturing Company.”

⁶⁸ Arrington, *Great Basin Kingdom*, 130.

in 1856 housed an operational factory forty years later.

During the early twentieth century, LDS church leaders chose to view the earlier attempt at making sugar as a step in an eventually successful venture rather than as a failure. For instance, in 1903 Apostle Heber J. Grant declared, “God will vindicate His mouthpiece as he [did]...in the establishment of the sugar industry.”⁶⁹ Thirteen years later, Apostle Francis Lyman called the sugar industry one of the Saints’ “most prominent achievements,” affirming that the present industry was a product of the ideals of Taylor and Young.⁷⁰

With two church presidents involved, many LDS historians have been careful in assigning blame for the DMC failure. Thus, we may never pinpoint the exact cause of the failed sugar industry in Utah in the 1850s. Perhaps the venture was merely premature; in 1879, twenty-seven years after the Sugar House plant closed, America’s first sugar beet factory produced an edible product in Alvarado, California. After this success, there were no other U.S. failures.⁷¹

⁶⁹ Heber J. Grant, address in *Semi-Annual Conference of the Church of Jesus Christ of Latter-day Saints* (Salt Lake City: Deseret Book Company, October 1903), 10.

⁷⁰ Francis Lyman, address in *Eighty-sixth Semi-Annual Conference of the Church of Jesus Christ of Latter-day Saints* (Salt Lake City: Deseret Book Company, April 1916), 27.

⁷¹ Fred G. Taylor, *A Saga of Sugar*, 70.