

The Harvard Shakers' Mill on Bennett's Brook

Ned Quist



The Bennett's Brook Mill looking northeast from the Mill Pond's south shore. Photo by Harrison E. Evans, June 1, 1907. Courtesy of the Ayer Library, Ayer, Mass.

Thirty miles northwest of Boston, Massachusetts, in the northeast corner of the town of Harvard, the Shakers established one of their earliest communities. They chose the spot that Mother Ann Lee, their sect's founder, had used as her headquarters during her 1781–1783 missionary journey from Watervliet, New York, to New England. Lee and her followers purchased the Square House in Harvard, built by local New Light minister, Shadrack Ireland. The Square House became the cornerstone of what would be the Harvard Shaker community after Lee's return to Watervliet and her subsequent death. Never among the largest of Shaker communities, the Harvard Shakers reached their peak population between 1825 and 1849, when they may have had as many as 188 members living in four families.¹

The Church family, centered at the Square House, grew at its peak to be a substantial agricultural village of over forty buildings, including three dwelling houses, meeting house, five-story herb-processing shop, stables,

one of the largest barns in Massachusetts, tannery, office, blacksmith shop, medical shop, and sheds for storing firewood, coal, ashes, and ice. The South Family, less than a quarter of a mile to the southwest, was centered around the former home of Isaac Willard. It became the home of the Harvard Shaker Novitiate Order, and would grow to over fifteen buildings including a large dwelling house, office, blacksmith shop, stone barn, sheds, and shops. The smallest family, the East Family, closely tied to the South Family, was located due south of the Church Family and had a dwelling, barns, and shops. The North Family, also known as the Second Family, located its village due north, mostly in what was then the town of South Groton. This grew to include an office, dwelling, shops, and barns. After 1853, the North Family would become known for the large brick dwelling of forty rooms completed in 1853 and known locally as the Rural Home. The Church Family built their mill on Bennett's Brook inside the town of South Groton adjacent to what became the North Family site.

The Shaker Mill on Bennett's Brook

Built in by the Church Family in 1806 as a grist mill, the mill on Bennett's Brook and its associated buildings supported the Harvard Shaker community's industrial efforts for over one hundred years, almost until the community's closing in 1918. The mill buildings no longer stand, and all that remains are the foundation structures, a reconstructed dam, and a magnificent granite tailrace. Fortunately, the mill buildings were photographed by a number of amateur and professional photographers and over a dozen images survive from the 1890s through 1925. Surviving documentary evidence about the mill and what went on inside it comes mostly from a dozen or so Shaker journals, diaries, and account books written between 1800 and 1900.² These sources are held at several institutions, but primarily in the Fruitlands Museum collections, now housed at the Trustees of Reservations Archives and Research Center in Sharon, Massachusetts, the Western Reserve Historical Society, in Cleveland, Ohio, the Harvard Historical Society in Harvard, Massachusetts, and the Ayer Library in Ayer, Massachusetts.³

The Mill as a Pillar of Shaker Industry

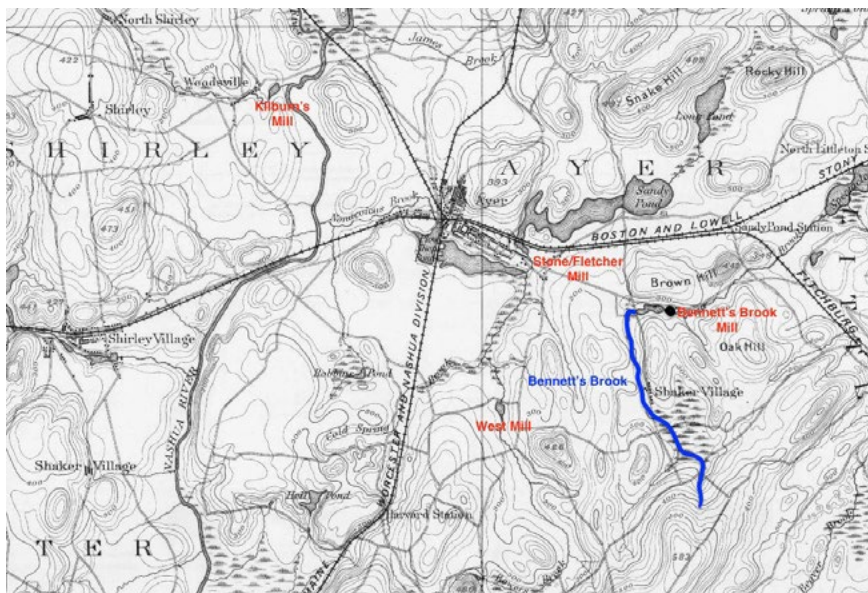
Like many other Shaker communities, the Shakers at Harvard put significant effort into building and maintaining an infrastructure to support their community industries. These industries not only supplied vital materials for the Shakers own temporal needs, but surplus production was sold for cash to purchase goods and services they could not provide

themselves. Community industry infrastructure often included one or more mills, separate workshops for brothers and sisters and a means of getting their products intended for sale to the World's market. Different Shaker communities, depending upon their location and resources, developed varied and often unique infrastructure. The Shakers in Canterbury, New Hampshire, for example, built a network of specialized mills and a complex water power system to run them.⁴ The Shakers at Mount Lebanon built and maintained a sophisticated system of aqueducts allowing them to provide water power not only to their mills but also their workshops and laundries.⁵ The Shakers in Pleasant Hill, Kentucky, were able to bring their manufactured goods to market using barges on the Kentucky River.⁶ In the community at Harvard, the Shakers succeeded in consolidating much of this infrastructure into a single building complex: the Shaker mill on Bennett's Brook. The mill was located on Bennett's Brook just south of the Ayer-Littleton Road (today, Rte. 2-A) a short distance east of what in the 1820s would become the North Family. Within this mill complex the Shaker brethren at various times processed grain and herbs; sawed, milled and dried lumber; and made matches, sieves, broom handles, shingles, and the boxes for Harvard's garden seed and bulk herb industry. Although it wasn't known to the Shakers at the time of its construction, locating the mill on Bennett's Brook near the North Family buildings, fortuitously brought it closer to market opportunities in Groton Junction and to the Littleton Depot.⁷ Beginning in 1844 both South Groton (Groton Junction) and Littleton Depot developed into railroad centers, first welcoming the Fitchburg Railroad (1844) and later the Worcester and Nashua Railroad (1848) and the Stoneybrook Railroads (1848).

The History of the Mill

Called into Shaker gospel order in 1791, the Harvard Shaker community did without a mill for the first fifteen years of its existence, yet lumber was needed for building construction, and grain was needed to be processed for flour and animal feed. For services that their mill would later provide, they relied in part on local mills in the nearby towns of Groton, Acton, and Shirley. Even after they built the Bennett's Brook mill, the Shakers continued to use the services of neighboring mills for specialized needs their own mill could not meet. While the Shakers paid many local mills for goods and services, two of their main suppliers were Joseph Stone's mill in South Groton (later Fletcher's Mill), and the Kilburn Mill in the Woodville village of Shirley.⁸

The water to drive the Shaker mill came from Bennett's Brook. This stream originated south of the Church Family and ran north from Oak Hill crossing Shaker Road to the west, just south of the Church Family, and then ran along the western side of the Church Family to the North Family. The Shakers not only straightened this meandering brook, but drained their western fields into it. Running north, the stream passed through a ravine and emerged into a flat swampy area in the town of South Groton (Ayer after 1871). There, just south of the Ayer-Littleton Road, the Shakers built a dam capturing what would become known as the Shaker Mill Pond. A dam and foundation structures still stand at the site of the mill.



Detail from USGS Groton Quadrangle 1893 showing relative locations of the Shaker Bennett's Brook Mill, the Shaker West Mill (1834–1838) and two other mills that supplied mill services to the Shakers.

The earliest mention of the mill's construction comes from the Church Family's "Journal and Manifest Record" where it was recorded on June 28, 1806 that "The Grist Mill was Raized."⁹ Typically "raized" (or raised) meant that the skeletal frame of the building was assembled in parts and then lifted off of the ground and made a free-standing structure, much like an Amish barn raising. Raising by no means signaled the completion of a building which would often take months. To do the specialized work of constructing a mill, the Shakers hired a local millwright, Thomas. W. Lyon of Leominster "to journey to view the mill

spot” in May 1806.¹⁰ The Shakers paid Lyon on June 28 for six days labor “at the mill” and then sixty-seven days of labor between July 4 and October 25, 1806.¹¹ One can speculate that Lyon may have supervised the raising of the mill frame, and then between July and October finished the building.¹² That same summer the Shakers paid Jonathan Cooper of Groton for scoring and hewing 525 ft. of large timber and 280 ft. of rafters as well as thirteen days of work at the mill suggesting that he too was involved with the mill construction.¹³ The final building (or buildings) appear to be in fact two structures, joined at an angle over a stone foundation closely tied to the dam. A woodshed, probably for drying sawn lumber, or perhaps merely for drying firewood, was added soon after.¹⁴ A fourth structure, possibly a lumber drying shed, was added sometime before 1896.

In 1806, the new mill would have been powered by a vertical water wheel, but whether the wheel type was undershot, breast or overshot is unclear. The records suggest that the Shakers may have purchased parts of the wheel, or the entire wheel, before building the mill.¹⁵

Most of what can be gleaned about the earliest years of the mill comes from the Harvard Shakers’ account books.¹⁶ The earliest significant sources are “Journal kept by Grove Blanchard 1815-1818” and “Daybook of Joseph Hammond.” These contain most of what little narrative we have on the early history of the mill from 1815 through the 1820s. What seems remarkable is while both mention the mill with some frequency, the use for which it was originally built, as a grist mill, never appears in either source.¹⁷ What seems remarkable is that while Hammond mentioned the mill with some frequency, the use for which it was originally built—as a grist mill—never appears in his journal. He does mention a combined “grist and sawmill” in an article he wrote for Spofford’s 1828 *Gazetteer of Massachusetts* in which he described the Harvard community. In that same source he noted that the Shaker lands in Harvard are “abounding in some parts with granite, of a superior quality, for mill stones from which many have been quarried.”¹⁸ But it was the mill complex as sawmill and woodworking shop that dominated Hammond’s 1820s accounts, and in fact, most of the subsequent accounts of activities at the mill.

The sawing of oak boards, slit work, and frame boards for Harvard town resident (and former Shaker), Simon Cooper between January 1810 and May 1811 provide what may be the earliest proof that the sawmill part of the mill complex—a sash style up and down saw—was in operation.¹⁹ Descriptions of industry at the mill also suggest the turning of broom handles, brush handles, and (wooden) screws for benches and broom vises, all of which require the use of a lathe. The Harvard Shakers had owned a lathe as early as 1801 when they sold one to local resident Stephen

Lawrence, but all indications point to this having been a lathe driven by a crank and flywheel.²⁰ Installing a lathe in the mill suggests that it relied on water power, most likely powered by a leather belt running from a ceiling-mounted line shaft. Beginning in 1825, the sawing and planing of sieve rims became a significant part of the mill activity. Meanwhile, the mill regularly produced lumber for building projects in the community. For example on April 6, 1824, Hammond reported “hauling off and sticking up stuff &c and our sawing finished.”²¹ He also noted that the mill hosted such miscellaneous tasks as pounding plaster, cutting tobacco, and grinding (sharpening) metal tools.



Interior wall of South Family Wash House (1823) exposed during 2019 repairs. Note the vertical saw pattern made by an up-and-down, sash- (not circular-) type saw such as the one at the Bennett's Brook mill. Courtesy of Judy Warner.

An early journal of Elder Grove Blanchard supplies most of what we know of the mill operations in the late 1830s.²² A curious Harvard Shaker industry seems to have flourished in this decade: the manufacture of wooden matches. Both Blanchard and Brother John Orsment worked to produce considerable numbers of matches, in December 1836 sawing some thirty gross and then the next month forty-one gross, which they took to Lowell to sell at one dollar per gross.²³ Possibly to increase efficiency of

their matchmaking, the elders and deacons agreed in 1837 to have Ziba Winchester make a “match machine for sawing sticks.”²⁴ The machine was complete by January 1838 when Blanchard saw it in operation.²⁵

The Shakers first introduced circular saws to the mill in the 1830s. Blanchard noted that several were being obtained in January of 1837.²⁶ The danger of these new devices became apparent in 1838, when Brother Oliver Robinson accidentally sawed off his thumb.²⁷ Circular saws at this time would’ve been relatively small and used as either cut-off or rip saws with rough-cut lumber. The metallurgy for the larger diameter saws used to slice lumber and beams from logs would not be available until the 1850s.²⁸ Perhaps because of the availability of the circular saws, the 1830s saw the rise of box construction. Beginning in 1837, Blanchard notes making essence boxes commissioned for Leonard of Lowell.²⁹ Boxes were also needed by the community, both for the distribution of Harvard’s garden seeds and also for the shipment of the pressed cakes or bricks of bulk herbs. Indeed, the Shakers were referring to the saw mill as “Saw mill & machine shop” according to a charge to the account of the North Family’s Joseph Mayo in 1837.³⁰



*Garden Seed Box, ca. 1820s, one of the many products relying on the mill.
Courtesy of the Trustees of Reservations, Fruitland Museum.*

In 1834, the Harvard Shakers bought the Adams Mill on Old Mill Road near the original location of the historic Prescott Mill.³¹ Although not contiguous to Shaker land it was conveniently located, only a short ride from the South Family. The Harvard town historian Henry Nourse observed that the mill was fitted out as a grist mill when the Shakers purchased it.³² Nourse suggests the Shakers used the mill for “the pulverizing of herbs, spices, etc.,” but also they brought grain to be ground at this location.³³ The mill on Bennett’s Brook, then, seems to have lost its function as a grist mill. The Adams mill purchase occurs at the same time that the Joseph Stone Mill in Groton Junction was sold to Groton farmer, Calvin Fletcher.³⁴ This purchase of the Adams Mill may have replaced services (notably grist mill service) previously offered by Stone, but no longer by Fletcher.³⁵ In several journal entries from the 1830s, the Shakers referred to the Adams Mill as the “West Mill.” Evidently the mill was not that successful. Elder Grove Blanchard reported that in 1837 Shaker Trustee Simon Atherton had been directed “to get liberty to sell the West Mill—we give consent if he can make a bargain.”³⁶ According to Nourse, the Shakers sold the West mill in 1838 to Harvard town resident, Henry Hapgood.³⁷



Adams Mill, ca. 1875. The Adams Mill complex burned to the ground in 1888.
Courtesy of the Trustees of Reservations,
Archives and Research Center.

The 1840s were a time not only of relative prosperity for the Harvard Shakers but also a time when significant mechanical talent existed among the brethren. This mechanical talent led to several technological advances in the Bennett's Brook Mill. Among them the Shakers introduced a shingle machine, a "cutting off saw frame" and a broom handle machine. Elijah Myrick seems to have been the person most responsible for the shingle machine—working on its development (or repair) in January and February 1843.³⁸ Also in 1843 Alfred Collier built a "cutting off saw frame" which was very likely a saw bench or what we would call today a table saw, using a circular saw blade to either crosscut (cut off the length) or rip (cut off the width) of a board.³⁹ The making of belts for both the shingle machine and the cutting-off saw point to the use of a water driven line shaft, a set-up known in other Shaker shop settings and common in many water-powered mills throughout the nineteenth century.⁴⁰ In March 1843, Augustus Grosvenor and Elijah Myrick worked on a new broom-handle machine that came from the Watervliet Shakers. Much more than simply a broom vise, it appears to have been a specialized lathe described in the journals as "fixing for and commencing turning broom handles on the new machine that came from Watervliet."⁴¹

Harvard's bulk herb business was perhaps at its peak in the 1840s and 50s with a dry house being built for herb drying in 1845–1848 and the five-story herb house in 1849. The mill served the herb business by providing lumber for the herb boxes used in shipping; however, because the mill did not have a planer and the "stuff" for boxes had to be relatively thin, the Harvard Shakers brought at least some of their lumber for boxes to a planing mill in Shirley.⁴² It is also apparent that the grinding of bark and cracking of roots necessary for processing such items as dock root, yellow lily root, and radish at least for much of the 1840s was done at a neighboring mill, rather using whatever grist mill facilities may have remained in the mill on Bennett's Brook.⁴³ Perhaps trying to keep more of this work "in house," in 1851 Elisha Myrick reported that George Whiting "has been engaged the most of this week on patterns for a model for an herb press & he probably will be for some time to come."⁴⁴ Whiting seems to have been near completion of this device in March, although it may not have succeeded, for in his year end report, Myrick noted:

We are daily using the same presses without any improvement that we used before we attempted to get anything better. Everything which we have tried has proved an entire failure & we have now made [arrangements] with David G. Starkey of Mattewan N.Y. to build us a press of 200 tons power to be done by the first of April 1852.⁴⁵

By the late 1850s the situation appears to have improved, because Elisha Myrick reported that in February 1857 that he went “to the Mill and clean out the cracker.”⁴⁶

As the mid-nineteenth century approached, the Shakers used the mill primarily for sawing lumber from logs. In the winter, when most trees were harvested and when there was usually a solid snow cover, the Shakers used sleds pulled by oxen (or sometimes horses) to move the logs to the mill and then to bring back lumber (stuff) and firewood to the shops and woodsheds in the family villages.⁴⁷ Comments on the depth of the snow and how it affected the quality of sledding and the movement of these materials appeared in the journals between November and February in most years.⁴⁸ Lumber was air-dried in the shed adjoining the mill or, in later years, outdoors. Slabs, or the round edges cut off of logs to make them square, and generally considered to be waste, became for the Shakers a valuable by-product of lumbering. Slabs could be cut into stove-sized lengths, air-dried in wood sheds, and used as fuel in their highly efficient wood stoves.⁴⁹ Wasting no part of the log, they collected saw dust periodically and used it as bedding for livestock.

Alfred Collier

Although perhaps not the dominant figure in the history of Harvard’s mill on Bennett’s Brook, Brother Alfred Collier’s two journals, 1856–59 and 1859–61, provide more detailed information on the mill for that five-year period than is available in any of the other Harvard manuscript sources.⁵⁰ Collier was brought by his mother to live with the Harvard Shakers as an eight-year-old boy in 1831. Of a similar age as Elijah Myrick, Collier moved out of the Boy’s Order in 1838 and was an “energetic worker and member of the Church Family” until his dismissal from the community by the Ministry in September 1864.⁵¹ During his thirty-three years at Harvard he would become a Farm Deacon, a cabinetmaker, a skilled carpenter, and mechanic contributing much to the upkeep and running of the mill.⁵² His journals cover only five of the last eight years he lived among the Harvard Shakers, but contain a wealth of information on the mill and its operation and, as former Fruitlands Museum curator Michael Volmar has pointed out, they are much more reflective and interesting to read than most Shaker journals.⁵³

Although Collier had been involved with the Bennett’s Brook Mill at least since 1842, when along with Thomas Holden he was made a farm deacon, in his later years with the community Collier was clearly among its prime users, and along with Elijah Myrick, one of its primary managers. From his two journals, we learn of the sale of lumber and firewood, the

handling of repairs both to the dam and to the mill itself, and the importing of outside expertise to maintain and upgrade the mill and its equipment.

Elder Grove Blanchard notes in his 1864 diary that “Brethren are doing quite a business at chopping, drawing and selling wood and timber. They get it back of Pine Hill, much of it ship timber [i.e., long leaf pine]. Elijah Myrick and Alfred Collier are the principal Brethren in the business.”⁵⁴ The Shakers also sawed walnut and oak from their own woodlots, much of which was sold to the World.

By the time of Collier’s journals, the mill and its dam had been in operation for close to fifty years and was in increasing need of repair. Collier wrote in February 1857 that the mill is “in a miserable condition the dam is very poor & leaky I drain all the water out of the Pond.”⁵⁵ On several occasions he reported repairs to the ways, the supports from which the logs were rolled onto the carriage carrying the log into the saw. Collier also reported several repairs to the dam and sluice gate. Just as they did originally when building of the mill, the Shakers called upon the expertise of local millwrights, Capt. Abram Foster of Shirley and Phineas Nutting of Groton.⁵⁶

Recognizing that the mill required a thorough overhaul, the Harvard Shakers made major improvements in this period. In the fall of 1859, with the assistance of Enfield, New Hampshire’s Caleb Dyer, they modernized from a vertical wheel to one or more Tyler water turbines. In March of 1860, John Tyler himself, inventor of these new style turbines, visited the Harvard Shakers’ mill and with Collier and Elijah Myrick took a “look at our wheels put in last Fall by Caleb Dyer” and “fix [them] some.”⁵⁷ Later in 1860, the Shakers covered forty feet of the tailrace downstream from the mill with stone and gravel and built a new stone dam. Later in September 1860, they installed yet another new wheel in order to drive the sawmill by belt. Initially they planned to have a vertical wheel made and installed, but after Elijah Myrick visited Claremont, New Hampshire, home of John Tyler’s water turbine business, they may have purchased another Tyler turbine, which arrived in October at Groton Junction, was subsequently installed by Collier and Myrick, and was operational by the end of October.⁵⁸

The Mill Declines with the Community

After the 1860s, there is little mention of the Bennett’s Brook Mill in the journals. This more or less coincides with the near complete depletion in the ranks of brethren at Harvard. The movement of timber and firewood continued, as did the making of boxes for the herb industry, but likely done mostly by hired help. Following the Civil War there was a significant increase

in the use of hired hands. Harvard's Employee Record Books show that between the 1870s and 1890s over twenty hired men were employed on a regular basis.⁵⁹ Much of this employment was surely for farm activities, but it's likely that some were engaging in work at the Shaker sawmill since one of them, Sanford Preble, who had worked for the Shakers since 1877, leased the sawmill from the Shakers in 1896.

After the departure of Alfred Collier in 1864, the journals provide very little information on the Bennett's Brook Mill. The ability to retain talented brethren had challenged the society for decades. Ziba Winchester, for example, left in 1838, but we know the loss of a talented group brethren from the late 1850s through the 1860s devastated the Harvard community. George Whiting left in 1858 and Elisha Myrick (brother of Elijah) left in 1859, Thomas Holden in 1862, and Collier in 1864. Augustus Grosvenor died in 1864, Daniel Myrick in 1868. All of these brothers appear frequently in the journals as working at the mill. Perhaps the final straw for the brethren participating in the work of the mill was the death of Elijah Myrick in 1890. Elijah Myrick, perhaps the best known among the Harvard brethren, served in various roles in the community, as trustee and as elder and is frequently mentioned in the journals in connection with the mill. Myrick's last contribution to the *Shaker Manifesto*, made only a couple of days before his death, notes that a new stone dam "layed in cement" was installed at the sawmill.⁶⁰

By the mid 1890s, the fate of the mill became clearer, in part because of photographic evidence to supplement what little appears in the journals. Photos were taken of the mill by local amateur photographers William A. Wright, Charles Kennison, Harrison E. Evans, and by professional photographers for the postcard trade. The rare mentions of the mill in the journals come from Sister Maria Foster. She reported in her diary that in 1895 the Shakers had begun negotiations to lease the Bennett's Brook Mill to the Preble family:

"Sandford Prebles [i.e. Preble], and Bliss Goss, came over to negotiate with Elder John [Whitely], about leasing the North Office, and Saw Mill, to Sandford Prebles, on trial of the first year. Elder John draws up a writing, and Sanford signs it, and Bliss Goss and Maria Foster witness to it."⁶¹

In August 1896 Foster reported another leasing arrangement with the Preble family, this time with Arthur Preble: "Elder John here to see about leasing our Saw Mill, to Auther [Arthur?] Prebles [Preble]."⁶² About the time of these second leasing arrangements, William Wright took what may

be the earliest photograph of the Bennett's Brook Mill in April 1896 with three men standing in front. Based on other contemporary photos of the Prebles in the Ayer Library, at least two of these, probably all three, are Prebles (from left to right, William, Stanford, and either Frank or Arthur). Since the photo was taken only two months before the second agreement with the Shakers, one could speculate that the purpose of the photograph related to the signing of a second, possibly longer term, arrangement.



*Bennett's Brook Mill in 1896. Detail of photo by William A. Wright, April 6, 1896.
Courtesy of the Trustees of Reservations, Archives and Research Center.*

The last mention of the mill as an operating sawmill appeared in the 1904 "Annual Report of the Massachusetts Fish and Game Dept." In that report, a Capt. Collins visited several working mills in the Ayer area looking for illegal discharge of sawdust into the rivers. On Sept. 7, he visited the "so-called Shaker sawmill in Ayer, and found there was sufficient opportunity to blow out the sawdust made or carry it away by building a small bridge of such waste material as the sawmill would produce, and also making a pen under the mill."⁶³

After 1904 we have several photographs of the mill in increasing states of disrepair, mostly taken by Charles Kennison, Harrison E. Evans, and others, still with piles of sawn and stickers lumber drying, suggesting sawmill activity continued after 1904. In September 1915 Charles Kennison took one particularly important photo of the sawmill itself, showing the sash or vertical up-and-down saw and log carriage still covered with sawdust, suggesting its use continued at least until then.



Sash saw and carriage of the Bennett's Brook Mill.

Photo by Charles Kennison, September 1915.

Courtesy of the Ayer Library, Ayer, Massachusetts.

In 1925 Fred Barrows took the last photograph known to this writer. The photo shows three-year-old Warren Stuyvesant Prescott Barrows of New York City (1922–2003) and his Aunt Florence Ellen Barrows of Ayer (1901–1985) in front of the mill, now heavily overgrown with weeds. With the porch roof collapsed, the doors mostly missing and very little remaining of the window sashes, the mill is derelict. Along with most of the real estate remaining in Shaker hands, the Bennett's Brook Mill became property of Boston industrialist and “Single Tax” advocate Fiske Warren in 1918.



Photo of the surviving foundations of the Bennett's Brook Mill. Taken by the author in November, 2019. The rusted metal rod and disc barely visible in the center may be the surviving pieces of a ceiling-mounted line shaft.



*Bennett's Brook Mill in 1925. Photo taken July 14, 1925 by Fred Barrows.
Courtesy of the Harvard Historical Society*

Without the pictorial evidence supplied by local photographers we would have little or no concept of what the mill looked like. Because it was located near the North Family, the mill doesn't appear on Kendall's 1836 village view of the Church Family even though it was clearly under its auspices. Today, the only pieces of visual evidence surviving are the foundations of the two main structures joined at an oblique angle and tucked up against the existing dam and the granite tailrace.

Conclusions

Regrettably, there are no known images, photographic or otherwise, showing the mill in its most active years between about 1825 and 1860. The Shaker journals and diaries tell us that the Harvard mill complex served a vital function for the community in providing key infrastructure supporting several Shaker industries. In its prime years, the mill operation provided lumber, broom handles, matches, and herb and seed boxes, and served as an incubator for the creativity of such talented brethren as Alfred Collier, George Whiting, Ziba Winchester and Elijah Myrick. But with the decline of the Harvard community's population after the Civil War, the mill mostly disappeared from the journals. Although it still operated as a sawmill, it was operated entirely by hired help who were under no obligation to keep journals.

The final disposition of the mill complex remains a mystery. Since the Historic American Buildings Survey did not record these buildings during their 1933 survey, it's likely they had burned or were dismantled before then, but if not, they were likely destroyed in either the 1936 flood of the Nashua River or the 1938 hurricane, both of which caused extensive damage in the Harvard-Ayer area.

The Harvard Shakers had the benefit of their own single mill complex for over one hundred years, from 1806 until at least 1915. Most Shaker communities featured several mills, each specializing in a particular function such as sawmill, grist mill, cloth-fulling mill, firewood mill, or turning mill (machine shop). Rare among Shaker mills in that it incorporated several functions, the Harvard Shakers' mill was used as a grist mill, and later as a sawmill providing lumber for construction of new buildings, renovations, and cabinet-making needs.⁶⁴ Like many other Shaker mills, this one was on the edge of the community, but fortuitously placed to take advantage of the worldly market access provided beginning in the mid-1840s with rail connections in both Groton Junction and Littleton. Also equipped with lathe, cut-off saws, and other water-powered equipment, the mill became a machine shop for the brethren. The mill further served as an "incubator" for the mechanical creativity of the Harvard Shaker brethren.

Ziba Winchester made a match-cutting machine in 1838. Elijah Myrick made a shingle machine in 1843, the same year that Alfred Collier made his cutting-off saw frame. George Whiting used the mill facilities in 1851 to develop an herb press.

The brethren made use of some of the best new technologies available to them from the outside world as well. In the 1830s they adopted the use of circular saws. In the 1850s possibly under the influence of Enfield's Caleb Dyer they brought in one or more Tyler water turbines to replace their mill wheel. Mirroring the decline of the brethren in the community, the mill's use appears to have narrowed to solely a sawmill in the 1870s and was later leased by Shaker employees (the Prebles), and possibly others, until its sale to Fiske Warren in 1918. The late nineteenth century drop in the numbers of brethren may explain the failure of the Harvard Shakers to invest in new technologies.⁶⁵ The Harvard Shakers, unlike their brethren at Enfield, Connecticut, or Canterbury, New Hampshire, never adopted the larger circular saws available starting in the 1850s, nor did they take advantage of the steam-engine technology as did the Shakers at Pleasant Hill, Kentucky.⁶⁶

The Shakers treated their buildings—whether meeting houses, dwellings, shops, or mills—as purely functional, repurposing them, and their constituent materials when needed. Because the Harvard Society was not, in their later years, able to maintain this building ecosystem with the few sisters who remained, the mill complex was allowed to deteriorate. Viewing the late nineteenth century and early twentieth century photos of the mill complex we find it hard to believe that these were the products of Shaker culture, yet they were. What we are left with instead are the shadows of Shaker industry which had flourished and faded leaving behind a reminder of what the Harvard Shakers had been.



Shaker Saw Mill July 25-1906. (Built by the Shakers in 1808.)

Bennett's Brook Mill looking ESE. The main building is obscured by the trees on left, but clearly shows the two buildings on the right, believed to be a woodshed and a lumber drying shed.

Detail of a photo by William A. Wright, July 26, 1906.

Courtesy of The Trustees of Reservations,
Archives and Research Center

Notes

Location symbols used in endnotes:

MaShaTR (formerly MHvFM): The Trustees of Reservations, Archives and Research Center.

OCIWHI: Western Reserve Historical Society.

Note that HVD is part of the item identification within MaShaTR.

1. There are competing points of view about the peak population at Harvard between 1820 and 1850. Roben Campbell (email with author, Jan. 9, 2021) believes that the population may have actually reached its peak in 1825 at about 178 members (or more) and Stephen Paterwic (email with the author, Jan. 9, 2021) points to OCIWHI V:B-140: "Account of a trip begun on August 5th, to Harvard Shirley, Lynn and New York kept by a member of the party which included Aaron Bells, George Curtiss and Abigail Crossman," which states on Sept. 5, 1849, the total at Harvard numbered 188 (Church 110, Second 36, South 29 and East 13)
2. Chief among these journals are The Journal and Manifest Record 1791–1806 (HVD 3103), Aaron Jewett and Seth Babbitts Book of Accounts in Dollars & Cents, 1799–1851 (HVD 3104), Joseph Hammond Daybook, 1820–1826 (HVD 3111), Journal containing some of the most important events of the day, 1840–1843 (HVD 3114), Harvard Church Family Daybook, 1843–1845 (HVD 3115), Harvard Church Family Daybook 1845–1847 (HVD 3117), Alfred Collier Journal kept for his own special benefit, 1859–1861 (HVD 3123), [Journal of] Grove Blanchard 1864 (HVD 3126), Journal of Maria Foster, 1893–1911 (MaShaTR, HVD 3133); Grove Blanchard's Journal, 1836–1840 (OCIWHI V:B-44-45); Journal of Alfred Collier (OCIWHI V:B-219). For the latter two, I owe special gratitude to Roben Campbell who generously supplied me with transcriptions she had made from microfilm while working at the Fruitlands Museum.
3. I am deeply indebted to the Trustees of Reservations Archives and Research Center's Sarah Hayes, to the Ayer Library's Samantha Benoit, to Roben Cambell of Harvard, Mass., to Alan Ganung of the Ledyard Sawmill, Ledyard, Conn., and to Judy Warner of the Harvard Historical Society.
4. David R. Starbuck, "The Shaker Mill System," in *Neither Plain Nor Simple: New Perspectives on the Canterbury Shakers* (Lebanon, N.H.: University Press of New England, 2004), 22-44.
5. Historic American Landscapes Survey, "North Family, Mount Lebanon Shaker Village HALS NY-07," 2009, 11-44, Emma B. King Library, The Shaker Museum, Old Chatham NY.
6. Julia Neal, *The Kentucky Shakers* (Lexington, Ky.: University Press of Kentucky, 1996), 35-36.
7. After 1871 Groton Junction (originally known as South Groton), became the town of Ayer. Well before the coming of the railroad in 1844, the Shakers were doing business with Groton Junction blacksmiths and millers. Even though most of the Shaker community was located within the northeastern

portion of the town of Harvard, the proximity to Groton Junction (Ayer) made the Harvard Shakers use it as their business address throughout most of their existence.

8. Joseph Stone's mill on Sandy Pond would be used by the Shakers from 1800 to 1834 when the mill was sold to Calvin Fletcher (see Barry Schwarzel, *Ayer* (Charleston, S.C.: Arcadia Publishing, 2012), 7). Records of transactions with Stone can be found in "Aaron Jewett and Seth Babbitts Book of Accounts in Dollars & Cents, 1799–1851," HVD 3104. Kilburn's mill in Shirley would be used by the Harvard Shakers from the 1830s to the 1860s as a supplier of both sawn lumber and grist mill services.
9. "Journal and Manifest Record," 100.
10. Ellery Bicknell Crane, *History of Worcester County, Massachusetts* (Lewis Historical Publishing Company, 1924), 814. This is likely the same Thomas W. Lyon described as an "ingenious machinist" who assisted David Poignand and Samuel Plant in the conversion of the Prescott saw and grist mill to a mill for processing cotton with power looms in Lancaster, Mass.
11. "Aaron Jewett and Seth Babbitts Book of Accounts in Dollars & Cents, 1799–1851," 83. MaShaTR.
12. "Journal and Manifest Record," 100. "June 28th 1806. Raized the Grist Mill." Edward Horgan in *The Shaker Holy Land: a Community Portrait* (Harvard, Mass.: Harvard Common Press, 1982), [46] reports the date as 1808. That date is likely taken from the caption to an 1896 photo of the mill by William A. Wright, who may have gotten the date anecdotally from the Shakers themselves, or simply got it wrong.
13. "Aaron Jewett and Seth Babbitts Book of Accounts in Dollars & Cents, 1799–1851, 12, MaShaTR. "Scoring and hewing" is the making of a square beam from a round log using hand tools, chiefly axes and adzes.
14. *Ibid.*, 30.
15. *Ibid.*, 41. Stephen Lawrence: "To a quantity of Wheel timbers plank fellows and spokes and a large lathe and wheel," "Aaron Jewett and Seth Babbitts Book of Accounts in Dollars & Cents, 1799–1851" p. 41, June 3, 1801 and May 6, 1814 "Joseph Stone: To turning timber for mill wheel.
16. These are the "Journal and Manifest Record, 1791–1806," MaShaTR, HVD 3103 and "Aaron Jewett and Seth Babbitts Book of Accounts in Dollars & Cents, 1799–1851" HVD 3104.
17. Grove Blanchard, "Journal Kept by Grove Blanchard, 1815-1818," OCIWHI V:B-196; Joseph Hammond, "Joseph Hammond Daybook, 1820–1826," MaShaTR 3111.
18. Jeremiah Spofford, *A Gazetteer of Massachusetts: Containing a General View of the State, with an Historical Sketch of the Principal Events from Its Settlement to the Present Time, and Notices of the Several Towns Alphabetically Arranged* (C. Whipple, 1828), 211.
19. "Aaron Jewett and Seth Babbitts Book of Accounts in Dollars & Cents, 1799–1851," 37.
20. *Ibid.*, 41. The description of the lathe: "large lathe and wheel" suggests

- that it may have been a “Great Wheel Lathe,” see Charles F. Hummel, *With Hammer in Hand: The Dominy Craftsmen of East Hampton, New York* (Charlottesville: Published for The Henry Francis du Pont Museum, The University Press of Virginia, 1968), 91-93.
21. Hammond, “Joseph Hammond Daybook, 1820–1826,” April 6, 1824. NB: “sticking” is the process of stacking green lumber with spacers (sticks) to provide for the free circulation of air promoting even drying. “Stuff” is a common carpenter’s term for lumber prepared for use. April would be a common time for the sawing to be finished as seasonal water levels drop in the late spring, and the brothers working in the mill would be needed for planting.
 22. Grove Blanchard, “Grove B. Blanchard’s Journal. Commencing on This 9th Day of November, 1836.” (Harvard, Mass., 1836–1840), OCIWHi B:44-45.
 23. Ibid., Dec. 30, 1836 and Jan. 3, 1837.
 24. Ibid., Oct. 20, 1837
 25. Ibid., Jan. 26, 1838.
 26. Ibid., Jan. 12, 1837. The question of the invention of the circular saw by the Shakers is handled in John O. Curtis, “The Introduction of the Circular Saw in the Early 19th Century,” *APT Bulletin* 7, no. 3 (1975): 79–89 and in Christian Goodwillie, “The Shakers and the Invention of the Circular Saw: a Circular Argument” in *Inspired Innovations: A Celebration of Shaker Ingenuity*, edited by M. Stephen Miller, 181-84 (Hanover, N.H.: University Press of New England, 2010). Both agree that while Sister Tabitha was very likely ingenious, the circular saw existed long before the Shakers first employed it.
 27. Grove Blanchard, “Grove B. Blanchard’s Journal,” Mar. 14, 1838.
 28. James L. Garvin, “Historic Structure and Cultural Landscape Report: Turning Mill Pond Dam and the Shaker Millpond System Canterbury Shaker Village” (Canterbury Shaker Village, 2018), 27.
 29. Blanchard, Mar. 16, 1837. Essence boxes are generally made for sale or display of small consumables.
 30. “Aaron Jewett and Seth Babbitts Book of Accounts in Dollars & Cents, 1799–1851,” 141.
 31. “Wetherbee to the Trustees April 4th, 1834. Mill” (April 4, 1834), Harvard Historical Society.
 32. Henry S. Nourse, *History of the Town of Harvard, Massachusetts. 1732–1893* (Harvard: W. Hapgood, 1894), 455
 33. Ibid., Harvard Church Family Daybook (Journal No. 2), 1843–1845, p. 191. MaShaTR, HVD 3115, March 15, 1845: “Samuel Myrick carried a grist to the West Mill with the Ministry’s horses and brot home the meal.”
 34. Calvin Fletcher (1797–1879) was a farmer and sawmill operator in Ayer and the namesake of Fletcher’s Pond. See Schwarzel, *Ayer*, 7.
 35. Although in 1843 Augustus Grosvenor does bring a log to Fletcher’s Mill to be sawn for the cider mill—perhaps because at that moment their own sawmill was either out of commission, or because it did not have the capacity to saw the particular log in question. See “Journal Containing

- Some of the Most Important Events of the Day, 1840–1843,” p. 156, MaShaTR, HVD 3114.
36. Blanchard, “Grove B. Blanchard’s Journal. Commencing on This 9th Day of November, 1836.” Dec. 29, 1837.
 37. Nourse, *History of the Town of Harvard, Massachusetts, 1732–1893*, 455.
 38. “Harvard Church Family Daybook,” 122–24, MaShaTR.
 39. *Ibid.*, 128–30.
 40. *Ibid.*, 130.
 41. *Ibid.*, 139. A broom handle lathe is mentioned in the Jan. 8, [1867], entry of the “Journal of the Watervliet West Family Shakers.” [<http://memoirs.shakerpedia.com/shaver/pages/?set=west&grp=005&pg=1&hi=broom+handle+machine>]
 42. Elisha Myrick, “Daybook Kept for the Use & Convenience of the Herb Department by Elisha Myrick” (1849–1852), MaShaTR, HVD 3120. “Go to Shirley Village with a two horse & a load of boards to be planed for herb boxes get them planed for 20 cts per hundred feet & home by noon.” Dec. 27, 1850.
 43. In almost every case, the journals describe taking their product to the mill or grist mill to get it cracked or ground, strongly suggesting that this was being “outsourced” to a local mill with expertise and proper equipment. See for example Elisha Myrick, “Daybook” entries for April 5, 1850, March 26, 1851, April 19, 1851, Nov. 4, 1851, Nov. 19, 1851, Feb. 10, 1852, etc.
 44. Elisha Myrick, “Daybook Kept for the Use & Convenience of the Herb Department by Elisha Myrick” (1852 1849), MaShaTR, HVD 3120, January 25, 1851.
 45. Elisha Myrick, “Daybook,” Dec. 31, 1851.
 46. *Ibid.*, Feb. 16, 1857.
 47. It is worth noting that the sleds were also used to cart ice from Sandy Pond. “I had four teams Sleding Ice this forenoon they brought 8 loads 55 cakes & finish Sleding Ice and fill the house In the forenoon; in all they drawed 24 loads about 30 tons in a day & ½,” “Journal of Alfred Collier, deacon of Chh family Harvard, 1856–1859.” OClWHi V:B:219, Jan. 10, 1857.
 48. “Harvard Church Family Daybook. Includes Entries on Work, Weather, Worship, and Visits.” (1845–1847), 169, MaShaTR, HVD 3117. For example “The farmers improve the sledding, hauling logs to the mill and wood and sawed timber home. The first sled load of wood was brot into the dooryard for this winter and the first load of timber for the Square house roof and for the cart shed was brot home.”
 49. “Harvard Church Family Daybook. Includes Entries on Work, Weather, Worship, and Visits.” 194.
 50. Alfred Collier, “Journal of Alfred Collier, Deacon of Chh Family Harvard, Shaker Village, 12-26-1856 Thru 2-25-1859” (1856-1859), OClWHi V:B:219; Alfred Collier, “A Journal Kept by Alfred Collier for His Own Special Benefit Continued from Book No. 2, Commenced February 1857.” (1859-1861), MaShaTR, HVD 3123.

51. For the story surrounding Collier's dismissal see Michael Volmar, "Insights into Harvard Shaker History," *American Communal Societies Quarterly* 7, no. 4 (October 2013): 175-94. Collier's dismissal arose from his writing intimate letters to a very young Sister Ida Rich.
52. Jerry Grant and Douglas R. Allen, "Alfred Merrick Collier (1823-1884) Harvard, Massachusetts," in *Shaker Furniture Makers* (Hanover, N.H.: Hancock Shaker Village Inc. by University Press of New England, 1989), 120-27.
53. Michael Volmar, "Insights into Harvard Shaker History," *American Communal Societies Quarterly* 7/4 (2013): 175-194.
54. Grove Blanchard, "Diary of Elder Grove [Babbitt] Blanchard, 1864." (1864), MaShaTR, HVD 3126, Jan. 7, 1864
55. Alfred Collier, "Journal of Alfred Collier, Deacon of Chh Family Harvard, Shaker Village, 12-26-1856 Thru 2-25-1859" (1856-1859), OClWHi V:B-219, Feb. 12, 1857.
56. [Alfred Collier], "Journal of Alfred Collier, Deacon of Chh Family Harvard Shaker Village 1856-59." OClWHi V:B-219, Mar. 23, 1857 "I went to git Capt Abram Foster to repair the Sawmill & put in a set of Mill togs [dogs?] on my way I stoped about 20 minutes at the Shirley Shakers then went over & got him & his Chest of tools"; Oct. 12, 1857 "I took one hand with me & hired P Nutting down to the Mill to repair the Dam we did a good Job at it & finished the dam."
57. Alfred Collier and Susan Channel. "Shaker Journal, 1859-1880." MaShaTR, HVD 3123, 64.
58. Ibid., 131-34
59. "Employee Accounts, 1886-1908" (Harvard, Mass., 1908 1876), Shaker Collection SC20330, New York State Library.
60. "Notes about Home" *Shaker Manifesto* 20, no. 3 (March 1890): 66-67.
61. Maria Foster "Journal of Maria Foster, 1893-1911." MaShaTR, HVD 3133, Aug. 24, 1895.
62. Ibid., August 14, 1896.
63. Secretary of the Commonwealth, *Public Documents of Massachusetts Being the Annual Reports of Various Public Officers and Institutions for the Year 1904. Vol. XII* (Boston: White and Potter Printing, 1905), 143.
64. The 1856 Great Mill at Sabbathday Lake was also a multi-function mill with a grist mill, saw mill and machine shop.
65. Andrew John Vадnais, *Machines Among the Shakers: The Adoption of Technology by the Mount Lebanon Shakers, 1790-1865*, Master's thesis, University of Delaware, 1991, 45-47. Vадnais observes that while the Shakers at Mount Lebanon introduced the steam engine and the Ericson Caloric Hot Air Engine after 1852, they no longer had the necessary skill set to maintain them and had to hire outside help.
66. Donald E. Janzen. *The Shaker Mills on Shawnee Run: Historical Archaeology at Shakertown at Pleasant Hill: Historical Archaeology at Shakertown at Pleasant Hill Mercer County, Kentucky*. (Harrodsburg, Ky.: Pleasant Hill Press, 1981).