1. NAME AND LOCATION OF PROPERTY

Historic Name: Watkins Mill

Other Name/Site Number: Watkins Woolen Mill; Bethany Plantation

Street and Number (if applicable)**:** 2600 Park Road North

City/Town: Lawson **County:** Clay **State:** Missouri

Updated documentation approved by the Secretary of the Interior September 2, 2024.

2. SIGNIFICANCE DATA

NHL Criteria: 1

NHL Criteria Exceptions: N/A

NHL Theme(s): V. Developing the American Economy
1. Extraction and Production

Period(s) of Significance: 1860-1886

Significant Person(s) (only Criterion 2)**:** N/A

Cultural Affiliation (only Criterion 6)**:** N/A

Designer/Creator/Architect/Builder: Walthall "Waltus" Lockett Watkins (1806-1884)

Historic Contexts: *Commerce and Industry* (1966)
Labor History in the United States (2022)

Paperwork Reduction Act Statement. We are collecting this information under the authority of the Historic Sites Act of 1935 (16 U.S.C. 461-467) and 36 CFR part 65. Your response is required to obtain or retain a benefit. We will use the information you provide to evaluate properties nominated as National Historic Landmarks. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number. OMB has approved this collection of information and assigned Control No. 1024-0276.

Estimated Burden Statement. Public reporting burden is 2 hours for an initial inquiry letter and 344 hours for NPS Form 10-934 (per response), including the time it takes to read, gather and maintain data, review instructions and complete the letter/form. Direct comments regarding this burden estimate, or any aspects of this form, to the Information Collection Clearance Officer, National Park Service, 12201 Sunrise Valley Drive, Mail Stop 242, Reston, VA 20192. Please do not send your form to this address.

3. WITHHOLDING SENSITIVE INFORMATION

Does this nomination contain sensitive information that should be withheld under Section 304 of the National Historic Preservation Act?

___ Yes

__X_ No

4. GEOGRAPHICAL DATA

1. Acreage of Property: 560 acres

2. Use either Latitude/Longitude Coordinates or the UTM system:

Latitude/Longitude Coordinates (enter coordinates to 6 decimal places)**:**
Datum if other than WGS84:

	Latitude:	**Longitude:**
A.	39.415422	-94.276639
B.	39.415034	-94.243793
C.	39.409171	-94.243811
D.	39.409157	-94.258933
E.	39.403871	-94.266233
F.	39.404098	-94.276744

OR

UTM References:

Zone	**Easting**	**Northing**

3. Verbal Boundary Description:

The boundary as described in the 1983 National Historic Landmark documentation has not been changed for the purposes of this update:

As shown by the black line on the accompanying U.S.G.S. maps, labelled “Holt, Mo.” And “Lawson, Mo.” From a point 0.25 miles directly south of the southwest corner of the west arm of Watkins Mill State Park, proceed north to the southwest corner of the west arm of the park, and continue north along the west boundary

of the west arm 0.52 miles to its northwest corner. Proceed due east 1.71 miles to the west curb of the road which skirts the east boundary of the park's east arm. Proceed south 0.35 miles along the curb to a point opposite the back property line of the old Octagon Schoolhouse. Proceed west 0.80 miles through the back property line to the west boundary of the Chicago, Rock Island and Pacific Railroad right-of-way. Proceed southwest 0.58 miles along the boundary to a point due east of the point of beginning. Proceed west 0.55 miles to the point of beginning.

4. Boundary Justification:

The 560-acre district includes buildings associated with the Waltus Watkins farm and woolen mill. All land is owned by Missouri Department of Natural Resources. The 560-acre area is approximately one-tenth of the Watkins family original patent of more than 5,000 acres. A February 1973 boundary recommendation for the site was conducted and recommended to include 1,520 acres of the original patent to "preserve an appropriate setting for the buildings and other historic features that formed the heart of the Watkins plantation." In March 1973 the inventory documentation form was returned, requesting additional documentation on associated structures and a re-evaluation of the overly large boundary. It was recommended by the Director of the Midwest Regional Office that the boundaries should be large enough to protect the historic values identified and their setting, but not include additional recreational lands that do not contribute to the national significance of the property. Additional information and boundary documentation was submitted in April 1973. In July 1983, the National Park Service advised the Missouri Department of Natural Resources that it was working to establish boundaries for all National Historic Landmarks for which no specific boundary had been previously identified. A memo from Carol D. Shull, Chief of Registration for the National Register of Historic Places, provided proposed boundaries to the state for Watkins Mill. In September 1983, the boundary was formally established by the National Park Service as described above.[1]

5. SIGNIFICANCE STATEMENT AND DISCUSSION

INTRODUCTION: SUMMARY STATEMENT OF SIGNIFICANCE

Watkins Mill in Clay County, Missouri, was built in 1859-1860 by Waltus Watkins. The property consists of the family farm with their residence, associated outbuildings, mill building, school, church, and associated archeological features. The property is eligible under Criterion 1, Theme V, Developing the American Economy, representing the historic context of industrial development of textile and woolen technology. The site holistically captures the small-scale industrial process of the period through the spatial relationships of residential, social, and mill functions. Watkins Mill complex is noteworthy in that it combines the farm's collection of out buildings, archeological knowledge of non-extant buildings, and an intact farm landscape. It contains the most intact extant collection of wool milling machinery from the 1860s and 1870s found in a small milling complex. The built environment presents a capsule of the interrelationship between family life and industrial production. The complex contributes to the knowledge and understanding of mill operations and the important functions of the family farm that supported the labor force at the mill. The period of national significance begins in 1860 when the mill was constructed and extends through 1886 when an equipment failure interrupted the production of woolen fabric. The national significance of the mill lies in its intact, layered expression of material culture that functioned as a fully integrated system to create woolen fabric. Its historic resources tell the story of the wool milling process that is singular to this site. The historic district, along with the process represented by the equipment, outstandingly represents the milling process on a local family farm during the Civil War era.

[1] Watkins Mill National Historic Landmark administrative file, National Archives and Records Administration.

Watkins Mill meets Criterion 1 for its association with American economic development of industrial extraction and production systems. The 2022 *Labor History in the United States* theme study describes:

> In 1861, the Watkins Woolen Mill became the local supplier of woolen cloth and yarn in the region. As an early textile mill in the Midwest this property provides the potential to explore the early development of the region's textile industry and how this nascent industry interacted with local populations. While much work has been done in this regard for woolen textile mills in the Northeast, a similar study of the Watkins Mill could provide a cross-regional comparison of labor processes and community life for the workers who labored within its walls.[2]

The national significance of Watkins Mill is represented in the totality of the built environment, rural historic landscape, and archeological resources that illustrate the material culture of the process of production from raw material to finished fabric. Fortuitously, Watkins Mill also retains an exceptional collection of machinery that represents technological advancements, individual adaptations, and rare examples that no longer exist elsewhere in the United States. This National Historic Landmark (NHL) nomination update expands on documentation prepared as part of a larger survey of historic properties completed by the federal government and used to designate the site an NHL on November 13, 1966. Supplemental documentation was completed in 1976 and approved by the Keeper of the National Register in 1983. This document expands on the historic contexts to meet current standards.

Public advocacy through the Watkins Mill Association during the 1950s and 1960s garnered sufficient support to pass a bond issue to purchase the property and donate it to the State of Missouri for a state park in 1963 and 1964. Watkins Mill was presented to the Advisory Board on National Parks, Historic Sites, Buildings and Monuments at its 48th meeting on March 25, 1963. At that meeting its potential designation was postponed until the Commerce and Industry Theme Study could be completed. Following formal designation, George Hartzog, Jr., Director of the National Park Service (NPS), dedicated the NHL plaque at Watkins Mill in April 1967. In 1978 the property was recorded by the Historic American Engineering Record (HAER MO-1). Restoration, reconstruction, and archeological investigations began immediately following acquisition by the state and establishment of the Watkins Woolen Mill State Park and State Historic Site.

Archeological resources on the property include two sites which contribute to its significance and integrity under Criterion 1. However, numerous surveys and excavations conducted on site reveal the presence of historic remains that help define Watkins Mill's spatial arrangement and activity areas, as well as inform the reconstruction of non-extant resources within the district. At present, there is insufficient information regarding the character and integrity of archeological deposits and features within the property to support an argument for its national significance under Criterion 6. Future archeological survey or excavation within the Watkins Mill district may reveal the presence of resources that meet the requirements for integrity and significance under Criterion 6. Such a determination would require the development of a research design to consider how these remains would yield nationally significant information and a comparison of this data with other nationally significant archeological sites. In such an instance, the existing nomination may be amended via additional documentation to accommodate any new significant information and relevant contexts of scholarship and history.

[2] Rachel Donaldson, *Labor History in the United States: A National Historic Landmarks Theme Study* (Washington, DC: National Park Service, US Department of the Interior, 2022), 347.

PROVIDE RELEVANT PROPERTY-SPECIFIC HISTORY, HISTORICAL CONTEXT, AND THEMES. JUSTIFY CRITERIA, EXCEPTIONS, AND PERIODS OF SIGNIFICANCE LISTED IN SECTION 2.

History

Waltus Watkins

Walthall "Waltus" Lockett Watkins was born near Versailles, Kentucky, on October 30, 1806, to Benjamin and Jane Watkins. At the age of eighteen he apprenticed as a mechanic and weaver at Jeremiah Minter's cotton mill near Bardstown, Kentucky. Within three years, Watkins was foreman of a mill in Frankfort, Kentucky. He continued his training in the cotton and woolen industries in Kentucky and notably worked with early steam power. Joseph Bruen and Charles Lewis, who built a prototype of a steam-powered railroad, enlisted Watkins to work for them. His experience with early steam power and milling techniques exposed him to entrepreneurs who used innovation and hard work to inform efficient production techniques.[3]

Fertile land and economic opportunities attracted Waltus Watkins to western Missouri in 1830. The young immigrant was among an estimated 5.8 percent of Kentucky's population that came to Missouri at this time. As the state's population increased 230 percent between 1820 and 1860, Clay County's population increased from 5,338 in 1830 to a little over 9,000 by 1848.[4] Watkins lived in Liberty, Missouri, for nine years, during which time he married Mary Ann Holloway and began a family. The family moved to Clay County in 1842.

Bethany Plantation

Watkins purchased land in northeast Clay County in 1842. He dubbed his land Bethany Plantation after the biblical reference to a New Testament town described as a retreat for Jesus. Another source of inspiration came from Bethany College in West Virginia, founded in 1840. The school served as a site of culture and sophistication. Watkins's choice of name may have been a combination of both, recognizing his deeply held religious beliefs as

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[3] Louis W. Potts and Ann M. Sligar, *Watkins Mill: The Factory on the Farm* (Kirksville, MO: Truman State University Press, 2004), 1-3; William H. Woodson, *A History of Clay County Missouri* (Topeka: History Publishing Co., 1920), 742-743, www.google.com/books/editions/history_of_Clay_County_Missouri. See also History of Clay and Platte Counties, Missouri (St. Louis: National Historical Company, 1885), 505, regarding Watkins's life: "His [Watkins'] first ancestor in this country, on his mother's side, Gen. Bartholomew Dupuy, was a distinguished representative of that fearless and true sect of Frenchmen. He has been a gallant officer in the French army, but on account of his Protestant faith and his refusal to forswear it, he was driven from the army and from France. Coming thence to this country in about 18=700, he located in Virginia, where he became a prominent citizen and successful man of affairs, leaving at his death, a large family of children. To one of Gen. Dupuy's descendants, Miss Jane Minter, Mr. Watkins's father, Benjamin Watkins, was married, in Virginia. Of this union came the subject of the present sketch, and twelve other children. After their marriage they removed to Kentucky and settled in Woodford County, where Waltus L. Watkins was born on the 30th of October, 1806. Reared in Kentucky, he remained there until he was about 25 years of age and then came to Missouri, in 1831, and settled in Liberty, Clay County. In the meantime, he had learned the machinist's trade in the East, and had also worked in cotton and woolen industries. It is a fact worthy of note, in passing, that he worked on the first railway locomotive ever built in the United States. After coming to Clay County he built the first cotton and woolen mill ever established in the county, and also introduced the first circular saw ever brought to the county. These were in connection with a grist mill, and his was one of the pioneer grist mills of this part of the country. It was patronized by people from a distance of seventy-five miles. In 1839 he moved to the land on which the family now reside, on which he improved a fine farm, erecting a handsome brick dwelling and making all of his other improvements of a superior class. He added to his lands from time to time by additional purchases and entry till they aggregated 5,000 acres, from which he sold several fine farms. On retiring from business, he sold to his successors, John Watkins & Bros., 3,600 acres of fine lands, his milling property and livestock. The woolen, flouring and grist mills, now conducted by his sons, John Watkins & Bros., consisting of John H., A. Judson and Joe B. Watkins, he erected in 1860, at a cost of $30,000, the largest establishment of the kind in the State, outside of the large cities."

[4] Potts and Sligar, 5, 9, 41; Bruce Laurie, *Artisans into Workers: Laborers in Nineteenth Century America*. (Urbana, IL: University of Illinois Press, 1989), 25.

well as a nod to the college near his home state.[5] Watkins used the term plantation deliberately, though his family farm was not a plantation in the common use of the term. In the southern United States, for example, a plantation usually characterizes a large estate on which cash crops such as coffee, sugar, and tobacco are cultivated by resident labor, often enslaved individuals.[6] Rather, Watkins likely used the term as a reminder of his southern roots in Kentucky and a desire for extensive, fertile, and productive land. Though Watkins does not explain his use of terms in his own words, he specifically chose the name Bethany Plantation for his new farm.

Watkins's first home on the plantation began as a simple two-room log cabin that measured 18' x 23'. The exact location of the cabin is not known; however, some historians believe the cabin's foundation was located under a garage that was later added for a second residence. Anywhere between ten and thirteen people lived in the cabin before construction efforts began in 1850 on what the family termed the Big House. Often fifteen to twenty people were fed outdoors, and later in the dining room of the main residence. In a letter to his sister in 1846, Watkins notes that he did not have enslaved labor at the time. Renting or hiring out the labor of enslaved individuals for assistance with the farm was not an uncommon practice. The 1850 Missouri Slave Schedule for Clay County, Missouri does not identify Watkins as an enslaver. The 1860 Schedule lists three individuals enslaved by W.L. Watkins and they included a 55-year-old female, a 35-year-old male, and a 20-year-old female.[7] It is not known where enslaved people lived. A productive avenue of future research would be to investigate the nature and organization of unfree labor exploited by Watkins.[8]

Watkins added a brick kiln to the farm in 1845 and began experimenting with brick manufacturing. In 1846, he built a 22'-deep well, 19' off the end of the porch. To diversify his farm platform, a grist and flour mill was added in 1848, along with a large mule barn the following year. His prosperity grew with extensive livestock holdings, fruit orchards, gardens, and pastures for the animals. Additional buildings included an icehouse, smokehouse, summer kitchen, and fruit drying shed to support the commercial and domestic needs of the family. He built roadways, erected fences, dug ponds, cut forested areas, and planted crops for his family, all prior to construction of the woolen mill.[9] The successful farm kept the family and hired hands busy, and as other relatives arrived, they contributed their labor to make sugar and molasses, process apples to make cider, and work the orchards and fields with plentiful wheat, hemp, corn, and vegetables.[10]

Family prosperity and the number of boarders and hired hands led Watkins to determine that a larger brick house would replace his log cabin. He began to experiment with manufacturing his own brick in 1840, built a brick kiln in 1845, dug and weathered clay, experimented with brick composition, and harvested wood to maintain kiln

[5] Potts and Sligar, 20-21.
[6] Definition of plantation provided by Oxford Languages, Oxford University Press.
[7] Slave Schedule, 1850 and 1860 US Census, Clay County, Missouri, available via Clay County Historical Society. Additional research is warranted to try to determine filial relationships of these individuals, who may be related.
[8] Ann Sligar, *Waltus Watkins & His Mill* (Watkins Mill Association, 2002), 21; letter, Waltus Watkins to Caroline Watkins Hardin, September 12, 1846, reproduced in Chad C. Means, *The Edited Watkins Family Letters* (n.p.: William Jewell College, 1991), 99. While less detail is known regarding Watkins's individual interactions with his enslaved and hired labor, valuable regional historic context can be found in the recent scholarship of Diane Mutti Burke, *On Slavery's Borders: Missouri's Small-Slaveholding Households, 1815-1865* Early American Places (Athens and London: The University of Georgia Press, 2010).
[9] Letter, Waltus Watkins to Caroline Watkins Hardin, September 12, 1846, in Means, 99; Watkins Mill Association, "Timeline," https://www.watkinsmill.org/history/.
[10] Letters, Margaret T. Blythe to Mary Ann Watkins, June 16, 1850, and Dear Cousin Lizzie from Dear Cousin Mary, March 6, 1845, Watkins Mill State Historic Site Archives. The Archive is a collection of business records and family documents such as letters and diaries that were donated to the Truman Library in Independence, Missouri. This collection was copied and returned on permanent loan to the State Historic Site. Today the archive is housed in a storage room within the State Historic Site Visitor Center and can only be accessed through special permission and by appointment.

fires. Perfecting the formula for composition and hardness was a challenge and extensive experimentation was required to create a durable building material that was eventually used in buildings across the site.[11]

Construction on the second, main residence began in 1850.[12] Watkins chose the highest point on his land and oriented the residence east toward the lane that led from the town of Greenville. He built a two-and-a-half-story brick house with simplified Greek Revival detailing and form, erected on limestone block foundation. The vernacular residence employs local materials and building traditions. Watkins used clay from his own land to make all the bricks in his kiln and trees from the property to create the woodwork. The common bond brick coursing was relatively simple to lay, square columns supported the porch rather than round, and carpenters used mortise-and-tenon joints in the heavy timber construction. Watkins purchased an Italianate-styled wrought iron balcony rail for above the porch and all new furnishings.[13]

In addition to the main residence, a large timber-frame mule barn was built in 1849, the foundations of which have been uncovered. This housed the driving mules for the gristmill and sawmill, along with two corn cribs, a lean-to for equipment storage, and workshop. Across the lane from the barn (east), Watkins constructed a sawmill with a circular saw blade considered advanced technology for its time. It was powered by horses and mules, affording the family year-round operation. Watkins developed this built environment with a handful of qualified men, including a blacksmith who had his own shop adjacent to where the mill stands today. The smith repaired and crafted tools, customized farm implements, and made small-scale household utensils and hardware. The smith was often a trained farrier and could make shoes for the horses and mules as well as care for wagon wheels. The Bethany blacksmith shop was a linchpin in the operations of the farm.[14]

The farmyard was organized to serve the needs of daily life with the summer kitchen, smokehouse, icehouse, well, gardens, and basement stores all near the residence. Here food was prepared for daily consumption as well as preserving and storing for future sales. Mary Ann Watkins, her daughters, and individuals enslaved by the family utilized these resources while the men worked in the fields, orchards, forests, and with the machinery and buildings. The women also sewed all the family's clothes and wove rugs for the house.[15] Bethany eventually grew to 3,400 acres and was one of the largest farms in Clay County. During the 1850s diversified livestock, additional crops, and orchards were added. Along with the brick kiln, grist mill, and sawmill, it was a wholly self-sustaining complex.[16]

Watkins's financial stability can be contributed to his diversified land holdings and commercial enterprises. His gristmill was among four others in the county but had a superior reputation to produce fine flour from wheat and corn. Gristmills became not only a source for a valued product, but a social hub as well. Given limited transportation systems at the time, most mills were interspersed within twenty miles of each other and served not only as a commercial market for the owner, but also as a hub for other local business. The mill area was outdoors and located northeast of the residence on the lane, and by around 1868 it was moved inside the woolen mill factory to utilize the benefits of steam power over oxen power. In addition to the woolen mill, Watkins continued to improve and operate the gristmill. This diversification helped stabilize income to the family, and at times was

[11] Potts and Sligar, 22.
[12] The family historically referred to the new residence as the Big House.
[13] Potts and Sligar, 24.
[14] Craig Sturdevant, *Archeological Investigations: Wool Shed, Dyers Cabins, and Weavers Cabins Watkins Mill State Historic Park,* Prepared for Missouri Department of Natural Resources (November 1989), 9-14.; Robert T. Bray, "Archeological Investigations at the Scale Pit, Scale House, and Road Traces at Watkins Mill State Park," (1972), 4-11; Kenneth Coombs and Robert Elgin, *Watkins Woolen Mill Master Plan* (Watkins Mill State Historic Site, 1979).
[15] Potts and Sligar, 27.
[16] Sligar, 15.

more profitable than the woolen manufacturing. The gristmill operated concurrently with the woolen manufacturing until the steam engine broke while grinding corn for feed in 1904.[17]

Census records from 1850 documented Waltus's holdings to include an estimated $1,160 in agricultural lands, $3,945 in livestock, 400 bushels of wheat, 600 bushels of oats, 4,000 of Indian corn with ten bushels of potatoes and sweet potatoes from his garden. His livestock income included $645 from slaughtering, 120 pounds of wool, 300 pounds of butter, and 100 pounds of cheese. Commercially Watkins claimed $50 from the orchards, 250 pounds of beeswax and honey, three tons of hemp, and twenty tons of hay. These self-reported numbers reflect his diversity and document the growth of Bethany during the twelve years they spent building the farm.[18]

Clay County became part of a major slaveholding Missouri region known "Little Dixie," a term that historian R. Douglas Hurt believes originated around the Civil War. The sub-region of the Upper South has been variously described to include between fourteen and twenty-one counties, the core of which included Audrain, Carroll, Chariton, Jackson, Platte, Randolph, Ray, Boone, Callaway, Clay, Cooper, Howard, Lafayette, and Saline.[19] Hurt describes how the influx of immigrants from Kentucky, Virginia, and Tennessee to the region fostered agriculture dependent on enslaved labor beginning in the aftermath of the War of 1812.[20] Most enslaved individuals in Little Dixie labored on small farms rather than larger plantations as in the southeastern United States.[21] While this difference alludes to a regional character of enslavement that ultimately differed from that of the deeper South, historian Diane Mutti Burke's research provides an important caution:

> Nineteenth-century white Americans' collective memory, in combination with cultural references, resulted in the myth of mild border slavery trumping formerly enslaved Missourians' criticisms of the system (…) important correctives by and large have neglected the experiences of the many black and white Southerners who lived on small-slaveholding farms in the upland or border South, however, thus allowing for the belief that slavery was easier to endure in the border states.[22]

Mutti Burke's research provides a deep examination of Missouri's regional context through the everyday experience of both enslavers and enslaved individuals, while reminding her reader: "Slavery differed in significant ways in Missouri, but this never translated into an overall 'better' system of bondage."[23]

The 1850 Clay County census records 7,585 whites, 2,742 enslaved people, and fourteen free African Americans. By 1860, twenty-five percent of the county's population were enslaved individuals.[24] In Clay County there were 252 African Americans in the township in 1850 and 445 in 1860. The 1850 census documents identify three people enslaved by a W.L. Watkins of neighboring Platte Township, but curiously no enslaved people were recorded at Waltus Watkins premises in Washington Township. The 1860 record identified Waltus Watkins with

[17] Potts and Sligar, 48-50.
[18] Agricultural Schedule, Seventh U.S. Census, 1850.
[19] R. Douglas Hurt, *Agriculture and Slavery in Missouri's Little Dixie* (Columbia and London: University of Missouri Press, 1992) ix-xiv.
[20] Hurt, 215.
[21] Harrison Anthony Trexler, "Slavery in Missouri, 1804-1865," PhD dissertation (The Johns Hopkins University, 1914), which explores, in part, generalized farm work rather than monoculture in Missouri and other border states (see p. 13). Note: Trexler's work does not reference the term "Little Dixie." See also Jeffrey C. Stone, *Slavery, Culture and Education in Little Dixie, Missouri, 1820-1860* Studies in African American History and Culture (New York and London: Routledge, 2006), 22-24.
[22] Mutti Burke, 3-4.
[23] Mutti Burke, 6.
[24] Stone, 21: "Throughout the antebellum period only about 12 percent of free families in the entire state of Missouri owned slaves. However, in the seven counties of Little Dixie this percentage was considerably higher."

three enslaved Black individuals: an adult woman (aged 55), an adult man (aged 35), and a female child (aged 2).[25] Waltus's brother James, who lived nearby and built a nearly identical residence, enslaved eight people. [26]

The 1850s brought growing tensions to western Missouri along with the rest of the nation. In 1852, Waltus Watkins served as a delegate from Clay County to the state convention and like many in his county, remained loyal to the Union and supported the Know-Nothings and Whigs, despite enslaving individuals. The 1854 Kansas-Nebraska Act brought not only increased tensions but also a rise in violence. As the citizens of Kansas tried to determine if they would enter the Union as slave or non-slave state, Missouri residents watched the vote closely. Clay County created the Kansas Aid Society to support pro-slavery groups in Kansas. The society sent money, supplies, and men to help with the cause. Waltus Watkins donated $50.[27] His politics during the 1850s and at the onslaught of the Civil War were thus at times contradictory, situated within the context of the Kansas-Missouri borderlands and social and political conflicts over the seminal question of slavery.

Agricultural census records from 1850, 1860, and 1870 show the success of Watkins's farm and its commodities. In 1850 his household size was identified as eight family members and one boarder with $15,000 worth of property. This included animals, honey, orchard products, cheese, butter, hay, oats, corn, wool, implements, land, and enslaved persons. By 1860 his value increased to $21,000 and by 1870 $122,000. The jump in value between 1860 and 1870 was in no doubt because of the woolen mill and the business's survival during and after the Civil War. By 1870 there were eight family members and six boarders at the house. The agricultural census records indicate that Watkins was one of the largest landholders in Clay County and had the most valuable farm in Washington Township. Meanwhile, the number of African American living in Clay County dropped from 445 in 1860 to 87 in 1870 following the Civil War.[28]

During the 1870s the family worked hard at processing their livestock and cultivating their garden. In December 1874 son Judson Watkins wrote to Mattie [sister Martha] that, "Mother has been trying to kill herself in the grease of eighty-five hogs, so you know you will get all the sassage [sic] you can eat." Three months later beginning in March 1875, Judson, Mattie, and Lizze [Elizabeth] Watkins corresponded regarding the success of the garden with peas, beets, onions, cabbage, tomatoes, lettuce, and sweet potatoes all growing. Mary Ann had seventy-five chickens that year and spent much time in the fall cutting carpet rags to make new carpets for the upcoming winter.[29] Later that year however, grasshoppers decimated the Watkins crops. Waltus wrote that they had eaten 120 acres of rye, destroyed the meadow, taken hundreds of acres of blue grass, and nearly all of the garden. The insects continued their destruction to include four acres of potatoes, some corn, and some oats. He lamented that they have taken all the beets, parsnips, tomatoes, cabbage, mustard, radishes, onions, asparagus, watermelons, and cucumbers. The grasshoppers could take large fields in hours and resulted in, "the darkest time that I have ever seen."[30] Though the farm struggled during these years, they were some of the most profitable at the woolen mill. These descriptions also document the diverse gardens and crops present at the site.

Watkins remained a lifelong Democrat, though he did not partake in political discussions or debates as was popular in antebellum Missouri. He never ran for political office and staunchly remained an entrepreneur and not

[25] Slave Schedule, 1860 US Census, Clay County, Missouri, (26 June 1860), 25, available via Clay County Historical Society.
[26] Slave Schedule, 1850 US Census, Clay County, Missouri, available via Clay County Historical Society; Stiles, "Last Rebel," 35, 37; Means, 10.
[27] Woodson, *A History*, 116-117, 120; T.J. Stiles, *Jesse James: Last Rebel of the Civil War.* (New York: Vintage Books, 2002), 49; Potts and Sligar, 71-72.
[28] Agricultural Schedules, Seventh, Eight, and Ninth US Censuses, Washington Township, Clay County, Missouri, (1850-1870).
[29] Various family correspondence, 1874-1875, Watkins Mill State Historic Site Archives.
[30] Letter, Waltus Watkins to daughter Mattie (Martha), June 76, 1875, Watkins Mill State Historic Site Archives.

a politician. His support of public education, devout religious beliefs, and standing in the community no doubt served him well as he built the mill in 1860, his largest endeavor and at the cusp of the American Civil War.

The Woolen Mill

Watkins began to plan for his woolen mill in the mid-1850s. Ann Sligar suggests in her monograph, *Waltus Watkins & His Mill,* that the family would have planned for at least three years prior to the mill opening because of the time to manufacture the brick. Watkins's personal and professional pursuits throughout his years at Bethany built a stable reputation upon which he furnished goods and services to neighbors within a day or two travel. Watkins spared no expense when he chose to construct and outfit his woolen mill. He built one of the largest mills in the Midwest that was steam powered and fully integrated with a variety of machines to execute processing raw fleece into cloth. The mill may be considered one of his most successful endeavors, and it served to support his family for nearly forty years. At the time there were eleven other woolen mills operating in the state. Another woolen mill was opened approximately three miles north of Liberty, Missouri, by Weekly Dale and James McCoun, who advertised they would manufacture wool into anything needed in the county.[31]

Watkins Mill generally adopted earlier models of small-scale mills specialized in custom production, principally such as that established by machinist and mill engineer Samuel Slater. Slater was a seminal figure in the American textile industry in the late eighteenth century and co-proprietor of the Slater Mill in Pawtucket, Rhode Island, the first water-powered textile mill in the US, founded in 1793 by the firm Almy, Brown, and Slater.[32] Ultimately, Slater's mill was expanded six times during the nineteenth century, and thus operated at a greater scale than Watkins Mill. Notwithstanding, Watkins's business model was a successful smaller model. The system of production focused on product diversity for individual or custom sale, rather than mass production. Materials were not stockpiled for later sale, and they were made by specialized workers. Given the smaller market and location of Watkins's factory, he chose to specialize in custom production. Watkins had specific ideas about the type of worker he wanted at the Mill, largely based on his religious beliefs. Watkins thus espoused on a small scale some trends that later developed more fully in paternalistic company towns beginning in the 1880s. He required family men and preferred married couples with children. He also did not allow alcohol and refused to hire drinkers. To entice those who were trained in the craft, he provided small houses on site. The row of residences was located on the hilltop behind the mill and was known as Smokey Row.[33] This group of cabins was arranged along a rise between the mill ponds and the state road. Travelers through the area could see the cabin chimneys, along with the mill stack. Visibility of smoke from these features led to the adoption of the name, Smokey Row.[34]

Watkins constructed the three-and-a-half story mill along the lane east and north of the family residence. He streamlined construction costs and initial capital outlay by making all the brick at Bethany kiln and providing lumber from his forested lands milled on site. After construction of the house, Watkins had perfected the craft of making bricks and it is estimated that approximately 450,000 bricks were needed for the mill. To fund the outfitting and construction, he borrowed from his brother-in-law John Handy, after traveling to Kentucky in 1857 and 1859 in unsuccessful attempts to secure capital for the new venture. Handy ultimately borrowed $1000 from

[31] Potts and Sligar, 86-87; Paul Ogren, "Notes on the business history of Watkins Mill," 5, contributing to Lawrence Gross, "Photographs, Written Historical and Descriptive Data, Watkins (Woolen) Mill, Lawson, Clay County, Missouri, HAER MO-1," (Washington, DC: National Park Service, US Department of the Interior, 1978) on file with the Library of Congress.
[32] National Park Service, "Slater Mill," https://www.nps.gov/blrv/learn/historyculture/slatermill.htm, accessed May 5, 2023.
[33] Donald W. Meinig, *The Shaping of America: A Geographical Perspective on 500 Years of History*, Vol. 2, (New Haven: Yale University Press, 1993), 376; Potts and Sligar, 96, 142. The Old Slater Mill NHL was designated on November 13, 1966.
[34] Potts and Sligar, 157.

the bank to support the building. Waltus additionally borrowed money from several other relatives, including his sister and mother, and sold some of his land holdings to raise the capital for the mill.[35]

The main building was completed in 1860. Topsoil was removed to expose the limestone shelf upon which to build the brick walls for the simple rectangular plan. The mill measures 46' x 87' with 2'-thick brick walls and rested directly on the limestone bedrock. The walls taper gradually as the building rises. Watkins added a metal roof commonly accepted as a safety precaution, coupled with non-flammable and slow-burn primary materials. Workflow in the mill was dictated by the ability to link machinery to the shafts of the power train, rather than on the most efficient process of woolen manufacture. This limited the efficiency of the manufacturing process for mill workers.[36]

The mill was advertised as a superior factory to others in the area. Watkins spared no cost when new equipment was purchased. Both local and national machinery sources furnished and powered the mill. J.T. Dowdall Company's Washington Foundry in St. Louis supplied the power plant in 1860. During the summer months, equipment was shipped aboard the steamboat *Thomas E. Tutt* via the Missouri River from St. Louis to Richfield (Missouri City). This included the boiler, steam engine, and flywheel, along with an engineer to install and operate the system. The boiler was salvaged from a sunken riverboat and the equipment was so heavy that Watkins had to wait until the ground was frozen in December to haul it the thirteen miles to the factory. It took six pair of oxen pulling a sled over frozen ground before it could be set onto the brick where it remains today. The engine powered the large flywheel and two pumps. Water for the boiler was pumped from one of the three mill ponds surrounding the building. Exhaust pipes pumped steam into the building to increase humidity levels and deter sparks from static electricity in the air. Extreme temperatures often resulted from the lack of air circulation, heat from machines, and the added humidity, which made for uncomfortable and dangerous working conditions. It took two people, an engineer and fireman, to run the power plant. Pulleys, belts, and shafts connected the drive train to machinery on all three floors.[37]

Production machinery was of the highest quality available at the time and was purchased from several East Coast manufacturers. Spinning and carding machines came from Alfred Jenks and Son in Pennsylvania, with various power looms from Jenks-Stafford in Connecticut and Furbush and Gage in Pennsylvania. Machinery consumed seventy percent of the capital cost of mill construction. Other contemporary mills often chose to purchase secondhand machinery to conserve costs. Watkins, however, elected to save money by building his own warping mill and dye vats. This was made possible through his employ of skilled craftsmen. An official opening date for the mill is unknown, but Watkins did purchase four broadlooms in 1860 and several carding machines soon thereafter, which allowed for limited production as early as 1860.[38] On May 8, 1861, Watkins announced that his mill would be fully running within ten days. On July 29, 1861, Waltus wrote to his daughters, who were away visiting family, that times were hard and money scarce due to the war. There was not as much wool to card as the previous season. However, he states, "There are two more roll machines started and many are selling their wool which will leave me with one fourth less to do in roll carding than formerly. We have had more wool to ship than formerly. Our new spinning jack has come at last and is nearly ready to start. It is a fine-looking machine."[39] By 1863, the mill was fully functional with all equipment operational, and Watkins expanded his spinning, carding, and weaving business. Though the historic record documents that Watkins enslaved three people at the time the

[35] Potts and Sligar, 88-92. The number of bricks equates to approximately four to five years of output from Watkins's kiln. Planning for the mill and its construction would have begun around 1855 or 1856, depending on productivity.
[36] Potts and Sligar, 94.
[37] Potts and Sligar, 95.
[38] Potts, *Watkins Mill*, 96; *Liberty Tribune,* May 8, 1861; Gross, HAER, 11.
[39] Letter, Waltus Watkins to his daughters, July 29, 1861, Watkins Mill State Historic Site Archives.

mill was constructed, it is unknown if labor from enslaved individuals was utilized to build the mill. Enslaved labor contributed to the operation of the farm, not the mill.[40]

During the Civil War, 1861-1865, Watkins managed to not only survive, but to thrive. His political views were nuanced and varied during this period. He pledged one loyalty oath to the Union but refused a second at the end of the war, which resulted in losing his right to vote. The fledgling woolen mill business along with his diversified farm were noted by both US Army and Confederate forces. Watkins was a leader in the county and despite the surrounding civil unrest, he managed to maintain stability through more than one raid on the property. On June 9, 1862, Waltus's daughter Kate wrote to family in Kentucky describing Federal forces ransacking the family home and taking with them gun powder, a bullet mold, and a skillet. Later, in October 1864, bushwhackers (pro-Confederate guerillas) came to the mill and took cloth as fast as they could produce it. This resulted in the brief closure of the factory, but Watkins continued grinding flour due to the demand. By 1863, US Army commanders in the divided state of Missouri again required residents to pledge loyalty to the Union. Through these oaths US Army commanders identified those who were friendly, while residents prevented destruction of their property by pro-Army forces. In 1861, Watkins pledged his loyalty to the United States and assured the US Army commander he would not support any pro-Confederate guerilla groups in the area.[41] Watkins and the mill survived the war by not openly taking sides. His two sons, eligible for service, left the state. When John Watkins received notice to report and enlist in the Enrolled Missouri Militia in 1863, he was out of state in Montana. Waltus wrote to the local commander on April 28, 1864, that son John was not able to serve due to a disabled back and had the support of a local doctor. With no sons serving in the war, and continuing to provide his neighbors with needed services, Waltus survived with only minor damage or disturbance to his farm, factory, and family.[42] Despite his sworn loyalty oath to the United States in 1861 (which kept the factory operating), he did not take the post-war loyalty oath required by the US government in 1865, and thus gave up his right to vote. He refused to answer any question, except that which was legally required. His neighbors confirmed that he remained loyal to the United States during the war and never participated in acts of disloyalty.[43]

In September 1863, daughter Kate reported in a letter that seven individuals enslaved by Watkins, left during the night that week, and the family had to hire two women and three men to help around the house and farm. Lucinda and Ben, two of these enslaved individuals, left with the hired hands. Two other enslaved individuals, Old Parkey and Esseck, remained at the farm. Kate's letter documents that those who left took six horses and nearly all her clothing with them, and that many enslaved people throughout the county fled that night. This indicated that there were more enslaved people at the property than were recorded in census records. It was not unusual practice for one to borrow or rent enslaved labor, which could account for the number of people at Bethany Plantation mentioned in Kate's letter, or it could mean that Watkins obtained additional enslaved labor after the census records were collected.[44]

The Watkins family routinely had many boarders at their residence. These were either farmhands or mill workers. Family correspondence notes in autumn 1862 that the family had about fifteen workmen boarding at the house, which kept Mary Ann Watkins busy with food preparation and clothing repair. In 1864 the family noted that they

[40] Missouri Slave Schedules, Clay County, Missouri, 1850 and 1860, available via the Missouri Secretary of State, Records & Archives, accessed December 29, 2023, https://www.sos.mo.gov/CMSImages/Archives/Census/Slave_1860/F107_1860_V1_Clay.pdf
[41] Potts and Sligar, 75, 78; Means, 142, 159; Letter, Kate Watkins to John Watkins, October 3, 1864, Watkins Mill State Historic Site Archives.
[42] Letter, W.A. [illegible] to J. White, April 28, 1864, Caroline Martin Collection, Watkins Mill State Historic Site Archives.
[43] Letter, Thomas S. Grant to John H. Watkins, Orders (n.d.), Caroline Martin Collection, Watkins Mill State Historic Site Archives; Potts and Sligar, 83, 105.
[44] Donald L. Gilmore, *Civil War on the Missouri-Kansas Border* (Gretna, LA: Pelican Publishing Co., 2006), 38; Means, 8; "Black History in Liberty, Missouri," Liberty African American Legacy Memorial, accessed April 19, 2021, www.libertylegacymemorial.org.

were overrun with business at both the factory and the house, enough for Mary Ann Watkins and three other women. In June 1864 Waltus hired "two black women to help her."[45]

In 1864, raids by bushwhackers forced him to temporarily close the mill. Watkins wrote on June 3, 1864, that the factory and house were run over with business. As noted, he hired two African American women to help Mary Ann in the house and he was "more crowded with business this year than I have ever been. There was [sic] 18 wagons here yesterday at one time some loaded with wheat but the most of them loaded with wool, some of it to be carded some to be spun and some to sell or swap for cloth."[46] The bushwhackers took so much cloth the family was compelled to stop the factory because they took the material as fast as it was produced. When Watkins reopened in 1865, he added advanced looms and employed forty workers that processed between forty and sixty thousand pounds of wool into products including cloth, blankets, shawls, yarns, and batting.[47]

Local newspaper accounts advertised Watkins mill products and their excellent quality. Custom work was available as well as a variety of yarn, cloth, and blankets that could be purchased by authorized agents. Several of the sales agents' original order books are present in the state historic site archives, illustrating the amounts and locations of specific goods.[48] In 1868, oldest son John entered partnership with his father, and under their management as W.L. Watkins & Son, the mill business prospered. They also upgraded their shorthorn cattle herd, and the mule and horse businesses were also thriving. Though the name changed (and would again as sons Judson and Joe eventually entered the partnership), the business was locally known simply as Watkins Mill. This was also probably a carryover from the earlier gristmill operations, where many knew the farm as the Watkins Mill. In an average year the mill produced $46,000 worth of goods, which provided Waltus about $4,000 in profit, and the gristmill averaged about $3,000 in profits.[49]

Raw materials for the mill were plentiful across Missouri and the Midwest. Sheep were relatively easy to sustain, inexpensive to feed, and survived the Midwest winters well. Missouri was the fourth most productive state in the Midwest by 1870. Watkins's integrated plan included raising some of his own sheep. Prior to the woolen mill, the farm had approximately fifty head of sheep, mostly for food and personal raw material. After the mill opened, Watkins increased his holdings to over 400 sheep. His breeds are not known, but because the fabric produced was of medium quality, they were probably a mixed breed, rather than the higher quality merinos. Merino wool produced cloth that was in high demand within his market. In 1880 the mill processed 625 fleeces that created 4,000 pounds of wool. At the height of production sixty thousand pounds of wool was produced per year. Though Watkins maintained his own herd, most wool came from other local growers. Neighbor O.F. Dougherty of the Multonomah Farm located west of Liberty provided fleeces and was additionally supplemented when needed by brokers from other Missouri dealers, as well as Kansas City broker Benjamin McLear, who provided raw material from as far off as Chicago and Philadelphia.[50]

This raw material produced fabrics that included flannel, jean, cassimere, broadcloth, kersey, linsey, and satinet. Jean garments were a wool/cotton mix that made rugged work clothes. Spooled cotton, or cotton threads were brought in from other areas to supplement the jean material, as cotton was not woven here. Jean fabric is not to be mistaken for denim. Jean was also a fustian twilled cloth to provide strength and durability, generally with

[45] Letters, Waltus Watkins to Kate and Mattie Watkins, June 3, 1864, and Anna Watkins [James's Watkins daughter] to Meg Blythe, Fall 1862, Watkins Mill State Historic Site Archives.
[46] Letter, Waltus Watkins to his Children, June 3, 1864, Watkins Mill State Historic Site Archives.
[47] "Watkins Woolen Mill", Missouri State Parks website, www.mostaateparks.com/page/55164/watkins-woolen-mill, accessed 25 April 2021; letter, Kate Watkins to John Watkins, October 3, 1864, Watkins Mill State Historic Site Archives.
[48] *Liberty Tribune*, 24 April 1863.
[49] Potts and Sligar, 99; Sligar, 91. Monetary calculators estimate that the total $7000 in profits was equal to approximately $160,000 today.
[50] Potts and Sligar, 99-100.

warp and woof of the same color.[51] The twill utilized a cotton warp or weft thread along with a wool thread to create a diagonal weave. Kersey was used for overcoats, trousers, and stockings. Cassimere was a lighter, drape, and high-end fabric used in suits along with flannels and broadcloths. Linsey and satinet were more affordable cotton/wool mixes. These fabrics along with yarn for knitting were the mill's staple goods. All mill products were made to order with variations available in each material. Kersey was available in sixteen weights and cloth was available in different patterns such as stripes, checks, herringbones, plaids, and other organic prints such as flowers and leaves. Though neutral whites, grays, browns, and blues were the predominant colors, some bright such as red were also available. Some pastels like green, lavender, and purple were also produced. Experienced worker with cloth dye William Waers, lived on site in his own cabin and worked at the mill for more than twenty years. His recipe books remain in the archives on site. Products included shawls, blankets, and bolt fabric that was guaranteed to last. Watkins advertised, "My blankets will last as long as your lives and you needn't hurry about dying either." Producing fabric by special order only was financially expedient and efficient for the mill but meant that the mill was inactive between jobs.[52]

Despite an economic panic in 1873 and following slump in the American economy, mill production was at its height and the company at its most stable during the 1870s. Though only seventeen orders were recorded between September 1874 and August 1875, several large single orders stabilized the books. Family members completed rudimentary tasks to maintain the farm and factory throughout the winter months and often the mill operated just two days per week. Joe Watkins spent much of his time carding wool at the mill to help production.[53] Watkins reinvested in the factory and ordered some new machinery. In August 1875, he purchased a new yarn twister from the Bridesburg Manufacturing Company. Existing machinery was rearranged and cleaned, so that when production resumed the focus shifted from cloth to yarn, which was easier to produce and required less labor. Judson Watkins stated, "some of the machinery we put in a kettle and boiled them clean." [54] Other improvements included consolidating mill operations, adding new machinery, moving machinery, and dredging the ponds. Between 1876 and 1879 yarn was the dominant product at the mill. Contributing to the mill's production during the decade were several single orders of such great size they compensated for the lack of order numbers. In late 1876 Tootle and Hanna of Kansas City ordered 1,400 pounds of mixed yarns, exceeding the combined sales from the previous year.

Reduction in cloth production was linked to growing instability in the market. White flannel sold for a high of ninety cents per yard in 1865 and by the end of 1870, sold for only thirty-five cents a yard. Also contributing to the fall of cloth production was the expanding availability of ready-to-wear, store-bought or catalog clothes produced en masse by large mills, generally in the east, and shipped directly to homes via the efficient railroad system.[55]

Sometime in the late 1860s (probably by 1868), Watkins moved the flour and grist mill from the lawn area north of the mill, into the north side of the first floor of the mill building to take advantage of steam power. Until this time, the grist and flour mills were powered by teams of oxen and mules. Material orders at the mill were supplemented by custom services such as carding, spinning, weaving, fulling, and dyeing materials brought in by others. This activity extended the longevity of mill operations and supplied nearly one-third of the work in the

[51] Lynn Downey, "A Short History of Denim," Levi Strauss & Co. website, accessed December 29, 2023, https://levistrauss.com/wp-content/uploads/2014/01/A-Short-History-of-Denim2.pdf
[52] *Liberty Tribune*, advertisements, 1861-1864; Potts and Sligar, 100-102. Cotton to supplement to the primary wool fiber would have been brought in from other southern states and used as a secondary fiber for affordable fabrics.
[53] Gross, HAER, 12; receipts: C.W. Todd, 1876; J.L. Kelley, 1875, J.W. Byers 1876, and Bridesberg Manufacturing, 1875, Watkins Mill State Historic Site Archives, general business correspondence folder; letter, Judson Watkins to Sister, n.d., Watkins Mill State Historic Site Archives.
[54] Letter, Judson Watkins to Sister, May 15, 1875, Watkins Mill State Historic Site Archives.
[55] Potts and Sligar, 168-169; letter, Waltus Watkins to Mattie Watkins, June 7, 1875, Watkins Mill State Historic Site Archives.

1880s. Additionally, some overflow work was forwarded from the Hamcher Brothers of the Richmond and Gallatin Dry Goods Company in Gallatin, Missouri, in 1884. Business slowly declined along with Waltus's health according to family letters as early as 1882. That year, perhaps aware of his fragile health, Waltus and Mary Ann divided their Clay County land holdings among their sons John, Joe, and Judson. Provisions were made for the parents to remain in the main residence until their deaths and the new firm of John H. Watkins and Brothers was formed. Despite several debts, the transfer of the business to his sons was smooth upon his death in 1884. In 1888, John bought out his two brothers. Judson moved to Lawson, where he built a profitable dairy farm. Joe remained at the main residence with John and cooperatively farmed the acreage.[56]

The woolen industry in Missouri declined throughout the 1880s and when the cloth shear machine broke in 1886, the Watkins mill abruptly stopped producing cloth. Advertised services reduced to custom carding and spinning. By 1881, the mill was no longer advertising fulling or dyeing among its services. Under the ownership of John H. Watkins and Brothers in 1883, short horn cattle were the prominent mention in advertising for the company rather than the woolen mill.[57] Yarn production continued until 1892 because it did not require a shear for production. As production of fabric and cloth ceased, the mill was operating on a limited basis only. The powerplant would be fired up to accommodate custom carding, spinning, or fulling; however, by 1898 most of this work had also diminished. Operations at the gristmill remained steady and the powerplant drove that side of the business. However, an explosion in the power plant in 1904 shut down mill operations permanently. Leftover goods, including blankets, yarn, and fabrics, remained available in the mill store, where latent products were sold, as late as 1956. The jobbing system, where larger quantities of materials were produced and sent to specific outlets for sale, accommodated the sale of surplus goods after the mill ceased operations. One of the two fulling machines and its line shaft were sold, but otherwise one of the brothers would oil the machinery two or three times each year to keep it in good working condition.[58]

Ironically, the main features of the mill that imbue its significance today, may have contributed to its demise. Watkins was loyal to his outdated equipment and was forced to rely on distant sales offices for its repair. Declining markets, difficulty in recruiting skilled workers, and the inefficient layout of the factory contributed to the demise of the mill. Though Watkins committed to purchasing state of the art equipment in 1860, he chose not to upgrade and incorporate newer, more efficient machinery available in the 1870s and 1880s. Although he did purchase additional equipment in the 1870s, it was often used equipment and not the latest, most efficient design. He also did not purchase some pieces of equipment that would have replaced workers or made some of the tasks easier. Of the estimated 2,400 contemporary woolen mills across the country, Watkins Mill remains singular in its preservation and retention of original equipment. Along with the collection of historic buildings and sites, this offers the opportunity to develop a nuanced understanding of the milling process on a family farm.[59]

Watkins Factory (Mill) Machinery and Process

Watkins Factory retains a comprehensive collection of mid nineteenth-century textile machinery that includes some of the most significant textile artifacts known to survive. The mill building, its material culture, the supporting farm, school, and church are now part of the Missouri State Park System. Within the mill building, the machinery configurations provide important information about the textile process, the history of the machines manufactured, industrial development, and the work process that served production. The machinery collection at Watkins Mill, primarily provided by two firms, represents prominent suppliers who were leaders in the trade. The

[56] Potts and Sligar, 166-168; Silgar, 91.
[57] Paul Ogren, notes for HAER documentation, reproduced in Potts and Sligar, appendix, 13.
[58] Potts and Sligar, 102.
[59] Ibid.

1860s-1880s manufacturing, movement, and support process of converting raw fleece into finished wool fabric represented here is unduplicated in the United States.

The factory had two primary functions, custom and commercial production. These two areas differed vastly from one another, and the most profitable for Watkins was custom production. Commercial production involved manufacturing and merchandising goods to appeal to the public and selling them in the open marketplace. The mill produced bolts of cloth, blankets, and yarn, ideally to sell through special order direct to the general public, via a secondary merchant, or jobber.[60] The custom market included spinning wool for cloth, carding wool, dyeing, and fulling cloth. Supplementing family resources, quantities of raw material were purchased on the open market for mass production, while local farmers provided their own sheep wool to convert into fabric or yarn. Watkins focused heavily on the custom market rather than commercial production.

The machinery came primarily from East Coast providers while supplies for mill operations came from diverse locations. Supplies included cotton warps, dyeing materials, and wood to fire the steam engine's boiler. Most of the wood came from Watkins's property as he cleared his land continuously through the years. Wood was an important commodity and one rich on Watkins's land. It was not only used as fuel, but for debt payment and trade. Supplies and warps were often purchased from jobbers in larger cities such as St. Louis, Indianapolis, Chicago, and Louisville. Dyestuffs included materials like logwood, camwood, fustic, alum, and cochineal, along with grease and lard oil to make the wool pliable. Machinery parts included travellers rings, bobbins, teasels, shuttles, and press plate papers. The beams of warp for the looms needed between 400 and 700 yards of material.[61]

The carding machines, spinning jacks, twisters, and looms required for the process of making fabric and yarn all remain in the mill building. Surviving business records document from whom Watkins purchased equipment and its cost. The site's comprehensive collection of intact historic resources tells the history of textile technology from raw material to finished cloth that can only be told here.

The Alfred Jenks Companies and Furbush and Gage produced most of the equipment. In 1810, Alfred Jenks built upon his cotton mill experience in Rhode Island and started his firm manufacturing cotton machinery in Holmesburg, Pennsylvania. That same year he relocated to Bridesburg, where the company thrived and continued after his death as A. Jenks and Son. Demand quickly dictated that the company expand to manufacturing woolen machinery, and it is credited with furnishing the first woolen mill in Pennsylvania at Conshohocken. After 1867, the company was simply known as Bridesburg Manufacturing Company. It had a reputation for quality and innovative machinery. Equipment at Watkins Factory bear all three names: A. Jenks Company, A. Jenks and Son, and Bridesburg Manufacturing[62]

Furbush and Gage were skilled machinists and developed looms used in many early mills across the eastern and midwestern United States. Merrile Furbush and Ira Gage were both associated with early mills in Lowell, Massachusetts, and Pawtucket, Rhode Island. They each had their own shops manufacturing innovative looms and were both noted machine builders. In 1859, they joined together to form Furbush and Gage, Inc. which operated until 1869. Furbush continued in the business independently until his death in 1887. The business continued on with future generations of the family.[63]

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[60] A jobber was a person who speculatively purchased wholesale merchandise to sell to retailers and thus acted as a second-party distributor for mill products.
[61] Gross, HAER, 35.
[62] John Leander Bishop, *A History of American Manufactures from 1608-1860*, Vol. II (Philadelphia: Edward Young and Co., 1866) 18-21.
[63] Gross, HAER, 67.

Below is a description of the machinery at the Watkins Factory. The machines are described in the order of wool processing, starting with sorting and scouring and ending with cleaning and pressing.

Sorting and Scouring

Fleece (raw material) was first sorted by skilled workers. These workers had the ability to identify and distinguish among the various divisions of fleece quality. Differentiating fleece qualities quickly contributed directly to the Watkins's profitability, as the highest quality fleeces produced the best wool for garments and fine cloth, while lower quality fleeces could be used in blankets. The species variety and grade of wool fleeces required a skilled wool sorter. A sorter station is not evident at the building today and it appears the process began with a box duster or willower. The willower machine would have been located near the sorting area, probably on the first floor. The willower at the mill is from A. Jenks in Bridesburg, Pennsylvania.[64] The willower cleaned the wool in drums with iron teeth. Historian and textile machinery expert Laurence Gross suggests this machine was primitive. It was not represented in either the 1853 or 1867 Jenks catalog, indicating it may have been in previous use when purchased by Watkins, or it was built from old patterns. Scouring was more highly mechanized during the 1870s, but Watkins never modernized and continued to use the simple wood tubs where wool was repeatedly rinsed and manipulated with hand-held wood poles. At the factory, the sorter was stationed at a bench on the first floor. Later the station may have been in the woolshed across the lane or even outside on the platform.[65]

Fleeces were then dried and could be dyed in their raw state or continue to further processing. As part of the finishing process, the Watkins mill dyed the wool in the cloth rather than the wool.

Picking

The cleaned and dried wool was then sent to the picker room on the second floor where different colors and types of wool could be blended and knots removed by carding machines. The picker machine was also made by A. Jenks and Son and is represented in an 1867 catalog. Archival records indicate that a hard waste picker was purchased in 1864, but no longer remains on site. This machine made recycled cloth from reworked wool and rags.[66] Often the picker or picking room was completely detached from mill buildings because of hazards from fire (sparks) and injury (loose steel teeth from the picker). Watkins did not separate this function. Heavy air particulate made picking particularly dangerous with an increased risk of fire that could ignite from static in the air.

Wool then traveled from the second-floor picker to the third floor for carding. Carding completely straightened, cleaned, and smoothed the wool fibers. Carding also separated the wool fibers to free them up for spinning. The card machine surfaces spread out the wool fibers into an even strand. They contained wire-covered rollers that rotated in different directions to process the wool through multiple cards. Wool was run through the cards multiple times with each round running through wheels that were mixed in size and spaced closer together, thus refining the raw material and readying it for spinning. Watkins had six production cards and three other cards for special use or domestic custom use for local customers.[67]

Carding

[64] Gross, HAER, 5.
[65] Potts and Sligar, 114.
[66] Gross, HAER, 8.
[67] Gross, HAER, 11.

The process of carding is to ensure that raw wool roving is untangled and all the wool fibers are aligned in one direction. This makes the wool easier to spin smoothly. Carding wool was undertaken by skilled labor at the mill and occurred on the third floor. Watkins had three diffferent card types, each used for different stages in refining the wool. The smallest (24" surface) and most simple card was a type that had not been regularly used for industrial purposes since the mid-1820s, while the other two larger cards were 31" and 48" respectively. The larger machines were more modern and efficient. The cards were also from A. Jenks and Son. One set of cards remains from a January 7, 1864, order. The combination of sizes at the mill provided flexibility in processing the wool orders. Wool was fed to the machine in standard amounts so the thickness of the finished product resulted in even yarn and ultimately the cloth it produced. If the feed was inconsistent, the spun yarn would have a thick/thin quality and produce an inferior fabric. Operating, maintaining, and calibrating the cards was exacting and skilled work. Precision was required to align the cards, maintain the teeth, and perfect the wool feed. Wool strands produced from the carding process are called roving. Quality, even, and smooth roving was required, as once the raw material left the card, any errors in its prepration could not be corrected. Though not all the cards carry a manufacturers name, with the labels of A. Jenks on several machines, it can be assumed that a larger 48"-wide surface machine that carries no name very closely resembles the others and is assumed to be from Jenks as well. Roving itself is a non-twisted raw fiber with no strength or resilience. It was not until the spinning process that wool's properties of durability were transformed.

Although other mechanized card feed systems were available as early as the 1850s and commonly used by the 1870s, Watkins never adopted them or purchased the necessary machinery. This resulted in a product that was highly labor intensive and more prone to inconsistent quality. Though the basic carding equipment at the mill was comparable to other contemporary mills in the 1860s, the lack of modernization and willingness to adopt evolving technology, limited the competitiveness of the mill.[68]

Cards had large cylinders that were covered with cloth called card clothing. This helped to smoothly feed the roving through the card machines. Card clothing required an even and consistent surface and cylinders were routinely maintained or ground off the main card in a traverse grinder. The traverse grinder is located in the center of the floorplan on the third floor between the cards and the spinning jacks and is marked A. Jenks and Son. This grinder was covered with a rough surface and essentially sanded, or ground, the cylinders of the card smooth for efficient use in the carding process. This required skilled labor to judge when the clothed cylinders were prepared for use.[69]

It took at least two men to operate a single card machine and one to supervise. Wear marks on the floorboards in front of the machines tell the story of how different workers operated the machines. It is clear that dents in the floor between the cards and spinning jacks illustrate different methods of removing empty bobbins where one dropped empties near his feet and another flung them behind him and hit a small barrier wall. In 1867 there were six carders and a card boss on staff at Watkins Mill. Carders included Abe James, James Feboe, James Fitzgerald, Ben Holman, William McIntire, and W.K. McKenight with the card boss identified as Thomas McGerty.[70] This remnant evidence of use and relationship of the machines to the building contribute to an understanding of the manufacturing process here that unifies the building with its function. Without the machines in their original locations, the wear would have no context.

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[68] Gross, HAER, 15, 18.
[69] Atlas Works, "Card Grinding in Theory and Practice, Treatise No. 14." (Oldham, England: Atlas Works, 1894) 12-15.; Gross, HAER, 21.
[70] Potts and Sligar, 122; Laurence Gross, "Wool Carding: A Study of Skills and Technology," *Technology and Culture* 28 (October 1987), 810; Population Schedule, Ninth U.S. Census, 1870.

At the end of the carding process, even strips of wool roving were ready for spinning into yarn.

Spinning

Four spinning jacks on the north side of the third floor are adjacent to the card machines. Roving was wrapped around bobbins or jackspool and were drawn out into twisted yarn at the spinning jacks. The spinning transforms the raw roving into usable yarn fibers by twisting the roving. Individual twists were then plied together to create multi-plied yarn. The third floor of the mill had four spinning jacks each with 216 spindles to produce yarn. Two spinning jacks at the east end are from A. Jenks and appear older than two from Furbush and Gage at the west end of the floor.

The spinning jacks operated on a track system where roving passed through rollers to the spindles while the carriage moved them away from the jack. This motion twisted the wool from the inclined spindles. The speed also drew out the roving and, combined with the twist, could as much as double the roving from its original length. The strength of the yarn was dependent on the tightness of the twist. The spinner operating the machinery walked back and forth with the carriage to control the operation. Repeated back and forth motion impacted the floor boards that are badly worn and in some cases replaced. This offers the visitor a tangible link to the past operation of the mill, and an understanding of the machinery as more than just museum objects. Spinning-jack operators were often men because of the physical strength required to operate the crankwheels as well as the endurance required to complete the task. Additionally, the long skirts worn by women proved a significant hazard in the physical environment, where excess material could become twisted or otherwise engaged in the machinery.[71]

The four jacks at Watkins Mill were labor-intensive machines to operate. They were located in two back-to-back rows on the north side of the third floor. The two on the east end were purchased from Jenks in 1860 and the two on the west were from Furbush and Gage and purchased in 1867. Two additional machines were in the northeast corner and appear to be the most used machines based on the wear patterns on the floorboards. By 1869 modern self-operating jacks were available that could increase production and reduce costs significantly. Estimates that the cost of machinery upgrades (approximately $200) could be made up in profits within a year apparently went unheeded by Watkins.[72]

As single-ply yarn came off the spinning jacks, it was plied or twisted together to become yarn for sale. Two ring frame twisters at the west end of the second floor are marked from “A. JENKS & SON” and “BRIDGESBURG MANUFG CO. PA.” The Bridesburg twister is most likely from an 1875 order for a twister at a cost of $225.00. Single strands of fiber were combined in two-, three-, or four-ply yarns for use in domestic knitting on these machines. Full bobbins of yarn were moved to a skeiner machine that wound the yarn into uniform length skeins. The skeins then were moved to a treadle-operated skein-twister or hanker that sat in the middle of the floor to twist the skeins into hanks. Today the hole worn in the floor under the skein-twister testifies to its use. There were two hankers, the manual and most likely homemade tread-operated unit and a power hanker marked “J.F. MCAFEE PATENTED FEB 6 1883 PLESANT HILL, MO.”[73] Grace Rogers Cooper, a textile curator at the Smithsonian Institution in Washington, DC, noted in her article in *Museum News* in September 1963 that the ply-twisters at Watkins Mill are among the most prized artifacts in the machinery collection because of their rarity and possibly as the last surviving examples.[74]

[71] Gross, HAER, 26.
[72] Gross. HAER, 31; Potts and Sligar, 127.
[73] Gross, HAER, 32; Potts and Sligar, 128-134.
[74] Grace Rogers Cooper, “Watkins Mill Revisited,” *Museum News* (September 1963): 11-15.

Yarn was also used as weft for the looms; spools or bobbins of yarn sat on spindles on the A. Jenks loom, the next step in the process.

Weaving

Wool yarn was woven into a variety of fabrics on the looms at the mill. Weaving required yarn for the warp and weft of the machines.[75] A variety of looms at Watkins Mill include broad, plain, fancy, and drop box looms. The looms were purchased from a variety of manufacturers. Yarn came from the spinning jacks on the third floor, back down to the second floor where looms were prepared for weaving. Three of the earliest looms at the mill are next to the twisters along the north wall and were supplied by A. Jenks and Son. These wove plain and simple fabrics with a single weft color. The looms, like most everything else in the mill, were powered via a leather belt connected to a set of gears and an overhead shaft. Complex weaving mechanisms on these looms appear to be those invented in 1847 by Richard Garsed, according to the Historic American Engineering Record.

The looms were elaborate pieces of machinery generally painted dark green or black with red accent paint along the edges. Three remnant looms are at the weave room's east end. These are incomplete machinery and may have been scavenged for parts for other looms, especially as production slowed. There are also three broadlooms marked "ALFRED JENKS BRIDESBURG". These looms are older products of the company or could have been backstock. They were used for weaving heavier fabrics, such as blankets at wider widths. The Jenks looms were outside the mainstream of other contemporary examples because of the method used in the lay motion. Most looms utilized the crank motion or cam-operated lay, while Jenks used a gear-driven disk. Gross speculates that this could have been an effort to avoid a patented motion or an attempt at an improved motion. Eventually the crank motion became the standard.[76] One of the looms has a patent date of March 27, 1866.

Two looms were made by the Stafford Loom Company in Stafford, Connecticut, and included more advanced designs than the Jenks looms. The two drop-box looms were purchased from C. Dickinson in September 1867 for $173.25. These looms were able to create more complex weaving patterns. Three fancy looms from Furbush and Gage in Phildelphia were the most complex and sophisticated machines at the mill. They were called fancy looms for their ability to create complex patterns in multiple colors. Up to five weft colors could be used. Watkins purchased two of these looms on July 16, 1867. Two broadlooms marked, "M.A. Furbush & Son, Phila. PA." were purchased in 1869 and were also capable of complex color and design schemes.[77]

The variety of looms at Watkins Mill represent the technological variation within a short period of time and are indicative of the innovation and rapid changes during the mid-nineteenth century. This also required flexible, nimble, and clever labor to comprehend and execute the varying functions of each loom as well as to maintain and repair them. There was a total of sixteen machines with two different types of broadlooms, three plain looms, two drop box looms, and three fancy looms.

The broadlooms at Watkins Mill displayed a unique method for the beater motion (the motion that pushes each strend of weft yarn into the previously woven cloth). Other looms produced on the East Coast utilized either a cam or a crank motion for this purpose. The Jenks broadlooms at Watkins Mill incorporated a new technique utilizing an iron disk on a gear-driven shaft that established a reciprocal motion to serve the same purpose. The

[75] Warp is a length of yarn that runs lengthwise in the loom. Weft is the yarn running crosswise in the loom that is actively carried back and forth to create fabric.
[76] Gross, HAER. 42-44.
[77] Gross, HAER. 53.

extant broadlooms illustrate how the machinery actually functionned in contrast to their static representation in period catalogs.[78]

The picker motion is the feature that sends the shuttle back and forth across the loom. It requires most of the loom's power and also determines how quickly cloth is produced. Watkins Mill has several configurations of this feature. These include the Stearns parallel picker motion, invented in 1859 and eventually emerging as the industry standard. The bat-wing drive was also used across the milling industry. Other techniques were also used at the mill which were not as effective as these industry standards. The Jenks and Son broadloom advertisement shows a portion of the lay motion, but the picker motion is not illustrated. In the *Catalogue of Machines Built by the Bridesburg Company* from 1867, images often represent an interpretive version of the device rather than its actual details, which can be studied exceptionally *in situ* at Watkins Mill.

The constant pursuit of efficiency in machinery provided a wide range of solutions in manufacturing until industry standards dictated common practices. This variety also highlighted the competitiveness of the industry at the time. Watkins's wanted to produce a variety of materials in his weaveroom where the seventeen looms present consisted of seven different types to serve this purpose. The looms here illustrate a period where technology was evolving towards the standardized and more automated systems at the turn of the twentieth century.[79] This also required skilled workers to set up and operate the looms. All of the machines were powered from the steam engine located in the frame shed addition at the east end of the building. The engine was connected to a 16' flywheel with belts and wheels connecting the system throughout the building along the east interior wall.

Some of the original loom shipping crates were kept and re-used in another area of the building. One board used as sheathing for the main drive pulley retains a stencil, reading "Not Contraband, 1 loom, Alfred Jenks & Son Manufacturers of all kinds of Cotton & Woolen Machinery, Bridesburg, PA." Identifying not as contraband was likely a reference to the challenges of delivery during the Civil War.

As the mill was outside the industrial centers of Kansas City and St. Louis, had generally limited staff, and produced a wide range of materials on diverse machinery, another challenge was consistent quality production.[80] After cloth was inspected for faults, it moved to the finishing process.

Finishing

Once cloth was formed, the finishing process included washing, fulling, dyeing, stretching, raising, shearing, and pressing, all of which took place back down on the first floor. Cloth was wet finished to remove dirt, oil, and starch added or picked up during processing. Large handmade scouring tubs with rollers were used to wring the fabric. Wool was then fulled to bring the fibers together to create an incredibly strong fabric. This was done in a fulling mill where cloth was crimped and folded, with pressure applied to achieve the desired result. During this process the cloth also shrunk in size.[81]

The dyeing process was a skilled activity that could have adverse health impacts to the worker because of the toxic chemicals used to achieve stay-fast colors. Fiber could be dyed in its loose form after being scoured, after processing as yarn, or by the piece as cloth. This was likely done by hand because no evidence of dyeing

[78] Laurence F. Gross, "The Importance of Research Outside the Library: Watkins Mill, A Case Study," *IA: The Journal of the Society for Industrial Archeology* 7, no. 1 (1981): 15–26, http://www.jstor.org/stable/40968009.
[79] Gross, HAER, 20.
[80] Gross "The Importance of Research Outside the Library," 15–26.
[81] Potts and Sligar, 136.

equipment remains. William Waers was in charge of dyeing at the mill and his recipe books and color samples are conserved in the site archives.

Finished cloth was stretched to further even fibers and remove wrinkles. A stretching machine from the Dayton, Ohio, Broadrup & Company is located at the east wall of the finishing room on the first floor. To soften the touch of the smoothed wool cloth it was raised to bring out the natural nap and create a soft feeling to the finished fiber. The cloth was dried on tenter frames extant in the attic today. The top edge of the fabric was attached to tenter hooks and hung in the warm attic to dry. The cloth then returned to the first floor for shearing and pressing. A shearing machine trimmed the fiber with a horizontally oriented mower-type blade action and the press folded the material and applied heat to give the fabric its final finish.[82]

Included in the collection is a rare machine, previously only known from catalogues. It is a cloth stretcher that removed wrinkles from fulled cloth to prepare it for napping the surface fibers. This machine's origin is unknown, but it represents how production techniques evolved over time. There is a second cloth stretcher in the mill manufactured by Broadrup & Company.

Religion and Education at Bethany

Watkins was a devoutly religious man, coming to his faith in middle age when he was baptized in the Baptist Church. Robert James preached at the New Hope Baptist Church in northern Clay County from 1844 to 1850. James was brought in to revive a congregation left uninspired by previous leadership that "left the women crying and the men discussing the election."[83] Perhaps the congregation's disarray contributed to Watkins's lackluster participation in church. His family routinely prayed for him and his conversion; it was James, however, who finally converted Watkins during a dramatic ceremony where he cried out for mercy and was eventually baptized as a changed man. This occurred in 1849 and his faith significantly influenced the rest of his life. His conversion also inspired a renewed sense of commitment to both his community and his family. His sister described his conversion in a letter to his mother: "It would have done your very soul good to have seen brother Waltus' deep conviction…His whole theme is to talk about religion, go to meeting and read the bible." Watkins became a staunch advocate of temperance and viewed those who drank as sinners and a threat to society. He later stated that he had not used spirits, coffee, or tobacco for more than twenty years even though he once used them all. Watkins enforced temperance when hiring workers for the mill, believing that alcohol and machines were a dangerous mix.[84]

After Watkins's religious conversion in 1849, he and his wife Mary Ann attended New Hope Baptist Church approximately five miles from the Bethany Plantation. In 1857, the Watkins family left Hope Baptist Church and Waltus helped establish the Mt. Vernon Missionary Baptist Church on the Bethany Plantation. This church provided a nearby place of worship for his family and his workers. In 1869 the church building burned, and Watkins helped provide money and materials for a new building. Watkins's influence within the church is evident when he declared that the new church would be constructed one and a half miles from the old and adjacent to the Franklin School, which was more convenient to his home and closer to the state road that ran through Bethany Plantation. He donated land for the church, along with building materials that included bricks fired in his own kiln and limestone for the foundation. When fundraising stalled, Watkins also donated the final $1,200 for the building.[85] The new brick building seated 150 and was completed in 1871. The church served those employed at

[82] Gross, HAER, 63.
[83] Potts and Sligar, 34; Woodson, "A History," 743.
[84] Potts and Sligar, 36; letter, E. Carter to Mrs. Susan Hardon, August 7, 1849, Watkins Mill State Historic Site Archives.
[85] Note the assertion in *History of Clay and Platte Counties, Missouri*, 499: "This brick edifice was erected in 1871 at a cost of $5,000, more than one-half of which was contributed by Waltus L. Watkins."

the mill, as well as families from neighboring farms. Watkins donated generously for the daily needs of the church including firewood, oil for lamps, and the purchase of spittoons. He served multiple leadership roles in the church over time and remained influential and active until 1880, when his health limited his involvement. A small cemetery associated with the church holds only one confirmed burial.[86] Joe Watkins, Waltus's youngest son, took over his father's role as secretary for the church in the 1880s. In 1918, the final worship service was held. Joe continued to send reports to the Baptist Association until 1928, when it was formally disbanded, and the land returned to the Watkins estate.[87]

The family believed in hard work and innovation on their farm, and the importance of formal education was also paramount. Unfortunately for Watkins, formal education in rural Missouri was difficult to access. Although the State authorized public schools, it did not fund them, which resulted in a lack of public schooling opportunities across the state. One of Waltus's Missouri family members, Jane Gill, complained that she could not rely on educational opportunities always being available. To meet demand, locals hired teachers and created subscription schools. As early as 1836, the Franklin Academy, one such school near the farm, operated out of a small log building. In 1842, its subscribers created Franklin School District on the Bethany Plantation. Subscription schools charged families based on their wealth. Because the Watkins family was one of the largest landowners, the school assessed them at a higher rate than others. Waltus's involvement in the school from its inception is evident in his service as a board member in 1844 and as an inspector who scrutinized and evaluated the qualifications of potential teachers. Each term at the school lasted a period of five months from the first of February through the end of June.[88]

Naming the school for Benjamin Franklin set high expectations for the education of students. Its founders hoped to instill model behavior and provide an advanced course of study. McGuffey readers were utilized as a text purchased by the students to teach reading, writing, arithmetic, and rhetoric. Watkins eventually led a drive to construct the larger building that stands on the site today. The octagonal school was constructed using brick provided by the Watkins family kiln and was located closer to his home along the state road. The new building cost $2,200 to build and furnish. Teacher's salaries were supplemented with produce as well as cash. At least five of the Watkins children attended Franklin school.[89] Watkins wrote to his daughters after they left home about the importance of education. He stated:

> I contemplate the enjoyment that will be afforded to your selves and friends when you are through your studies but do not think that you will then be done with life's troubles, for they will have then just begun and I hope that you will then really perceive and know that you have only laid the foundation of an education and not do as many have done not only quit studying and loose [sic] all that have laboured so hard to acquire. We have all been placed on this earth by a wise and beneficent creator for some noble and wise purpose and we should begin early in life to fill our destiny and it is all important to start right if we make a wrong move at the beginning we may never be able to entirely change the effect of that beginning, so you see it behooves us to examine the ground well before we make a step on it so that when old age comes we will not have to lament a misspent life.[90]

At the Franklin Academy, students progressed at their own rate until they mastered all subjects, and at least one of the teachers boarded with the Watkins family. Subscription schooling ceased in 1870, when the academy was

[86] Sligar, 89; Potts and Sligar, 56-57.
[87] Potts and Sligar, 56-7; Sligar, 89.
[88] Potts and Sligar, 58-59; Sligar, 87; Stiles, *Jesse James*, 29.
[89] Orson Fowler, *The Octagon House, A Home for All* (New York: Dover Press, 1973 [reprint, originally published 1853]); Potts and Sligar, 57-59; Sligar, 87.
[90] Letter, Waltus Watkins to his children, June 3, 1864, Watkins Mill State Historic Site Archives.

converted to a public school. By 1878 the public school outgrew the building, and a larger one was constructed closer to the heart of the district. Watkins purchased the octagonal school at public auction and converted it to house mill workers and laborers on his farm. They occupied the building until the 1930s.[91]

The school educated only local white children, as an 1847 Missouri state law made it illegal to educate enslaved people.[92]

Watkins's interest in education extended beyond the primary courses provided at the Franklin Academy. He was a staunch supporter of William Jewell College in Liberty, Missouri, which opened in 1850. Between Watkins and Reverend Robert James, who opened the school, they raised more than $60,000 for its construction.[93]

Life at Bethany After the Mill

By 1890, the Watkins House was occupied by John, his brother Joe and his wife, and their sister Carrie. Judson was living in Lawson with his family on a dairy farm. The workers' houses were empty, but the brothers continued agricultural pursuits with livestock including mules. The brothers also participated in incorporating organized social activities. John Watkins hosted an annual fox hunt through the Missouri Valley Fox Hunters Association from 1909 to 1931. Every fall, hundreds of tents were raised to accommodate the hunt. Community services to support hunt participants included restaurants, a movie theater, and barber shop, all connected along the lane by electric streetlights and a telephone line. John Watkins built a kennel for 240 fox hounds just south of the orchard. Other activities included dog shows, horse shows, concerts, general competitions, and exhibitions like those usually held at a county or state fair. The lanes were renamed Fox Trot Boulevard and Hound Dog Avenue and guests were invited to tour the former woolen factory. Carding and spinning demonstrations were offered to the hunters. Remarkably, this event, which lasted only one week, was the largest of its kind in the United States and attracted twenty thousand people for daytime activities and as many as five thousand who stayed in tents on the grounds.[94]

Commemorative activities at the Mill were almost immediate, given the nostalgia for the machinery and the evocative nature of the site. Clay County's 1922 centennial seeded the opportunity for many to reminisce about the mill, including John Watkins, who was featured in a January 1923 *Kansas City Star* newspaper article reflecting on the historic value of the mill and its remaining machinery. Others expressed interest in the property, including Henry Ford, who was building his museum at Greenfield Village at the time, as well as the Smithsonian Institution in Washington, DC. As John Watkins's health diminished, his nephew J. Spencer Watkins managed the home and grounds on his behalf from 1932 to 1945. He organized memorial events such as a celebration for his Aunt Carrie's eightieth birthday, when approximately 200 people came to the farm to celebrate and listen to stories based in history. Among popular stories were those about Frank and Jesse James, whose family farm was nearby. Spencer Watkins provided tours of the mill, the former Franklin School, and the Baptist church and opened the grounds daily. The family supported Spencer's activities at the farm and were fully behind a concept to make the grounds a state park.[95]

The Clay County Historical Society recognized the mill as an important historic property and protectively watched over it during the World War II era. From 1941 to 1945 reportedly fifty tons of old farm machinery and scrap

[91] Potts and Sligar, 50; Sligar, 87.
[92] The February 16, 1847, law states: "No person shall keep or teach any school for the instruction of negroes or mulattoes (sic), in reading or writing, in this State." Accessed at the Missouri Secretary of State office website, https://www.sos.mo.gov/CMSImages/MDH/ANActRespectingSlaves,1847
[93] Potts and Sligar, 62-63.
[94] "The Missouri Valley Fox Hunt," *Clay County Sesquicentennial*, 131-132.
[95] Potts and Sligar, 177-178.

metal were recycled for the war effort. Ethel Massie Withers begged the attention of Senator Harry S Truman to protect the machinery inside the mill so that it was not sacrificed to support the war. Compounding this effort, Carrie Watkins, Waltus and Mary Ann's only surviving child, left the farm in 1943. Family members petitioned the court to disperse the historic tract that consisted of 1,600 acres at the time. The following year, Henry Frass, Jr., from Texas purchased the farm with the intent to develop the mill and farm as a historic property. For thirteen years, members of the Frass family occupied the residence and often opened the grounds and mill for tours.[96]

In 1953 hundreds gathered at the site for the Clay County Historical Society's annual meeting with local officials to brainstorm a bright future for the mill as part of the Missouri State Park system. Ray Coffman, former mayor of Lawson, and Ruth Roney, a local historian, advocated for the property and emphasized its significance as the singular example of its type with all machinery intact. John Watkins Oliver, a family member and Kansas City attorney, lobbied state officials to adopt the property under their State Park Board as a state historic park. Insufficient funds for management and renovation proved insurmountable for the State. In spring 1958, the Frass family offered the property for sale at auction. Wayne Cook Associates advertised the historic significance of the buildings, the suitable nature of the surrounding grounds for livestock, and emphasized the intact woolen mill would be sold separately. Among the bidders was Grace Rogers from the Smithsonian Institution who came to bid on two unusual and rare ring-frame ply-twisters for yarn.[97]

Three men from the Allis-Chalmers equipment plant in Independence, Missouri, were interested in the auction for the antique equipment at the mill. Forest Ingram and Lee Oberholtz attended the auction, and they also represented their general manager, George Reuland. After being separated during the bidding process, Oberholtz discovered the winning bid for the equipment was Ingram, who purchased all the machines in the mill for $650. The land and building were sold separately to an initial bidder whose plan to convert the mill to a slaughterhouse or factory failed when he could not produce the down payment. George Stilley, the second highest bidder and a Raytown farmer, won the tract and soon started grazing cattle on the land while at the same time agreeing with Ingram and Oberholtz that the equipment could remain in the mill.[98]

The Watkins Mill Association

Immediately following the auction, Reuland, Ingram, and Oberholtz organized the Watkins Mill Association to manage and protect their investment in the property. They collected all records left on the property and donated them to the Harry S. Truman Presidential Library in Independence with the help and support of the Jackson County Historical Society. The goal of the Association was to procure, preserve, restore, maintain, study, and promote the Watkins Mill Estate and make available to the public the historic operations in early industry, community life, church, and school as exemplified by the historic Watkins Mill.[99] The three took turns spending weekends at the Mill with their families, conducted tours at the site, and continued to advocate for its acceptance as a state historic park. George Stilley sold the mill building and 12.5 acres of land to the Association in 1960 and optioned the rest of the buildings upon his death in 1962.[100]

Grace Rogers Cooper from the Smithsonian returned to the site in 1961 and the *Kansas City Star* covered her visit. She shared her beliefs about the special nature of the site as a unique missing link in the documentation of the American textile manufacturing industry. She also commented on its special rural setting.[101] Over the next five years, the Association actively campaigned to create a state historic park. Bond issues, land acquisitions, and

[96] Potts and Sligar, 178-179.
[97] Potts and Sligar, 179.
[98] Potts and Sligar, 179; Sligar, 103.
[99] Potts and Sligar, 180-182.
[100] Potts and Sligar, 181.
[101] "Smithsonian Eyes Historical Mill with Envy," *Kansas City Star*, (Kansas City, MO, 2 June 1961).

logistics contributed to an enticing package for the state. Increased tourism was certain with the development and improvement of local highways including Interstate 35 and US Highway 69. The *Kansas City Star* was a strong advocate and published many articles and advertisements supporting the cause. In 1962, Robert Elgin of Recreation Associates was hired by the Missouri State Parks Board to visit the site. He emphasized that the mill was just as historic as many sites along the East Coast and in New England, particularly because it was mechanically complete. He also estimated that repairs to the mill, house, several of the outbuildings, church, and school would total $156,369, and that minimally 460 acres would be required to make the property a successful park. Quantifying dollar amounts and acreage was a key point for the State board and gave them a place to begin negotiations. A bond issue was voted on and won a majority with 52.5 percent in favor but fell short of the 66.7 percent required to pass. Strong newspaper support encouraged a second drive to continue the momentum. Preservation of the mill was considered important to the citizens of western Missouri and the second vote passed with nearly 71 percent majority. Surveys and other legal entanglements with the State and the Association lingered through 1963, but on January 1, 1964, the state took possession of the site with the Association under contract to clean and repair the mill machinery and open the site. The mill was opened on November 1, 1965, as a tourist and historic attraction.[102]

Preservation and interpretation activities at the mill continued through the late 1960s. It, along with the house and outbuildings, was designated a National Historic Landmark in 1966, recognized as the only mid nineteenth-century textile mill with all its original machinery in the United States. Other designations followed and in 1969 the journal *Society for the History of Technology* asserted that the mill was "the most important industrial relic for the study of textile history in this country and probably the world…only the noise and smell are missing." Following this, the American Society of Mechanical Engineers designated Watkins Woolen Mill a National Historic Mechanical Engineering Landmark in 1980.[103]

Following acquisition by the State, a series of academic studies and surveys documented the site. These included archeological investigations led by Booker Hall Rucker, III, beginning in 1963, and in 1978 the site was recorded for the Historic American Engineering Record (HAER). The State organized a rich living history program demonstrating household and domestic tasks, along with gardening and animal husbandry focused on a sheep raising and poultry.

Watkins Woolen Mill State Park and Historic Site

The State of Missouri Parks Department began historic treatment plans for the mill and development plans for the state park almost immediately. A lake was created, campground established, and roads, picnic areas, beach, and walking paths opened. After years of vacancy and significant maintenance issues, a restoration plan for the mill was also underway. The wood frame engine room and dye shed were stabilized and reconstructed, the smokehouse restored, and restoration begun at the Franklin School. In 1977 efforts began to restore the main residence's back porch to its historic appearance after being enclosed in the 1950s. The Daughters of the American Revolution (DAR) led restoration of the fruit drying house as a celebration of the American Bicentennial. Major work took place as funds became available while park staff concurrently worked on small-scale projects. [104]

Additional significant work was done at the site after the State passed a $600 million bond issue in 1981 meant to repair and construct state buildings across Missouri. These funds paid for restoration/reconstruction of the exterior of Mount Vernon Baptist Church, restoration of the exterior of the main residence, and repair of plaster walls and ceilings on the interior. Twentieth-century alterations, such as the garage, were removed to return the

[102]American Society of Mechanical Engineers, "#43 Watkins Woolen Mill," https://www.asme.org/about-asme/engineering-history/landmarks/43-watkins-woolen-mill (accessed May 1, 2023).
[103] Potts and Sligar, 184-185.
[104] Coombs and Elgin.

property to its appearance during the historic period. Other work included reconstructing the summer kitchen, furnishing and restoring the interiors of the church and school, repointing the stone-lined icehouse pit, and reconstructing the icehouse. New shingle roofs were added to the house, smokehouse, church, and school. The gristmill was partially restored and opened to the public. Site and landscape features such as roads, fences, and paths were restored.[105]

To comprehend the built environment more fully at the farm, the State conducted several archeological investigations. Booker Rucker conducted the earliest investigations at the engine and dye shed annex, following which he was appointed first director of the state-owned Watkins Mill. Dr. Robert Bray at the University of Missouri-Columbia continued with investigations of the scale house, roads, fences, wells, and pathways at the yard of the main residence. Later investigations documented the icehouse storage pit and how the building was used. Archeologists Ken Cole and Larry Grantham excavated the gristmill and Grantham documented the location of the yard fence and privy. The privy excavation contributed a great deal of knowledge about the family's lifestyle through the artifacts recovered. Other archeological investigations were at the Waers family cabin and blacksmith shop.[106]

The State continued a rich living history program. Ann Matthews Sligar, former site administrator, directed the preservation of the irreplaceable milling equipment. In 1992, a new $1.2 million Visitor Center and Museum opened to interpret the mill and farm, with exhibits completed in 1996. The *Society for the History of Technology* named the site a recipient of its Dibner Award for Excellence for the quality of its interpretation. The Watkins Mill Association continues to support the site by funding special projects and activities.[107]

Criterion 1: Developing the American Economy: Extraction and Production

Information embedded within the mill and farm complex, coupled with extant machinery systems, illustrates the vertically integrated, small-scale industrial processes at Watkins Woolen Mill, and represents a valuable resource illustrating extraction and production. A variety of wool textiles were produced here that contributed to the largest industry in the nation in 1860. In the years between 1859 and 1869, the number of woolen mills in the United States doubled as mechanized processes overtook home textile production. Mechanization reduced the cost of cloth, which afforded many people the opportunity to purchase a variety of household textiles, clothing, upholstery, and rugs. The Watkins Mill, supported by the farm, evokes this industrial and cultural evolution. Wool fabric became available in a great diversity of style and colors as compared to cotton. It was often produced in smaller bolts with patterns and colors woven into the fabric rather than dyed on its surface.[108]

Regional demand and high cost of goods from outside the area, opened a market for Watkins to meet local demand. The factory was well above the average Missouri mill in scale of operations and produced a diverse range of products. Fabrics ranged from finer cloth for suiting to rugged materials for work clothes. Colors from soft pastels to bright primary colors and prints including plaids, florals, and checks were popular. Watkins's products were mostly made to order where stores, jobbers, or individual customers would place orders and the mill would start up to produce groups of products at a time. This meant the mill was not active daily, but that it also did not accumulate overstock of unaccounted-for inventory. Watkins also provided customized services like carding and spinning for home weavers and knitters. The family did maintain a small sales counter in the front of the mill where it was possible to purchase yarns, blankets, or cloth directly. They reached a wider market through

[105] Sligar, 107.
[106] Sligar, 109.
[107] The Watkins Mill Association, https://www.watkinsmill.org/ (accessed May 1, 2023).
[108] Arthur Harrison Cole, *The American Wool Manufacture* (New York: Harper and Row, 1969), 160-170.

consignment with regional merchants, salesmen, and jobbers. Sales market books conserved in the Watkins Woolen Mill State Historic Site library and archive record transactions across the Midwest.

Watkins's textile production is illustrated through the machinery system that remains in the mill building. Designated archeological features and extant buildings complete the collection of material culture that made the factory on the farm a success. The machinery types and operation systems document a work experience, provide an understanding of tasks completed, and evoke the operator's relationship to the manufacturing process. This understanding is not typically available in the absence of tangible artifacts (machines) in their original context and setting. Information drawn from mill records, including worker compensation documents, housing logs, and purchase forms informs the visiting public's experience. The buildings represent the industrial process, which the material culture compliments to depict how work at the site unfolded, both commercially and socially. Comprehending how a piece of machinery operated and seeing that machinery in place, with floorboards worn by the repeated motion of its operators, provides an understanding of the process carried out by individual laborers. Pitted bricks in the walls where shuttles flew off cards show one example of the danger of the work. The hole worn through the floorboard by the operator of the yarn hanker, who worked the machine with one foot strapped to a treadle, informs the posture of a specific and generally undocumented position. The experiential data available at Watkins Woolen Mill contributes to the comprehension and meaning of the physical production experience.[109]

In his article, "The Importance of Research Outside the Library: Watkins Mill, A Case Study," historian Lawrence Gross argues that the *in situ* machinery located amidst the other historic resources comprising the Watkins Mill can reveal much about technological innovation and workers' on-the-job refinements to improve manufacturing: "Information of the type found in Watkins Mill represents a valuable resource for the student of labor history and should prove indispensable to the 'new labor historians' who pursue the subject from the bottom up, starting with the workers rather than their institutions. This orientation toward the work experience requires, I believe, an understanding of the work done, the machines used, and the operatives' relationship to them. Such understanding is often impossible without the kind of concrete knowledge offered by artifact."[110] Gross' documentation of the property for the Historic American Engineering Record convinced him of the research potential of its material culture and experiential data to speak to technical innovations, workers' lived experience, and limitations of the mill's design.

Workers and Production at Watkins Mill

Waltus Watkins built his woolen mill at the dawn of the Civil War, when American manufacturing and labor practices were shifting from small-scale rural agricultural practice to larger industrial factories with power driven equipment. Finding and retaining skilled workers in the woolen fabrication industry was a challenge for the family.[111]

After adding the grist mill and eventually, the woolen mill, Waltus Watkins found himself supervising, hiring, and maintaining a small factory workforce. Prior to and after building the gristmill in 1849, Waltus used enslaved individuals and hired labor to help with the farm. It is unknown whether the three people recorded in census records as enslaved by Watkins worked in the mill, on the farm, or both. Because the factory and the farm largely integrated labor among family members and other mill employees, it is likely that the enslaved people contributed to labor efforts across the entirety of the complex. In 1860, after completing the woolen mill, Watkins's work force needs increased. Between 1860 and 1880, the mill employed between thirty and forty people on average.[112]

[109] Gross, "The Importance of Research Outside the Library," 15–26.
[110] Gross, "The Importance of Research Outside the Library," 21.
[111] Gross, HAER, 2.
[112] Potts and Sligar, 51, 145; Cole, 235.

Mill operations were often sporadic, seasonal, and influenced by the increase of mass-produced or mail order clothing and fabric bolts. During the 1880s, the mill's operating season was often only four to six months, though many hands stayed the entire year to help on the farm and with other agricultural needs. Watkins's factory was one of the top five woolen mills in Missouri, though that number was shrinking during the 1880s.[113]

Watkins production structure appeared to loosely model the Slater management system. Samuel Slater developed a labor system to operate his cotton mill in Pawtucket, Rhode Island, and is credited with developing the first successful water-powered spinning machinery in 1790. Slater Mill opened in 1793. Old Slater Mill was designated a National Historic Landmark on November 13, 1966. The Slater system was used by mills throughout the eastern United States. These mills hired both skilled and unskilled workers. The company provided workers with lodging and often hired entire families. Samuel Slater offered his laborers schools, company stores, and a church. Other mill owners modeled this system. At Watkins Mill, the church and the school were part of the family's culture prior to the mill, with both rebuilt after the mill's construction. The availability of these resources to workers, along with housing at Smokey Row, may have contributed to attracting valued employees to the mill.[114]

Operating sorters, carders, pickers, spinning jacks, and weaving required skilled workers. Watkins advertised and hired workers from the East with previous mill experience. To achieve the level of experience required, positions such as the sorter and carder required apprenticeships. Some workers were immigrants who brought their skills with them. Records show that factory employees originated from Ireland, England, Germany, Sweden, and Scotland. One carder, Thomas McGerty, trained in Europe before immigrating to the United States. Watkins also employed immigrants for other positions on the farm, such as clerk, bricklayer, and general help.[115]

Unskilled labor for both the mill and farm was also necessary. Women and children, often family members of skilled workers, filled these positions. Women also worked as weavers in the mill. Records show that at least twenty women worked as weavers between 1863 and 1866. An 1892 store ledger recorded seventeen employees, two of whom were women. High demand for skilled labor limited the number of children who worked in the mill, except in positions as runners to communicate messages and bring supplies to machine operators. Company records show that eleven-year-old Mandy Dangley worked in a non-skilled position as a twister in 1866.[116] Watkins attempted to increase efficiencies by placing looms so they faced each other, thus allowing one weaver to operate up to three machines at a time. Greater attention was required at a single broad or fancy loom. Though labor was critical in operating the looms, placement within the building was dictated by the location of the power train.[117]

Wages became a source of conflict at many factories and caused high turnover rates because skilled workers required higher wages. Although records about the workers themselves are scant, newspapers and family letters do not seem to indicate that workers at Watkins Mill complained about their wages. Watkins paid his employees around $2.50 a day, which would have been a living wage, especially since housing was also included. Some ledgers also indicate that mill employees were paid in trade with a combination of farm goods such as butter, milk, and meat along with cash. Weavers, however, were paid on a piecework basis and company logs document the daily production at the mill. Records show that weavers produced approximately twenty-five yards per day per loom. In 1872, while traveling on business in Richmond, Virginia, John Watkins wrote back to his father recommending one John Rupp for a job as a carder. The man reported two years previous experience and claimed

[113] Gross, HAER, 4, 16.
[114] Meinig, *Continental America,* 393; Cole, 235.
[115] Potts and Sligar, 84, 123,148; Cole, 235.
[116] "Store Ledger" (September 1892), Watkins Mill State Historic Site Archives; Potts and Sligar, 123, 147, 135.
[117] Potts and Sligar, 132.

he could work as a spinner as well. John recommended hiring Rupp at $2.50 a day.[118] At most mills, experienced spinners received the highest pay. This did not necessarily appear to be the case at Watkins Mill.[119]

Watkins's smaller-scale, seasonal operations may have been better able to maintain good labor relations despite difficult working conditions and competition for skilled labor. Because Watkins did not install any artificial lighting in the factory, work hours tended to be shorter, and the mill did not routinely operate year-round. This was certainly the case for Watkins himself, who prioritized the farm. However, his workers did not have to leave to find off-season employment, as they resided in worker houses and contributed to farm labor when the factory was not operating.[120] Miserable and dangerous conditions were not uncommon, however. Workers at spinning jacks and carders were required to work in ambient conditions maintained to at least 75 degrees Fahrenheit with 72 percent humidity. These conditions were achieved through stoves and pipes from the steam boiler. Those operating spinning jacks often worked barefoot and in lightweight clothing because of that environment. They were also among the most skilled laborers at the mill, many European-trained immigrants.[121]

Like mills in the East, Watkins offered free housing and other amenities. Waltus provided a row of housing a short distance from the factory. This came to be known as Smokey Row. Throughout his vast acreage he also had other homes for workers. The dyer, William Waers, lived in a cabin with his family of ten children across the lane from the Watkins house. Single employees found free room and board with the Watkins in their home. In addition, workers could purchase and/or barter goods at the company store.[122]

Work in the mill was hard and physically demanding. Although Watkins had more looms and other machinery than many other mills in the west, he did not upgrade or purchase the latest technology. For example, Watkins did not invest in the latest carding technology. Newer machinery would have eliminated the need for two employees to oversee its operation. Instead, Watkins continued to employee two people to run his outdated carding machines. Other newer machines improved the quality and consistency of fabric and increased production. Watkins's employees worked physically harder, walked more, and stood longer than those in mills using the newer technology. Environmental conditions at the mill were also a challenge. Intense heat and humidity, immensely noisy machinery that some said could be heard from a mile away, and particulates in the air made conditions incredibly uncomfortable. The factory's proximity to St. Joseph and Kansas City provided easy access to western trails and transportation that could entice one to move further west. On average, unskilled mill workers tended to stay only a year. Skilled workers stayed for long periods of time. For example, Waers worked for Watkins Mill for eighteen years and fuller Gil Jackson stayed nearly twenty years.[123]

Besides the mill, Watkins employed other workers around the farm. After the Civil War, formerly enslaved people at the farm and within the county left the area, and the family hired free people of color for domestic help. As the farm grew so did the demand for more labor. In the 1870s, Watkins hired a fireman, railroad hand, miller, blacksmith, farm hands, and mule drivers. The farm and mills provided a source of employment in Clay County and brought immigrants to the area.[124]

Comparable Fiber Mills in North America

[118] Letter, John Watkins to Waltus Watkins, February 22, 1872, Watkins Mill State Historic Site Archives; Potts and Sligar, 148.
[119] Potts and Sligar, 126.
[120] Gross, "The Importance of Research Outside the Library," 24.
[121] Potts and Sligar, 126.
[122] Sligar, 81; Potts and Sligar, 147.
[123] Potts and Sligar, 122, 136, 149 150; Gross, "The Importance of Research Outside the Library," 23.
[124] Potts and Sligar, 75, 84.

While woolen and cotton mills were widespread across the Eastern and Midwestern United States from the 1790s through the 1890s, very few survive today. The peak of the midwestern woolen manufacturing industry came in about 1870 when there were 881 milling establishments operating in an eight-state region. This comprised approximately 36 percent of the nation's woolen factories. Watkins Mill peaked at this time as well. Between 1873 and 1898 wool prices fell faster than other commodities for many reasons. Widespread availability of cloth through national manufacturing and distribution, technological advancements in residential climate control, and ready-to-wear garments through department stores and catalogs influenced the value of woolen manufacturing and by 1900 merely 183 woolen factories remained in the Midwest.[125]

Sheep in Missouri were redirected to the meat market rather than the fleece trade and by the end of the 1890s, only twenty mills were still operational with half of them producing cloth. This economic decline and shift toward imported goods as well as mass produced goods set the stage for not only the decline of the mills, but also their disappearance from the landscape. As large buildings or complexes that served specific processing needs, many mill buildings were not easily adaptable and as family businesses closed, buildings were left to deteriorate. Few were repurposed. This limits the number of comparative properties, especially in terms of woolen mills with intact machinery.

The National Register Information System database references fifty-seven listed woolen mills. Of these, three are identified as nationally significant, while the remainder are largely listed at the local level of significance. Located in San Francisco, the Pioneer Woolen Mill and D. Ghirardelli Company, listed in 1982, comprises a large complex first used as a woolen mill from 1858 to 1889. The complex was subsequently adapted as a chocolate works in 1893 and then as restaurants and for tourism in 1968. As such, the complex is a less evocative physical representation of a woolen mill by comparison with Watkins Mill.[126] Listed in 1973, the Thomas Kay Woolen Mill (NRIS 73001579) in Salem, founded in 1889, is an industrial model mill designed by architect Walter D. Pugh based on British precedents for its English founder, Thomas B. Kay. It was the only contemporary water-powered textile factory in Oregon and represents well this later period.[127] Listed in 1971, the Belknap-Sulloway Mill in Laconia, New Hampshire, also known as the Meredith Cotton and Woolen Manufacturing Company, was founded in 1811 and its 1823 brick mill was modeled on the 1813 Waltham, Massachusetts, mill (NRIS 71000046).[128] The only surviving mill of its type in New England, a 1965 urban renewal project cleared smaller wood buildings associated with the mill's function, but the Save the Mill Society (formed in 1970, now the Belknap Mill Society) pursued preservation of the building.[129]

The following properties represent cotton mills that have been listed in the National Register of Historic Places (NRHP) for their national significance or have been designated NHLs. These properties are typically much larger in scale and represent corporate mass-production of fabrics, further illustrating the relative rarity of Watkins Mill as a woolen factory on a family farm with a high degree of historic integrity in its physical setting and built environment. Comparative properties discussed below include: the Loray Mill in Gastonia, North Carolina; Old

[125] Norman Crockett, *The Woolen Industry of the Midwest* (Lexington, KY: University Press of Kentucky, 1970), 94.; Lawrence Gross, *The Course of Industrial Decline: The Boott Cotton Mills of Lowell, Massachusetts, 1835-1955* (Baltimore: Johns Hopkins University Press, 2000).
[126] Elisabeth Walton, "Thomas Kay Woolen Mill" National Register of Historic Places Nomination Form (Washington, DC: US Department of the Interior, National Park Service, 1973).
[127] Bland Platt and Randol Delehanty, "Pioneer Woolen Mills and D. Ghirardelli Company" National Register of Historic Places Nomination Form (Washington, DC: US Department of the Interior, National Park Service, 1982); Leland M. Roth, "Thomas Kay Woolen Mill [Salem, Oregon]," SAH Archipedia, eds. Gabrielle Esperdy and Karen Kingsley (Charlottesville: University of Virginia Press, 2012), accessed December 29, 2023, https://sah-archipedia.org/buildings/OR-01-047-0005.
[128] "Our History," Belknap Mill website, accessed December 29, 2023, https://www.belknapmill.org/belknap-mill-history.
[129] Richard M. Candee, "Belknap-Sulloway Mill" National Register of Historic Places Nomination Form (Washington, DC: US Department of the Interior, National Park Service, 1971).

Slater Mill in Pawtucket, Rhode Island; Paterson Mill in Paterson, New Jersey; and Boott Cotton Mill in Lowell, Massachusetts. Watkins Mill is the sole woolen mill, while the others were all cotton mills.

The Loray Mill Historic District (NRIS 01001131, NRHP October 19, 2001) in Gaston County, North Carolina, is a large district comprising 649 contributing buildings with a later industrial period of significance beginning in 1900 and extending through 1935. This historic district encompasses thirty blocks of frame mill housing and the five-story brick Loray Mill itself. The property exhibits a national level of significance under National Register Criteria A and C in the areas of social history, industry, and architecture. It is a significant example of textile mill construction and technological innovation in the South from the early twentieth century. The enormous mill and related community processed cotton and fine combed yarns designed to produce cloth sheeting. It later converted to tire sheeting to serve the automotive industry. The size and scale of Loray Mill is vastly different than that of Watkins Mill. After producing tire sheeting for Firestone for many years, the mill was vacated in the 1990s and threatened with demolition. Today, the mill has been redeveloped into a housing and multi-use complex and no longer retains the physical integrity of the working mill complex that Watkins Mill possesses.[130]

Old Slater Mill NHL in Pawtucket, Rhode Island, is a late eighteenth-century cotton mill started by English immigrant Samuel Slater. Slater was known as an industrial innovator involved in developing early water-powered spinning machinery in the 1790s. Old Slater Mill is considered the country's first successful cotton mill and Slater is often credited with launching the American textile industry. Four acres of parkland surrounds two dams that supplied waterpower from the Blackstone River. The mill itself, coupled with the Oziel Wilkinson Mill and Sylvanus Brown House, comprise the historic property. Slater's contributions to the textile industry were also significant due to his business and management practices. He established means to maximize production at his cotton mill and manufacture wholesale yarns for weavers to distribute throughout the East Coast. His method was referred to as the Slater system or Rhode Island system of manufacture, derived from English systems Slater was familiar with which utilized entire families to work parts of the mill. Old Slater Mill remained a cotton spinning mill until 1895.

Though a frame building, the original Old Slater Mill is not dissimilar in plan from Watkins Mill. The National Park Service manages and interprets the property today as part of the Blackstone River Valley National Historical Park, telling the story of the birth of the American Industrial Revolution. The property is nationally significant under the theme Commerce and Industry.[131] Old Slater Mill represents the development of the textile industry in the United States, interpreted in part through a collection of machinery from the late 1700s that spun raw cotton roving into various types of thread. The machinery is presented generally as individual artifacts and the collection is representative, rather than being the actual original operating machines from the site, by contrast to those found at Watkins Mill. Old Slater Mill is available to tour with open floor plans focused on viewing a single machine type. Watkins Mill captures a specific time period not represented elsewhere. Further, its original collection of machinery illustrates the integrative process of making fabric and yarn and remains unchanged from its period of operation.

Paterson Mill in Paterson, New Jersey, is part of the Great Falls of the Passaic/Society for Establishing Useful Manufacturers Historic District NHL (NRIS 66000001, designated May 11, 1976) and near Paterson Great Falls National Historical Park. The district is nationally significant primarily due to its engineering as a hydroelectric system generated by the falls alongside the extensive number of mills and manufacturers constructed around this

[130] Mattson, Alexander and Associates, Inc., "Loray Mill Historic District" National Register of Historic Places Nomination Form (Washington, DC: US Department of the Interior, National Park Service, 2000).
[131] Blanche Higgins Schroer, "Old Slater Mill" National Historic Landmark Nomination Form (Washington, DC: US Department of the Interior, National Park Service, September 1975); "Samuel Slater," www.nps.gov/blrv/historyculture/samuel-slater.htm (accessed December 1, 2021).

natural resource. Its period of significance begins in 1750 and extends to 1924. During early development in the latter part of the eighteenth century, the area saw milling and manufacturing at a massive level, much of which was based on Alexander Hamilton's *Report on Manufacturers* and the *Society for Establishing Useful Manufactures*. Diverse products, including Colt guns, submarines, and locomotives, were among those manufactured at Paterson mills. Fiber including cotton, flax, paper, hemp, and jute were also part of the milling activities. Notable among the fiber resources was silk. During the late nineteenth and early twentieth centuries Paterson was often labeled the Silk City because it supplied nearly 50 percent of the country's entire silk production through its factories and mills. Though other fibers, including wool, were manufactured alongside rope and paper, there were over 100 factories and mills involved in silk production.

Many Paterson mill resources were substantially damaged by a devastating fire in 1983 and others lost through years of deferred maintenance. Notwithstanding, Paterson remains an important historic industrial center and today thrives on tourism through the historic district.[132]

Lowell National Historical Park in Lowell, Massachusetts, consists of myriad resources within a historic district. Lowell was a model industrial city during the first half of the nineteenth century. Like Slater, Lowell developed an industrial system distinguished by state-of-the-art technology, a canal system, mill architecture, city planning, and massive production capabilities. Lowell is noted as influential on subsequent US industrialization and urbanization. Among the ten original textile firms at Lowell, Boott Cotton Mills Museum is a property that today interprets Lowell's industrial past. Boott Cotton Mill was designated as part of the Lowell Locks and Canals Historic District NHL on December 22, 1977 (NRIS 76001972). Boott Mill contains a cotton cloth weaving room with more than eighty historic power looms dating from the 1920s. The collection is not the original machinery at the mill but affords the visitor the opportunity to see what workers might have experienced.

Lowell National Historical Park was authorized by Congress in 1978 to include hundreds of buildings ranging from residential to commercial to industrial and governmental properties. Lowell holds significance in many areas including the labor history of women activists, technology, commerce, and industry. Interpretation of the textile industry at Lowell is focused on labor practices and planned communities that served the mills. By the 1960s much of Lowell was abandoned after the textile industry experienced a sharp decline in preceding decades.[133]

The comparative properties noted above represent large-scale textile mills that dominated industrial landscapes and economies in their respective locales. They established labor systems and methods at the infancy of the American industrial economy. Like Watkins Mill, these locations suffered considerable deferred maintenance and deterioration over time and have all been renovated into commercial enterprises or interpretive sites. Where Watkins Mill remains singular in its national significance is in the snapshot in time and scale of production it retains. Analysis of comparative resources confirm that Watkins Mill retains a high level of physical integrity relative to other similar properties. Many of the surviving mills differ from Watkins Mill in size and scale as well as alterations over time. Watkins Mill is noteworthy in that it combines the farm's built environment, archeological information potential, and intact rural historic landscape. While not counted as a contributing resource, the collection of original machinery purchased and used by Watkins, and the processing system it represents, is not extant at any comparative site, nor elsewhere in the country. The collection complements the historic resources designated as the NHL as a singular remnant of the wide-ranging, nineteenth-century textile industry in the Midwest. The intact, *in situ* equipment makes the property stand out from other comparable properties. Watkins Mill represents a small-scale, integrated, family-owned property with supporting social,

[132] National Park Service, Division of Park Planning and Special Studies, *Great Falls Historic District, Paterson, New Jersey, Special Resource Study* (Washington, DC: US Department of the Interior, November 2006), 24-36.
[133] Christine Boulding and Joe Orfant, *Lowell Locks and Canals Historic District* National Historic Landmark Nomination Form (Boston: US Department of the Interior, National Park Service, March 1976).

commercial, and religious functions that completed the community supporting the textile production. The historic district documents the small factory and its regional success as well as its interrelationship with a prosperous family farm. The fact that it is mechanically complete contributes to an understanding of its production. It is protected through its status as a state historic site owned by the State of Missouri.

Conclusion

Watkins Mill represents a significant aspect of the nation's woolen manufacturing industry as a preeminent example of a small-scale factory farm in the mid-to-late nineteenth century. Historians have noted that the intact rural setting and historic resources, coupled with the significant collection of material culture, highlights the manufacturing process in ways not possible at other sites nationally.

The 1840s development of the family farm, construction of the residence, and perfection of brick making realized by Waltus Watkins served to stabilize the family business financially and contribute to conditions where construction of the woolen mill was possible. It became an example of how wool processing--from labor to machinery to social construct--was integrated into the physical environment. Family control of the mill and the specialized manufacturing represented by the wholly intact property illustrate a key link in the evolution of textile production. Products such as yarn and cloth, combined with flour and lumber from the grist and sawmills, helped build and expand the small industrial sector. The mill used custom production and jobbers to market its varied products among dealer networks across the state and Midwest.

The Mill was the hub where social, professional, and familial activities merged. The family, including Waltus and his son Joe, oversaw, directed, and executed activities at the mill and implemented family and social events from meals to religious practice and educational pursuits engaging mill workers. Watkins Mill possesses national significance under Commerce and Industry and in the context of American labor history as a factory farm during the period 1860 to 1886.

6. PROPERTY DESCRIPTION AND STATEMENT OF INTEGRITY

Ownership of Property	**Category of Property**
Private:	Building(s):
Public-Local:	District: X
Public-State: X	Site:
Public-Federal:	Structure:
	Object:

Number of Resources within Boundary of Property:

Contributing		**Noncontributing**	
Buildings:	5	Buildings:	11
Sites:	5	Sites:	0
Structures:	0	Structures:	2
Objects:	0	Objects:	0
Total:	10	Total:	13

PROVIDE PRESENT AND PAST PHYSICAL DESCRIPTIONS OF PROPERTY
(Please see specific guidance for type of resource[s] being nominated)

Summary Description

Watkins Mill is a collection of hand-fired brick buildings, related archeological sites, and rural historic landscape features in Clay County, Missouri, that comprise the historic district. Clay County lies in the rolling hills of northwest Missouri, approximately thirty miles north and east of Kansas City. Waltus Watkins purchased property in Washington Township to build his family farm and woolen mill which were constructed between 1850 and 1860. Today, the property is within the boundaries of Watkins Woolen Mill State Park and State Historic Site amidst a bucolic setting of rolling hills and mature trees. It represents the only property to retain its original set of 1860s-era wool milling machinery in the United States in compliment to the exceptionally high degree of integrity of its historic resources to its period of national significance.

The property encompasses a 560-acre boundary that incorporates the mill, associated support buildings, historic archeological features, family residence, church, school, and two cemeteries. This nomination describes a total of twenty-three resources (ten contributing and thirteen non-contributing). Contributing resources include five buildings and five sites. Non-contributing resources include eleven buildings and two structures. Numbered among the non-contributing resources are reconstructions of several farm buildings based on period drawings, photographs, descriptions, and archeological investigations. Three other non-contributing resources include the 1992 Visitor Center, a maintenance area, and the former Rock Island Railroad (now Union Pacific Railroad) tracks and underpass dating to the 1930s. This nomination expands on documentation prepared as part of a larger thematic survey of historic properties completed by the National Park Service and used to designate the site an NHL in 1966. Supplemental documentation was completed in 1976 and approved in 1983.

Named for Representative Henry Clay of Kentucky when it was organized in 1822, Clay County falls within a region referred to as Little Dixie in Missouri. Watkins Mill includes the mill, farmyard with associated transportation network of lanes and pathways, along with a church and school located approximately six-tenths of a mile east of the mill and farm complex. Union Pacific Railroad tracks divide the Watkins Mill property into two distinct areas: the mill complex with the family farm and the Mount Vernon Missionary Baptist Church and Franklin Academy.

The family residence and farm buildings are themselves separated from the mill by a gravel lane, now mostly a pedestrian path, known as Bethany Road.[134] Generally, mill resources, including the worker housing, mill ponds, and blacksmith shop are on the east side of the lane, while the farmyard and family residence are west of the lane. Agricultural practices and resources associated with the farm include orchards, harvesting of raw natural materials from the forested land, and various outbuildings such as the icehouse, smokehouse, and fruit drying building. Mill operations were further served by storage sheds for wool processing, a blacksmith shop, and other specialized buildings and sites described below.

Associated with the mill and farm complex are the Mount Vernon Missionary Baptist Church and Franklin Academy. Watkins was instrumental in building both to serve his family as well as mill workers. Buildings throughout the property exhibit a uniformity in appearance as they are mostly constructed of hand-fired bricks made in Watkins's own kiln on site. It is unknown whether borrow pits exist on site. Additional archeological study could locate these features if present.

The 560 acres that comprise the historic district constitute a viewshed important to its setting. The district boundaries identified in 1983 in consultation with the National Park Service remain the same used in this nomination update. Rolling topography, heavily forested landscape, remnant plantings for hedgerows to divide agricultural crops, and fencing all contribute to the historic setting, feeling, and association of the property. Just outside the NHL boundary is the state park where a man-made lake, multi-modal paths, and camping areas have been established.

Evaluation of Historic Integrity

Watkins Mill, the family farm, and associated buildings comprise a remarkably intact collection of buildings and landscape features that illustrate small-scale textile production in the United States between 1860 and 1886. The NHL boundary encompasses portions of land historically associated with the Watkins family farm during this period of national significance. Associated buildings and sites contribute to an understanding about how life on the family farm contributed to the Watkins Mill woolen textile production. There have been some changes in vegetation, but historic field patterns and gardens along with transportation systems remain visible in the landscape, linking family life to the commercial production at the mill. Since acquiring the property in the 1960s, the Missouri Department of Natural Resources has followed the Secretary of the Interior's Standards for the Treatment of Historic Properties in its approach to restoring, preserving, and reconstructing resources associated with the property. Setting, feeling, and association are preserved through the careful planning and siting of new construction to serve the adjacent state park. Modern site facilities and visitor amenities, including the 1992 visitor center, are distanced from the historic resources, and no vehicular traffic is permitted in the farm and mill complex. This ensures a pedestrian experience an unparalleled sense of place.

[134] Bethany Road provided transportation for goods and services between St. Joseph and Lexington, Missouri. Watkins and his family maintained the section of road in front of their residence, and it served both freight and stage lines.

A paved park road connects the mill to the church and school. The road traverses under the railroad tracks and through wooded areas following the historic path that connected the historic resources. Several buildings associated with the mill have long since vanished from the landscape, but historical research and archeological investigation have resulted in the identification of foundations that remain visible for interpretive purposes. Three buildings have been wholly or partially reconstructed based on extant ruins, archeological information, and documentation in the historical record.[135] The only building fully reconstructed on site is the icehouse. The ruins of the fruit drying shed and summer kitchen were reconstructed from the limited form presented and documentation through the historic record. However, Booker Rucker, first site director, established a management approach that has long guided the property to focus on preservation rather than reconstruction.

Buildings were subject to neglect after decades of vacancy when the Watkins Mill Association and Missouri Department of Natural Resources began work to stabilize the property in the 1970s. Brick was repointed, roofs replaced or reconstructed, and walls stabilized through various funding opportunities over the course of three decades. Most buildings and features interpreted today were present during the period of significance with few non-historic additions. Landscape features like fencing and lanes have been reconstructed based on archeological research and historic photographs. Non-historic additions within the NHL boundary include the 1992 interpretive (visitor) center, the railroad line that bisected the property in the 1930s, and the addition of minor maintenance and service areas, such as parking. Materials, craftsmanship, and design are consistent across the property because most buildings are constructed utilizing bricks fired on site in Watkins's own kiln. The collection of mill machinery (not counted as a resource) contributes to the integrity of setting, feeling, association, and workmanship, while the collection of buildings, sites, and rural historic landscape speaks to the full function of the farm and its support of the mill.

The two documented archeological sites are Bethany Plantation (site number 23CL1566) which includes the family farm and mill, and the Mount Vernon Missionary Baptist Church and Franklin Academy site (23CL1565). Archeological investigations have demonstrated that undisturbed nineteenth-century deposits exist at these sites. While the locations of many non-extant buildings and structures have been known since their occupation, archeology has positively identified or clarified the locations of others. Investigations have confirmed the location of the main house privy, first cabin, and fence and road locations. Archeology has added to understanding the form of the icehouse, wool house, scale house, and scale pit. Intensive excavations at the blacksmith shop and dyer's cabin have provided information about the form, function, and activities associated with those buildings.

Information from sites 23CL1565 and 23CL1566 contribute to an understanding of the occupation and commercial activities at Watkins Mill and archeological investigations indicate they retain subsurface deposits from the period of significance. Through years of investigations, multiple features at Bethany Plantation have been documented. Foundations have been exposed for interpretive purposes, while other features like the ice pit were instrumental in contributing to accurate reconstruction of the icehouse. Other areas, like Smokey Row worker housing, have had reconnaissance-level work but have not been fully evaluated. Past archeological investigation has been invaluable for understanding the local built environment and providing objects for interpretive displays, but researchers have not addressed questions that have major theoretical implications or deeply inform historical gaps in nationally significant themes.

[135] The three reconstructed buildings include the icehouse, fruit drying shed, and summer kitchen. They are considered non-contributing buildings to the complex, but aid in interpretation and the understanding of the built environment during the period of significance.

The following descriptions provide an overview of the resources at Watkins Mill. The inventory is arranged by contributing status and according to resource type. Each resource is notated by its commonly known name.

Contributing Buildings

Watkins Factory (Woolen Mill)-1860

Watkins constructed the three-and-a-half story mill in 1860 from bricks made by hand on site. The brick building measures 46' wide x 87' long. The brick walls are 2'-thick at the base and rest directly on a bedrock limestone shelf with no additional foundation. Walls diminish in thickness as they rise being reduced by one brick wythe at each level. All bricks used in construction were handmade and fired in a kiln on site. Interpretive materials developed by the state historic site estimated that there are approximately 450,000 bricks used in this building. With Watkins's kiln output potential, it is estimated that it would take three years to manufacture the bricks needed for the mill.[136] Bricks at the windows were chamfered to allow maximum light into the interior.

The main façade of the shallow gable end faces west. The façade is articulated by a central wood pedestrian door flanked on either side by double-hung six-over-six windows on the first floor. The second and third levels repeat this pattern, but with a centered wood opening featuring a gate-type partial-height railing fitted within the opening. A glazed wood door with four glass panels mirrored on each side occupies the fourth-floor opening. Ropes and pulleys are attached at the projecting hay-hood and reach each floor. When necessary, this system hauled equipment, wool, and other supplies to upper levels of the building.

Brick bonding is consistent throughout the façade with ten rows of running bond interrupted by one row of a header bond forming a modified English bond pattern. A soldier course acts as the lintel for each window opening in addition to a stone sill.

A wood plank boardwalk extends along the south wall and leads into the wood-frame, one-story, shed-roof addition at the west end. This addition houses the steam boiler (power plant) and dye room equipment and was constructed in two phases, as documented in the 1979 *Watkins Mill Master Plan.* The master plan asserts the dye room had to be built after the well that is enclosed within the addition was dug. The well was most likely dug in 1868, thus the dye room would have been constructed at some time later, probably in the early 1870s.[137] Flat vertical lumber boards clad the addition with an unframed opening providing access to the power plant. The shed roof is clad with the same steel roof as the mill building itself. The shed addition wraps around the south corner and across the east side.

The wall here is punctuated by seven double-hung, six-over-six wood frame windows at each of the three levels. A pedestrian door with wood gate is immediately adjacent to the frame shed addition. Two downspouts divide the wall into three bays. A simple molded cornice and flat fascia bridges the transition from wall to roof. The first floor of the north face has a pedestrian door at the central opening and another door as the far east opening, which appears to have been a larger opening that was infilled. The south has a door opening second from the east and six windows.

The east, or rear, of the building faces one of three mill ponds. The shed addition extends along this side and projects beyond the north wall. An entrance with a six-over-two-light wood frame door is centered on the first

[136] "Mill Architecture" [interpretive manual], Watkins Mill State Historic Site Archives.
[137] Coombs and Elgin, 4.

level of the wall. A brick soldier course defines the lintel with the door set into an inlaid arched brick opening. The upper two stories have three double-hung, six-over-six windows at each level with one opening at the fourth level. The brick chimney extends 30' above the roof at the northeast corner.

Interior Mill Operations

The central power plant for mill operations was a boiler, steam engine, and flywheel located in the frame shed addition along the east wall. The 16' flywheel was larger than the 10' diameter Watkins expected, but because the powerplant was not to be in the main building, the space was easily adjusted to accommodate the size. The machinery was set in brick and fed by 4'-long logs felled from the neighboring forest. Water from one of the three mill ponds was drawn by a pump on the engine and later from a well inside the engine shed. Steam exhaust from the boiler was vented directly into the mill floor to add the required humidity levels needed for wool production. Humidity lessened fire threat by maintaining a level of moisture so the particulate static from the machinery would not ignite. The engine remains in place, though it has not functioned since 1904, when a steam gasket around the piston failed.[138]

An identical floor plan features brick floors on the first level with wood plank flooring on the second and third floors. A central east-west line of structural wood support columns, exposed brick walls, and exposed ceiling beams repeat on all levels. Window wells have chamfered bricks to provide maximum daylight through the openings.

A small retail space with a counter, shelves, and wood-burning stove is immediately adjacent (north) to the main pedestrian entry. Here, bolts of fabric were cut, yarn displayed, and items from the grist mill sold. Vertical wood boards create wall dividers between the working space and the retail area. An open workspace with exposed ceiling beams houses two bolting bins, a fulling mill, carpenters' bench, and lathe. The north side holds bins for wheat and corn and a grain hopper where the grist mill was located. A portion of the brick floor was dug out and replaced with wood plank when the grist mill moved inside ca. 1875 to take advantage of the steam power.[139] A hand hewn wood beam separates the brick floor from the grist mill floor. Watkins purchased imported French buhr stones, some of the highest grade available at the time, for this part of the mill. About half the grain processed was from Watkins's own harvest and the other half from customers who would travel to the mill for the high consistency of the final product. Wood paneled walls feature historic signatures and other graffiti at the stair to the second level located along the west wall. A brick wall with a paneled wood door divides this open working area from the rear of the floor plan where the main drive pulley was located. This back room along the east end housed a gig mill, shear dyestuffs, and press along with the main drive pulley, yarn dyeing vat, washing machine, and cloth dyeing vat.

The second-floor plan mimics the first with an open working space that consumes approximately 75 percent of the space on the west end, divided by a brick wall and wood paneled door to access the back room (approximately 25 percent of the space). The interior faces of walls are exposed brick, ceilings are exposed beams, and floors are wood plank. A center line of wood support columns runs east-west. The stair at the southwest corner extends up along the west wall. Machinery on this floor is dominated by looms, including six plain, five broad, three fancy, and two drop box looms. Two ring-form twisters and a skeiner are in the northwest corner with a second skeiner

[138] Potts and Sligar, 94. Watkins contracted with the J.T. Dowdall Company foundry in St. Louis in 1860 to supply and furnish everything needed to operate the powerplant at the woolen mill. There were minor discrepancies between the contract and what was delivered to the mill. Among these were that the boiler had four rather than five 12-inch return flues and that the flywheel, weighing 8,000 pounds was 16 feet rather than 10 feet in diameter as specified in the contract. Watkins could accommodate these differences because the boiler, engine, and flywheel were housed in the wood frame shed attached to the factory.
[139] Ogren, 12.

at the center of the floor. Immediately adjacent to this skeiner is the hanker, where a hole in the floorboard has formed from repeated use. A bundling press, warping creel tensioner, and warping reel are also located here. The back or east room has a picker with picker bin, a willower, and a quiller. Various pulleys, wheels, and connectors extend from the demising wall at the east end to connect each of the machines to the main flywheel below. Wood thresholds are worn from continuous use. Deep wood windowsills act storage shelves within the thick walls.

The north end of the third floor is home to four large spinning jacks that are set on rails embedded in the floorboards. Various carding machines along the south wall include two batting cards, a roll card, four breaker cards (used to make batting or roving), and two finisher cards. A wood-burning stove is at center alongside a traverse grinder used to sharpen the wires of the card clothing near the stair. The third level is open plan from east to west with no demising wall.

The fourth-story attic space was used for storage and had racks to stretch and dry the fabric smoothly. Additional racks were located outside on the south side of the building. Tentering racks were wood frames with rows of sharp hooks to catch the fabric. This open area has exposed roof trusses and knee walls with wood plank floors. Original wood packing crates, disabled machinery, and spare parts are found here. A wood ladder in the center of the south knee wall provides roof access.

Watkins Family Residence (referred to historically as the Big House)-1850

The two-and-a-half story main residence was built from bricks made and fired on site in a plain or vernacular interpretation of elements of the Greek Revival style. Construction predated the mill building and served to refine the composition and manufacture of the brick. Wood used in construction and for finishes include oak and walnut from trees harvested on the farm and sawn in Watkins's sawmill. Living spaces on the main level included two parlors, dining room, and winter kitchen. There were eight bedrooms, a detached summer kitchen, and food and dairy stores in the basement.

The main façade faces east toward the lane to the mill. The two-and-a-half story brick residence has a shallow, side-gable asphalt shingle roof with four brick chimneys, two each at the north and south gable ends. The east façade features brick laid in a common bond pattern.[140] The main entry is a centered wood paneled door flanked on either side by wood panel and glass sidelights, capped by a five-light transom. Square pilasters on either side of the door frame the opening. The same door configuration with a stone lintel is repeated at the second-story balcony. The balcony has a wrought iron railing with detailed balustrade. Each baluster forms a rectangular frame around a centered sunburst with curvilinear lyre shaped features at the base reflected by a modified lyre at the top of each baluster. The balcony is accessed by the generous second-story landing at the top of the stair.

The three-bay façade has one double-hung, six-over-six wood frame window on either side of the central entry at both the first and second stories. The windows have functional wood shutters painted light green, added as part of a 1980s renovation. A partial width front porch with wood floorboards has a flat roof that forms the second-floor balcony and is supported by paired square columns at either side. The central door on the second level mimics that of the one below. Stone sills and lintels along with a simple flat cornice and fascia board define this front façade. The brick is laid in a modified English bond and the limestone foundation has lower-level windows that punctuate the clean line.

The north and south side gable walls have paired windows at both the first and second story. Each window is a six-over-six. double-hung wood frame window with stone sills and lintel and functioning shutters. A single

[140] Common bond is laid with multiple stretcher rows of bricks regularly interspersed with full header rows. The residence has four rows of running bond stretchers with a full row of headers every fifth row. The mill is laid in the same pattern, but with nine rows of stretchers with every tenth a header row.

window unit of matching configuration, but smaller in size, is located in the gable end within the half-story space. Truncated gable returns contribute to the simplified Greek Revival style with two brick chimneys that project from the roofline, interrupting the fascia board plane. The exterior wall surface is flush with the roof, contributing to a simple, streamlined wall that speaks to efficient use of materials. Two additional lower-level windows interrupt the stone foundation along this side.

The west wall plane is the back of the house and where many functions of the residence took place. Today a shed roof extends from mid-point to fully cover a back porch. Wood floorboards and simple square wood posts with no balustrade or railing define the porch. Two sets of exterior stairs lead to the basement along the west wall with a wood railing surrounding each stair. There is a third stair to the lower level from the interior. Three wood paneled doors with porcelain knobs and one window punctuate the lower level of this wall. The porch provided a sheltered area to travel from the main residence to outbuildings behind the house, including the summer kitchen, smoke house, and fruit drying shed. At some point the back porch was enclosed with wood framing, but this was reversed as part of site improvements that took place during 1977; at that time the original porch configuration was rebuilt on the original foundations.

The interior of the residence was quite large for the Watkins family. Along with the public rooms on the first story, there were eight bedrooms. However, the Watkins family had anywhere from six to fifteen mill hands living in the house with them, usually in the upper story, where two large open rooms were fitted out dormitory style. The interior was heated entirely by cast iron wood stoves in every room. Stove pipes extend across several rooms for ventilation. Many of the stoves are set in front of walnut mantelpieces.

Walnut and oak came from the forested land owned by Watkins and was used for the mortise and tenon joining, flooring, and curved stair. The main level opens to a gracious entry dominated by the curved, semi-floating, hand carved walnut stair. The modified center hall plan had a formal parlor to the north of this entry with a family parlor or library to the south, while the west side of the building housed family areas such as the winter kitchen and dining room. Jane Watkins, Waltus's mother (known as grandmother), occupied a small room at the southwest corner of the first floor. There are a total of six sets of stairs in the residence, each which serves a specific area of the house. Stairs are located at the main entry, dining room, grandmother's room, and three to the basement. These stairs all accessed functional areas that did not fully communicate with one another. The formal curved main stair accesses adult family quarters at the east end of the upper level. Family quarters for adults and children on the second level were separate and accessed separately.

An arched-top, paneled walnut door is located directly under the stair and leads to the dining room, while four-panel walnut rectangular doors accessed the parlor north of the main entry and the library to the south. The library walls are punctuated by windows, built-in cabinetry, and three doors on the west and north walls. A simple yet substantial walnut fireplace mantel is along the south wall. The small room for Jane Watkins, west of the family parlor-library has another fireplace and was later converted to a kitchen. This room also leads directly outside to the rear porch.

The family dining room with built-in cabinetry also has an exterior door to the rear porch. Waltus and Mary Ann Watkins's original dining room table and chairs remain in the space. An additional stair to the upper level is found from this room. Adjacent to the dining room is the winter kitchen, which now features a large loom for weaving.

The rear porch served as a gathering space between the summer kitchen, kitchen stores in the lower level, smoke house, and other outside activities. Plaster walls are whitewashed throughout the space, providing a dramatic contrast between the dark walnut wide plank trim. Watkins purchased new furniture for the parlor in 1854 and

added the piano in 1870. Also notable is the colorful parlor carpet that Waltus added. The carpet has an elaborate print in aqua blue, black, and red check pattern with black floral designs within each square.[141]

The elaborate main stair required skilled carpentry and likely delayed completion of the house as most of the construction was undertaken by farmhands. A curved and scrolled newel post connects to the banister with slim turned balusters. Applied scrolled details are at the exterior fascia of the stair at each step. The stair leads to a generous second level landing with bedroom suites on either side. The landing retains a highboy desk where Watkins ran much of the mill business as well as access to the balcony.

Two bedrooms, a guest room and master bedroom, flank the main stair on the second level. These two rooms, along with the central hall that accesses the balcony, are physically divided from the west side of the second level where the children's rooms were located. The two back stairs from the dining room and the grandmother's bedroom accessed three bedrooms at the west side of the second level. Two rooms served as the girls' and boys' bedrooms respectively.

From the midpoint of the second level a stair accessed the open third floor where a hall divided two rooms. The larger of the two was reserved for boarders and the smaller was another boys' bedroom. Between six to fifteen boarders shared the house at any given time. These were usually men working at the mill. These rooms exhibit some modern fixtures, such as fluorescent lighting, from when park offices were housed here. Each room has wide plank floors with angled ceilings and knee walls defining the roofline as well as wood paneled doors.

The basement has stone foundation walls and brick floors and was used for food storage. An interior stair between the dining room and winter kitchen, along with two exterior stairs located along the west wall on the rear porch, accessed the lower level. Six rooms provided space for general food storage and dairy at the west end along with canned goods, a potato room, and additional dairy on the east side. Exposed structural elements such as floor joists and floorboards clearly show the solid building materials and sawmill markings.

An oversized two-car brick garage was constructed northwest of the residence sometime in the 1920s or 1930s. The 1979 master plan notes that the garage may have been partially built on the foundations of the original log house. The garage was used for storage and to display period farm equipment and vehicles but razed when alternative locations for that equipment were found.[142]

Smokehouse-ca. 1850

The Watkins family processed eighty to one hundred hogs every year. They salted and smoked the meat in the smokehouse. Some was then stored in large hollow logs, while cured meat was packed in ash to give it good flavor.[143] The smokehouse is a 15' x 15' brick building with a native limestone foundation. Like other masonry buildings here, brick coursing is laid in common bond. The smokehouse was most likely constructed contemporaneous with the main residence. It is located immediately west of the house and contains meat hooks and hangers suspended from ceiling joists. An entry door within the south wall rests within the limestone foundation with brick ventilation built into the wall at the gable ends. A large hollow sycamore log serves as a salt box or brine vat for meat storage. Brick floors inside have a central fire pit under the exposed beams for hanging meat.

Franklin Academy-1856

The brick Franklin Academy school building is octagonal in plan with octagonal roof and cupola, built in 1856. The school and Mount Vernon Missionary Baptist Church are approximately six-tenths of a mile from the mill.

[141] Potts and Silgar, 24.
[142] Coombs and Elgin, 6.
[143] Information on meat processing drawn from www.mostateparks.com/page/55169/buildings.

Watkins financed the school's construction, and it was built from bricks fired on the property laid in a simple running bond. The school rests on a stone foundation. This building replaced the Franklin School district's log schoolhouse, with Waltus Watkins supervising its construction. The new brick school was completed at a cost of $2,200, including furnishings. As a subscription school, families in the district paid a fee for maintenance. It closed in 1878 when the school system built a new schoolhouse, and the building was sold at auction. Watkins purchased it and converted it into a house for one of his workers. It continued to be occupied as a residence until the 1930s.[144]

Main access to the building is via a wood-paneled door in the north façade. The symmetrical entry is flanked on both sides by wood paneled and glazed side lights and a transom. This door configuration echoes the entry door at the main residence. The door rests on limestone foundation blocks and is accessed by a concrete stoop with steps. A soldier course capped by brick headers forms the lintel. The entry door dominates the wall space.

Fenestration across the façade is a mix of multi-light window units. Paired, segmental arched, wood frame, double-hung, four-over-four windows feature on either side of the main entry. Six-over-six wood windows are at the southeast, southwest, northeast, and northwest sides of the building. These are rectangular within segmental arched openings. Of the eight sides, the north is the main entry; the two flanking sides have paired windows; four sides have a single window unit; and the south side is devoid of fenestration. This side is where the chalkboard is mounted on the interior.

The polygonal roof overhangs slightly, supported by scrolled brackets. The brackets are paired at each end of the wall where the plane shifts to the neighboring side, with two other single brackets evenly spaced in each wall. Brick work under the roof overhang is painted a contrasting light tan color with cartouches painted in black between the brackets, the whole visually forming a fascia or cornice. Two brick chimneys extend through the east and west sides of the roof, venting the wood-burning stoves inside.

An eight-sided cupola with a corresponding polygonal roof supported by paired curved brackets surmounts the building. Paired single-light windows are located within each wall section and a small spire rises from a squat circular base.

The one-room interior is accessed by a vestibule at the main entry. The vestibule has doors to access the classroom on both east and west ends. The four-panel vestibule doors are capped by three-light transoms. Wood trim within the building is painted light brown. An oak plank floor extends throughout the building. A central teacher's desk rests on a wood platform that elevates it from student benches and desks. These are original furnishings returned to the building as part of a 1970s renovation. Two cabinets are located at either side of the teacher's desk. Wood stoves are at either end of the classroom space, with a chalkboard at the south wall. Interior walls are plastered. An octagonal skylight added light from the cupola.

Two non-historic frame privies feature front gable roofs. A cutout of a moon and sun provide ventilation in the gable ends on both.

Mount Vernon Missionary Baptist Church-1871

This 1871 one-room, rectangular plan, gable-end building replaced a wood-frame church that burned in 1869. Waltus Watkins designed and built the new brick building on behalf of the congregation. He donated the land and bricks from his kiln. A neighbor donated an additional acre to include a burial ground. Only one couple, named Warren, are confirmed interred here. Waltus and Mary Ann Watkins heavily supported the church financially, with the last service held in August 1919. Waltus's son Joe served as church secretary and continued to send reports to the Baptist Association for another ten years. In 1928 the church formally disbanded and the land

[144] Sligar, 87.

returned to the Watkins. The vacated building was eventually used for hay and grain storage, which damaged the interior. A tornado subsequently ruined the roof, leaving the interior open to the elements.[145]

The church is oriented north-south approximately 400' from the Franklin Academy School. The building measures 38'-6" x 56'-6". The main façade faces north with a stone stoop that accesses two separate entry doors. The façade is bisected evenly into two recessed planes defined by brick pilasters with a staggered header course of brick adding texture and dimension to the wall surface at top. The six-panel single doors are capped by two-light segmental arched transoms. A brick soldier course capped by the staggered header course forms the lintel. A recessed triangular panel at the gable end forms a pediment, connected by the gable end returns. Paired turned brackets are located at the peak, midway down the gable end wall and under the small gable returns. Paired turned brackets are found at the roofline in the same configuration. The south wall is devoid of fenestration and the wall plane divided into two recessed panels formed by brick work. Projecting and staggered header courses add dimension to the wall panels.

Four two-over-two, double-hung segmental arched wood windows occupy the space between brick pilasters that create recessed wall panels on the east and west sides. Paired scrolled brackets are found above each pilaster. A brick chimney projects from the south end of the roofline.

Associated with the Mount Vernon Baptist Church are two non-historic outbuildings, a privy and a small wood-frame shed, each located at the rear of the church to the south. Constructed of vertical boards, the privy features a diamond-shaped cutout in its gable end. These features were reconstructed as part of late twentieth-century restoration efforts at the site.

Contributing Sites

Contributing sites at Watkins Mill consist of two archeological sites, two cemeteries, and one rural historic landscape. Archeological investigations at Watkins Mill began in 1963 under the leadership and vision of Booker Rucker, the first site administrator, and the early state administration and ownership of the site. Prior to restoration of existing buildings or reconstruction of ruins, further archeological excavations were conducted. Rucker became the first facility head at Watkins Mill and guided archeological investigations led by Dr. Robert Bray of the University of Missouri-Columbia. Targeted investigations determined the location of features including the scale house, roads, fences, wells, icehouse, barn, wool shed, worker housing, blacksmith shop, and privies, along with other resources. Archeologists Ken Cole and Larry Grantham with Missouri State Parks also conducted excavations that targeted the gristmill, family privy, and yard fence.

These efforts were designed to aid reconstruction efforts by providing the locations of no longer extant buildings. Archeologists documented and exposed elements from the past built environment. Visible features are interpreted for the public and described below.

Mount Vernon Missionary Baptist Church and Franklin Academy (23CL1565)

Although the Mount Vernon Missionary Baptist Church and Franklin Academy are part of the larger Watkins Mill extant built environment, archeological deposits surrounding them are considered discontiguous from Bethany Plantation and warrant a unique archeological Smithsonian trinomial number. Its boundary is sufficiently large at approximately six acres to encompass any undiscovered activity areas associated with the church and fenced school yard. As both buildings were in disrepair by the mid-twentieth century, restoration was undertaken in the 1970s to return them to the period of the Watkins family; however, no known archeological excavation was undertaken at that time, unlike at Bethany Plantation. No subsequent survey or testing has evaluated the integrity

[145] Sligar, 89.

of any deposits dating to the use of the church and school during the late nineteenth century. Historical research has not identified whether any additional non-extant outbuildings or structures are associated with these buildings.

Since archeological investigations encountered intact nineteenth-century deposits at the Bethany plantation site, it is expected that the similar deposits remain intact for 23CL1565 as well. A former county road ran between the school and church before turning east to the north of the church. The county vacated the road in the 1980s and it was removed around 1990 with minimal disturbance.[146]

Bethany Plantation (23CL1566)

Archeological excavation has supported interpretation of Watkins Mill since the mid-1960s. Archeologists have documented the location, method of construction, and function of numerous non-extant buildings and features, including the scale house, roads, fences, wells, icehouse, barn, wool shed, worker housing, blacksmith shop, and privies later reconstructed and interpreted for the public. Site number 23CL1566 includes foundations and features associated with Bethany Plantation and Watkins Woolen Mill. The site encompasses approximately forty-eight acres surrounding the mill, residence, and associated rural historic landscape. Extant resources are described below:

Mule Barn Foundations-ca. 1850

The barn foundations north of the main residence are visible at the ground surface. The mule barn is estimated to have measured 30' x 90' with stalls for driving mules, along with two large corn cribs served by wagons that entered through a central corridor. A lean-to was on the eastern end and may have housed a workshop for the farm. The farmyard around the mule barn was surrounded by a 5' board fence to keep draft mules within the pasture contained.[147] The mule barn was constructed of the same heavy timber framing as the engine-dye room attached to the mill. The joints were mortise and tenon and secured with wood pegs. The barn was one-story with a side gable roof and shed addition. It was oriented east to west and had vertical boards for exterior cladding.

The 1979 master plan recommended conducting archeological investigation at the mule barn foundations prior to reconstruction. However, park policy is now to interpret existing features rather than reconstruct buildings.

Brick Kiln-ca.1840

The brick kiln, located west of the main residence, is where the brick was fired for construction of all masonry buildings on the property, including the residence itself and mill. The location of the kiln was verified based on brick piles from the last firing that remained in place at the time of the 1979 master plan effort. Only reconnaissance-level archeological investigation has been completed in the brick kiln area.

Scale House and Scale Pit-ca.1860

This building housed the scales upon which wool was weighed. Located just north and slightly west of the mill, a 1940 photograph shows the front-gable scale house oriented north-south. In 1966 and 1971, archeological investigations led by Robert T. Bray indicated that the wood-frame building was rectangular in plan, open on the east side with a scale room on the west and an extension to the north for a storeroom. The scale pit was approximately centered on the open, eastern portion with a wagon path leading to the scale running in a north-south direction within the open bay. An early photograph indicates that the building was painted white with a

[146] Larry Grantham, "An Historic Documentary Search and Minor Road Trace Archeology, Watkins Woolen Mill State Historic Site, Clay County, Missouri," Prepared for Missouri Department of Natural Resources (Jefferson City, MO: 1990).
[147] Potts and Sligar, 24-25.

door to the scale room on the south façade. Four equally spaced columns formed the east-side support for the roof structure. The building measured approximately 20' x 40' with the longer dimension on the north-south axis.[148]

Wool Shed Foundations-ca.1860

The wool house was used to select and sort wool prior to processing. Its location was verified by excavation that uncovered the foundations west of the mill along the west edge of the lane south of the scale house. At that time, this location served as a parking lot for mill visitors and nearly 2' of fill covered the original grade. The wool shed foundations include four rows of flat native limestone slabs acting as cap rocks at an 18"-24" deep, 20"-wide trench filled with gravel. Each row of rocks is 60' in length. The rows are 10' apart, approximating a 30' x 60' original building. The cap rocks are mostly uniform in size (approximately 12" x 8" x 3"). The limestone is bedrock from the general area. The shed had a rectangular plan. Period photography shows a wood-frame, unpainted building with a shingled, front-gabled roof. Vertical boards clad the exterior walls.[149]

Sawmill-ca. 1860

A sawmill stood approximately 100' north of the mill building. Surface features include an elongated circular shape on the earth that marks the path of animals used to power the mill. The sawmill mainly provided firewood for the mill's boilers. Oral history indicates that the mill was powered by eight mules, two hooked to each of four sweeps. Watkins kept mules on site in the mule shed further west across the lane. The drive shaft ran through a semi-buried box toward the mill so that sawing was accomplished close to the edge of the bank immediately north of the engine room.[150]

Blacksmith Shop-ca. 1860

A rectangular plan, wood-frame building with a gable roof oriented north to south, the blacksmith shop was located south of the mill building. It was clad with vertical wood board as can be seen in several historic photographs. Surface survey conducted in 1979 located only a few features of the shop. Investigators found several large stones that may indicate the setting for the forge and several bricks from the fallen chimney. The ground surrounding the shop is saturated with ash, cinder, and small bits of coal. Excavation in 1990 confirmed the location of the forge base. Archeologists concluded that the shop had been scavenged of much of its useful blacksmithing tools and building materials due to the sparsity and lack of diversity in the assemblage recovered. The building likely served as general storage in post-blacksmith use.[151]

Smokey Row (Weaver Cabins)-ca. 1865

Watkins provided housing for several of his workers. Some lived in a row of log houses known as Smokey Row located north and east of the mill complex, while others boarded on the third floor of the main residence. A series of six to possibly twelve cabins were built along a small rise near what was the main entrance to the area. The 1877 pictorial atlas of Clay County, Missouri, shows five cabins south of the entrance road and four on the north side. Recollections of Will Goodwin, whose parents worked at the mill and lived in a Smokey Row cabin, noted that Smokey Row consisted of only four or five cabins, which included two north of the road, two south of the road, plus one additional cabin further south. Goodwin reported his parents lived in the first cabin north of the

[148] Coombs and Elgin, 8.
[149] Craig R. Sturdevant, "Archaeological Investigations: Wool Shed, Dyers Cabins, and Waers Cabin, Watkins Mill State Historic Site." Vol. 1: Wool Shed (Jefferson City, MO: Missouri Department of Natural Resources, November 1989).
[150] Coombs and Elgin.
[151] Robert T. Bray and Jeffery K. Yelton, "Archeological Investigations at Watkins Woolen Mill State Historic Site: Final Report on MDNR Contract B001953" (Columbia, MO: Department of Anthropology, University of Missouri, Columbia, August 1990).

road, but he was only three years old at the time and his recollection was vague.[152] An undated photograph shows two cabin-like buildings in the general area, north and east of the mill. One is clearly a single unit while the other, located further north, appears to be two units joined by an enclosed space.

Little physical evidence of these buildings remains. The 1979 Master Plan indicated that traces of foundations were found north of the road, while south of the road two foundations and the possible site of a root cellar or wall have been located. Physical evidence of the foundations indicate that the cabins were about 17'-18' square.[153] The 1989 fieldwork included metal detector survey and subsurface probing to identify cabin locations south of the entrance road. Two potential structures were identified, although of differing forms and alignments. A definitive form could not be recommended based on the foundations alone.[154] Investigations did not extend north of the road into an area which may have been disturbed by county road maintenance activity.

Waers Cabin-ca. 1865

William Waers was a dyer and finisher at the mill. He held the position from approximately 1865 to 1883 and lived in a log cabin south and east of the mill and south and west of Smokey Row. The two-bay log cabin featured a shed addition to the east. Oral history identifies a sloping yard across the front with gardens by the creek and a view to the other cabins on Smokey Row.[155]

The Waers Cabin was intensively investigated in 1988 and 1989 to determine its exact location and form. Investigators identified foundation piers and determined dimensions of the residence as a 16' x 32' log building with a 10' x 32' frame addition.[156]

First Cabin-ca. 1839

Prior to construction of the large brick residence, Waltus Watkins and his family resided in a log home. The log house is believed to have been northwest of the brick residence in the location of a later automobile garage. The cabin remained into the early twentieth century and photographs show a portion of the building in undated photographs. Archeologist Dr. Robert Bray first explored the site in 1978, although his findings were inconclusive.[157] A second attempt was made in 1981 during which Bray was able to locate six piers consistent with the historic photo of the First Cabin. They represent a 16' x 21' building oriented on a north-south axis. Additional stone piles represent possible porch piers and a fireplace.[158]

Main House Privies-ca. 1880s

Archeological investigations have identified two privy pits associated with the main residence. As part of his 1986 investigations, Bray encountered a small, shallow privy pit southwest of the residence and summer kitchen

[152] Coombs and Elgin, 7. There is no context provided to estimate an approximate date when Mr. Goodwin and his parents would have occupied the cabin. The Master Plan by Combs and Elgin was written in 1979 and citations were not provided. One historic photograph identifies M.D. Goodwin, possibly Will Goodwin's father, taken with two other workers who both appeared in the 1870 Census (photo on p. 153 of Potts and Sligar's *Watkins Mill*). Mr. Goodwin's written recollections were not located, but it could be inferred that he occupied the Smokey Row cabin with his parents at the height of production in the 1870s.
[153] Coombs and Elgin, 9.
[154] Sturdevant, 140-143.
[155] Potts and Sligar, 139.
[156] Craig R. Sturdevant. "Archaeological Investigations: Wool Shed, Dyers Cabins, and Weavers Cabins, Watkins Mill State Historic Site," Vol. 2: Waers Cabin (Jefferson, MO: Missouri Department of Natural Resources, 1990).
[157] Robert T. Bray, "Archeological Investigations at Watkins Woolen Mill State Historic Site, 1979," (Jefferson City, MO: Missouri Department of Natural Resources, March 1979).
[158] Robert T. Bray, "Archeological Investigations [1981] at First Cabin Site, Watkins Woolen Mill State Historic Site, Lawson, Missouri," (Jefferson City, MO: Missouri Department of Natural Resources, August 1982).

near the end of a flagstone walk. The pit contained few artifacts, mostly of twentieth-century manufacture. This coincides with the information that a later privy pit was likely dug ca. 1910. The excavations then identified another pit possibly dating to the nineteenth century, but time constraints prevented its investigation further.[159] Larry Grantham returned in 1987 to continue excavations of the latter privy. This excavation uncovered a much larger privy consistent with the larger nineteenth-century population of the house. Using depositional patterns, he suggested a likely use-history of the privy.[160]

Other structures and features

While archeology has been used to locate many nineteenth-century buildings, several investigations have proven inconclusive. Bray's 1986 excavations searched for evidence of the possible chicken house(s) seen in historic photographs west of the main house but did not find structural remains or artifacts from activities associated with large-scale poultry production.[161] Archeologists also searched for remains of a fence running east to west north of the icehouse but have been unsuccessful in identifying the fence's location or post spacing.

The 1972 excavations included a search for evidence of a carriage way leading from the lane westward to the front or north of the house. Four trenches were placed around the house, but no evidence of it has been discovered.[162]

Watkins Family Cemetery-ca.1862

Jane Watkins, Waltus's mother, came to live with the family in 1839 and wanted to be buried in the peach orchard upon her death in 1862. Three years after her death the family purchased a tall limestone obelisk to mark her grave. Other family members laid to rest included Waltus's daughter Kate, buried beside Jane in 1870, and Waltus's sister Rebecca in 1885. Waltus, Mary Ann, John, and Joe are all also interred here. A single large stone honors the Cleander B. Holloway family, also buried in the cemetery. Holloway was Mary Ann Watkins's brother.

The family cemetery is rectangular in plan, surrounded by a stone wall erected in 1931 after John Watkins died. The fence was intended to keep cows away from the grave markers. At that time matching stones were added for Waltus, Mary Ann, and Kate. Only Jane and Rebecca's graves retain their original stones. It is unknown how many other burials are within the small cemetery.

Corner caps accentuate the stone wall. There is no gate to access the cemetery, but a stone step on each side of the wall at the west end allows access within the walls. Eight markers within the cemetery mark members of the Watkins family, including the large obelisk at center. The obelisk bears the name "WATKINS" in a shield at its base with additional relief lettering for Jane, wife of Benjamin. Waltus, his wife Mary Ann, son John, and daughter Catherine all have markers within the plot.

Mount Vernon Baptist Church Cemetery-ca. 1850

Another small cemetery or burying ground is just north across the lane from the church, commonly described as one of the earliest cemeteries in the region. The plot is surrounded by a white painted wood picket fence. Two known burials lie in the cemetery, although the base of only one stone marker is all that remains to mark these. A swinging gate accesses the cemetery at the southwest corner of the plot.

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[159] Robert T. Bray, "Archeological Survey and Tests at Watkins Woolen Mill State Historic Site [1986]: Shed, Chicken Houses, Privies, Yard Fence, and Entrance Road," (Jefferson City, MO: Missouri Department of Natural Resources, August 1987).
[160] Larry Grantham, "Excavations in the Main House Privy, Watkins Woolen Mill State Historic Site, Clay County, Missouri," 1987.
[161] Bray, "Archeological Survey and Tests at Watkins Woolen Mill State Historic Site: Shed, Chicken Houses, Privies, Yard Fence, and Entrance Road."
[162] Robert T. Bray, "Road Trace and Backyard Archeology, Watkins Mill State Park" (1972).

Watkins Mill Landscape-ca.1850

The Watkins Mill rural historic landscape is composed of the mill, farmyard, church, and school areas. It includes interpretive as well as visitor access features designed to provide the public with an understanding of the historic family business through the built environment, exposed building foundations, agricultural use areas, and landscape characteristics. These features existed during the historic period and have been preserved, restored, and reconstructed by the State of Missouri. Contributing features include the walking paths and lanes, fencing, mature trees and vegetation, agricultural fields, livestock areas, and mill ponds. The landscape surrounding the farmyard and mill retains a strong sense of time and place with the orchard, family garden, agricultural fields, and fenced chicken areas harkening the family's interests. Rows of Osage orange trees (*Maclura pomifera*) divide fields and though many now grow generally throughout the park, their historic alignments remain today to evoke their original function. Much of the forest cover cut by Watkins has also regrown and a large stand of timber lies south from the main house. Typical of many local wooded areas species include oak, hickory, elm, ash, hackberry, walnut, locust, and maple. Flowering trees include redbud, blackhaw, hawthorn, dogwood, and native red cedar scattered throughout the wooded areas.

Wood split-rail fencing surrounds the residence and extends along the pedestrian walkways within the park. Most of the fencing was constructed in the 1980s and repaired throughout the decades. Fencing around the family residence was built based on archeological investigations that documented its original location. Historic photos focus on the buildings rather than landscape features, but period illustrations indicate the fence was wood, split rail. Union Pacific Railroad tracks cross the property from northeast to southwest with a concrete underpass on the lane to the Mt. Vernon Missionary Baptist Church and Franklin Academy. A circa 1920 pony truss automotive bridge is also located along this lane.

Evenly spaced coniferous trees line the main residence yard in an east to west axis to form an allée from the house to the lane. Gardens, chicken yard, beehives, and other mature trees dot the main residence yard. Gravel lanes connect the farmyard, mill, and ancillary structures. The site remains in relative isolation from modern intrusions, expressing a quiet, bucolic, rural setting.[163]

Non-Contributing Buildings

Summer Kitchen-ca.1850 (reconstructed 1980)

Cooking and other household chores took place in the outside kitchen during the warm months. The summer kitchen is a brick 16' x 16' building located just 3' off the back porch and connected by wood plank flooring. The building was accurately reconstructed based on physical evidence, historic photographs, and archeological investigation of its original limestone foundation. The reconstructed building has a central entry door that faces east toward the residence. The gable end roof has a sloping overhang extending from the north supported by three square wood posts. A multi-light, double-hung, six-over-six wood window occupies the north and south walls. A fireplace dominates the west interior wall with a brick chimney extending above the gable end roof line. The one-room building has brick floors and a six-burner wood stove with standpipe at center. Open storage shelves line either side of the fireplace. Walnut trim surrounds windows and door on the interior. Only the west wall and foundations of the summer kitchen remained extant when Watkins Mill first became a state historic site.

[163] Further research is warranted through additional survey and documentation to identify specific landscape characteristics, features, plant and tree species, patterns of spatial organization, elements of the family garden, and other vegetation to more fully develop the details of the landscape.

Fruit Dry House-ca. 1850 (reconstructed ca. 1977)

Watkins kept fruit orchards and sliced and dried the fruit on removable racks in the dry house. It was then packed in jars and sold at market. Watkins raised apples, pears, peaches, apricots, and cherries and sold the fruit both fresh as well as dried and in jams. A slow fire kept in a shallow floor trench maintained the drying temperature. The fruit dry house is sizable and considered commercial in scale, as it is two to three times larger than those found on most farms.

The fruit dry house measures 8'-2" x 10'-8", has a wood gabled roof, and is located southwest of the residence. Vertical wood planks with exterior hinges create a raised, paired opening on the south façade. Vertical boards also infill the gable end. A short, truncated chimney creates a broken gable on the north wall plane. The building had collapsed and remained a ruin until 1976-1977 when the Daughters of the American Revolution Chapter in Liberty, Missouri, provided the funds for its reconstruction.

Icehouse-ca.1850 (reconstructed ca. 1980)

Blocks of ice cut from the pond were stored in the ice pit, which could provide a year's supply of ice. Sawdust was used to separate and insulate the blocks. The simple wood-frame, side gable building is located east and north of the house within the front yard area. Vertical wood boards clad the exterior, and a projecting flat-roofed canopy extends from the east across the entire width of the building and was used for temporary shelter for buggies. The original icehouse rock-lined pit which contained debris has been removed. The building above was reconstructed as part of site restoration in the 1970s and 1980s and based on original descriptions and physical evidence from the intact ice pit.

Barn-1955

Built in 1955, the 40' x 50' frame building is located in the pasture north of the house and west of the mill. The rectangular plan, side-gable building has four open bays facing south and is oriented on the east-west axis. A shed extends across the north exterior wall providing outdoor sheltered area.

Watkins Mill State Park Visitor Center-1992

A visitor and interpretive center constructed in 1992, the brick building has three gables extending off a main hall to house interpretive exhibits, state park staff, storage, and a library. Gable ends have a truncated extension at the peak of each gable reminiscent of a chimney and of the side-gable historic family residence. A limestone foundation and horizontal beltcourse divide the building. It is capped by a standing seam steel roof and has an associated paved parking lot. The visitor center provides public access to the mill building, farm, and family cemetery.

The interior offers an interpretive experience for the visiting public with exhibits documenting the history of the Watkins family, mill, and evolution of the property to a state historic site. Additional storage for artifacts, a library, and archive are located on the southwest end of the first level, while site staff offices are at the northeast end.

Wood Frame Shed-ca.1980

Immediately west of the smokehouse is a rectangular gable-end storage shed with vertical board siding. A single-entry door is offset in the south wall.

Watkins Mill State Park Maintenance Building-ca. 1960

The maintenance building is a one-story ranch-style wood-frame residence. It has a side-gable roof and is rectangular in plan.

Watkins Mill State Park Maintenance Garage-ca.1960

The maintenance garage is located just north of the maintenance building. Itis a three-bay building with overhead doors and a pedestrian entrance.

Sheep Barns-ca. 1980

Sheep barns are located in the corral area south of the mill. These modern buildings shelter the small sheep flock maintained at the site. The rectangular plan building with metal roof and overhang provides storage and shelter.

Watkins Mill Park Camp-ca. 2000

Watkins Mill Park Camp is a state juvenile detention center. This recent building houses approximately sixty people and is located at the far southwest corner of the site boundary.

Privies (3)-n.d.

Three privies have been reconstructed at the Mount Vernon Missionary Baptist Church and Franklin Academy site. One is associated with the church and two with the school. All three are wood frame, single-seat outbuildings.

Non-contributing Structures

Chicago, Rock Island & Pacific [Rock Island] (Union Pacific) Railroad Line, ca. 1930

A rail line runs diagonally across the land holdings of Watkins Mill State Park and State Historic Site. The 250' right-of-way of the former Rock Island (now Union Pacific) Railroad remains an active line. The rail line through the county began as the Chicago, Rock Island & Pacific Railroad from 1866 to1920, served the Rock Island Railroad from 1920 to 1975, and today is operated by the Union Pacific Railroad. Historic maps clearly indicate railroads through Clay County, however, this line arrived outside the period of national significance.

Railroad Underpass, ca. 1930

An existing concrete underpass separates vehicular traffic from train traffic. The concrete slab bridge over Watkins Road on the Union Pacific Railroad line within Watkins Mill State Park serves two lanes of traffic. A poured concrete bed supports the tracks with stepped side walls at both the north and south ends. The underpass is contemporary with establishment of the railroad tracks.

Conclusion

Watkins Mill and its surrounding environment retains a high degree of historic integrity. Modern intrusions are generally small in scale, with extensive landscape buffering the historic areas from modern camping and recreational activities at the state park. The family farm and mill provide an experiential opportunity rooted in rural nineteenth-century America, with accurate reconstructions based on historical information and extant ruins on the site. The nearby Mount Vernon Missionary Baptist Church and Franklin School are accessed by the lane with surface parking sheltered from the buildings. Pedestrian access to the church and across the field to the school also support an experience reminiscent of those who used the buildings within the historic period.

This property is nationally significant under Criterion 1, Theme V, Developing the American Economy. It represents historic extraction and production and the larger themes of Commerce and Industry and American Labor History. Watkins Mill and its material culture illustrates the small-scale wool manufacturing industry as supported by an associated family farm as well as social and religious institutions as represented by the Mount Vernon Missionary Baptist Church and the Franklin Academy. Original milling equipment from the 1860s and 1870s constitutes an exceedingly rare and complete collection of *in situ* machinery that documents the historic wool production process. The period of national significance begins in 1860, when the mill was constructed and

outfitted, and extends through 1886, when wool fabric production ceased due to equipment failure. Rather than remove dated and broken equipment, Watkins and his sons repaired and retained their investment in existing machinery. When the main power source failed in 1904, the mill closed with the equipment intact and evidence of Watkins's milling process preserved. The manufacturing system represented by the machinery and its location within the building reveals a process-based story singular to this site and not represented elsewhere in the country.

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__ Not previously listed in the National Register (fill in **only** 4, 5, and 6 below)

1. NRIS: 6600416
2. Date of listing: November 13, 1966
3. Level of significance: National
4. Applicable National Register Criteria: A_X_ B__ C__ D__
5. Criteria Considerations (Exceptions): A__ B__ C__ D__ E__ F__ G__
6. Areas of Significance: Agriculture, Architecture, Education, Industry

__ Previously Determined Eligible for the National Register: Date of determination:
_x_ Designated a National Historic Landmark: Date of designation: November 1966
_x_ Recorded by Historic American Buildings Survey: HABS No. MO-1180[MO,24-EXPRI.V,1]
HABS No. MO-1185[MO,24-EXPRI.V,2]
_x_ Recorded by Historic American Engineering Record: HAER No. MO-1
__ Recorded by Historic American Landscapes Survey: HALS No.

Location of additional data:

State Historic Preservation Office:
Other State Agency: Missouri Department of Natural Resources
Federal Agency: National Park Service
Local Government:
University:

Other (Specify Repository):

8. FORM PREPARED BY

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Date: March 14, 2023

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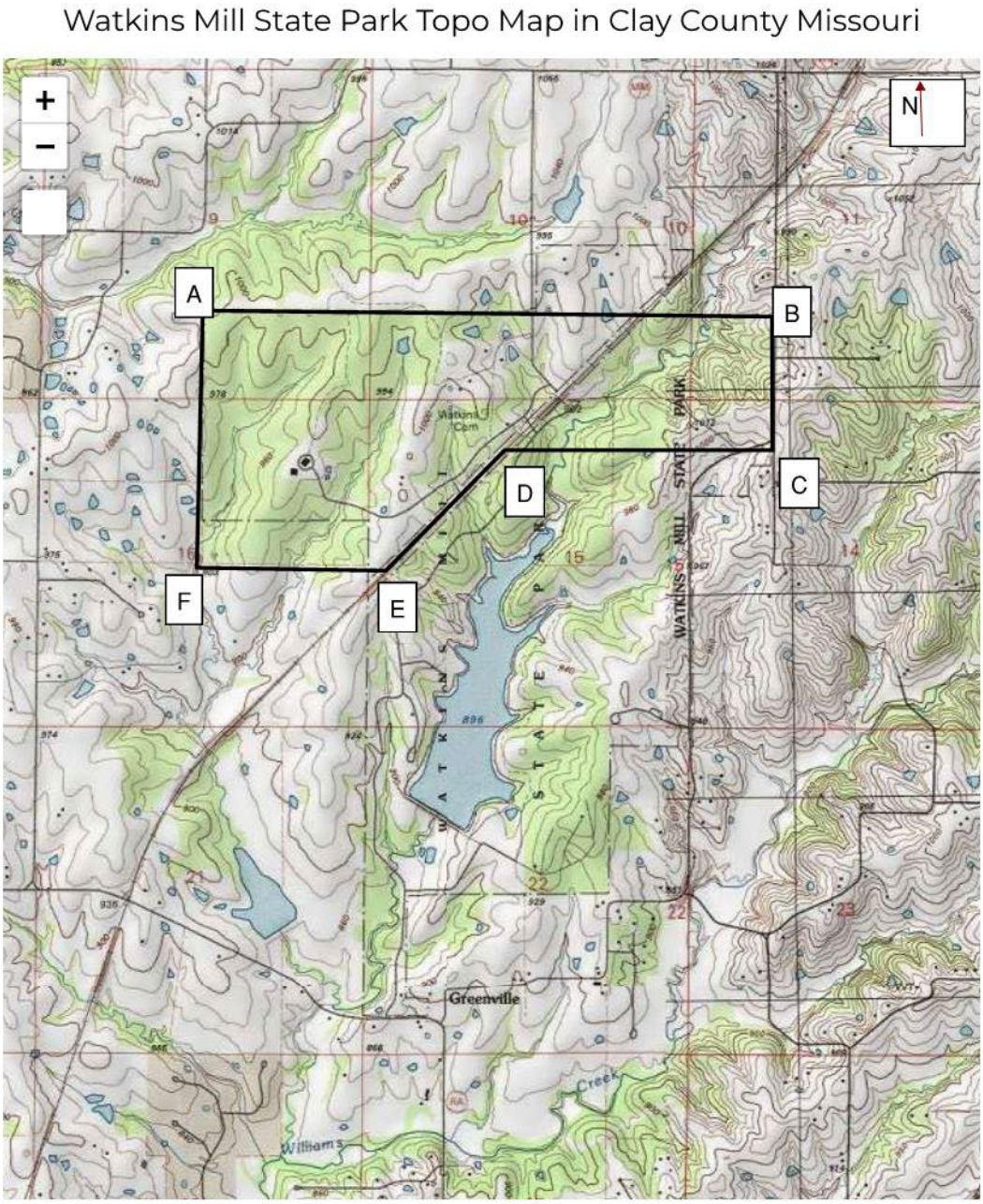
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National Historic Landmarks Program
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Washington, DC 20240

Lisa Davidson, PhD
National Park Service
National Historic Landmarks Program
1849 C Street NW, Mail Stop 7228
Washington, DC 20240

Telephone: (202) 354-2179

Maps

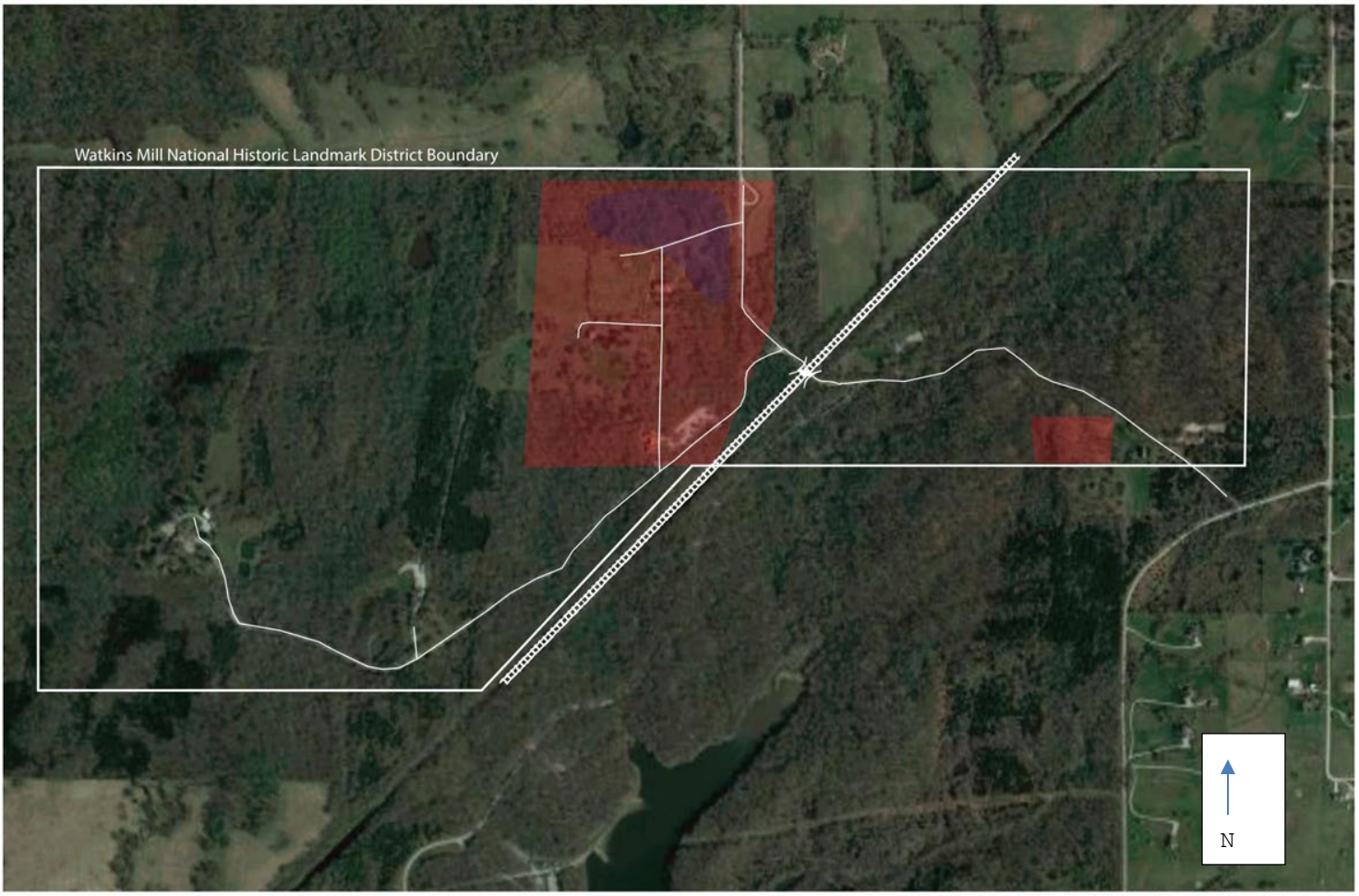
USGS Topographical maps showing NHL boundary extending across the Holt and Lawson, Missouri, 7.5 minute quadrangle maps, scale 1:24,000. Boundaries are identified as a detail to ease site identification.



Watkins Mill State park Topo map in Clay County, Missouri
https://www.topozone.com

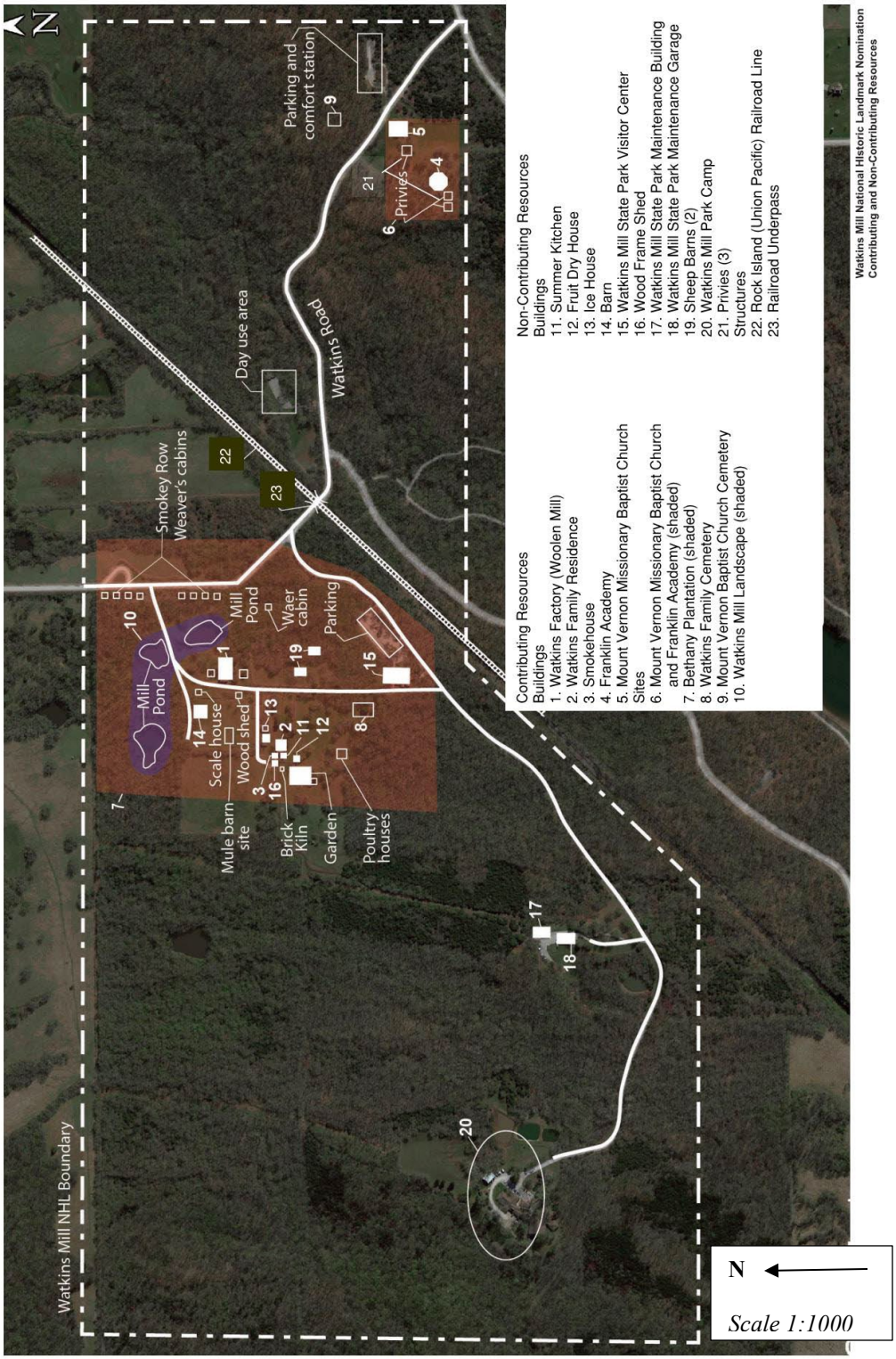
Map detail showing Watkins Mill National Historic Landmark Boundary

Watkins Mill Boundary. Shaded areas identify boundary of two archeological properties.



Watkins Mill National Historic Landmark District Boundary
March 2022

Watkins Mill
Contributing and non-contributing properties



Historic Photographs

Name of Property: Watkins Mill
County and State: Clay County, Missouri
Name of Photographer: Unknown
Photograph Date: 1890
Location of Photographs: Watkins Woolen Mill State Historic Site Archives, Weber Collection

Historic Photo Log



Photo 0001H
Image File Name: MO_Clay County_Watkins Mill_0001H
"Distant view of the mill, including corner of the blacksmith shop," looking northeast



Photo 0002H
Image File Name: MO_Clay County_Watkins Mill_0002H
"Front of house, ca. 1890-early 1900s," looking northwest. Source: Undated photo album, Watkins Woolen Mill State Park Archives.



Photo 0003H
MO_Clay County_Watkins Mill_0003H
"Mount Vernon Church, c. 1931," looking southeast. Source: Undated photo album, Watkins Woolen Mill State Park Archives.

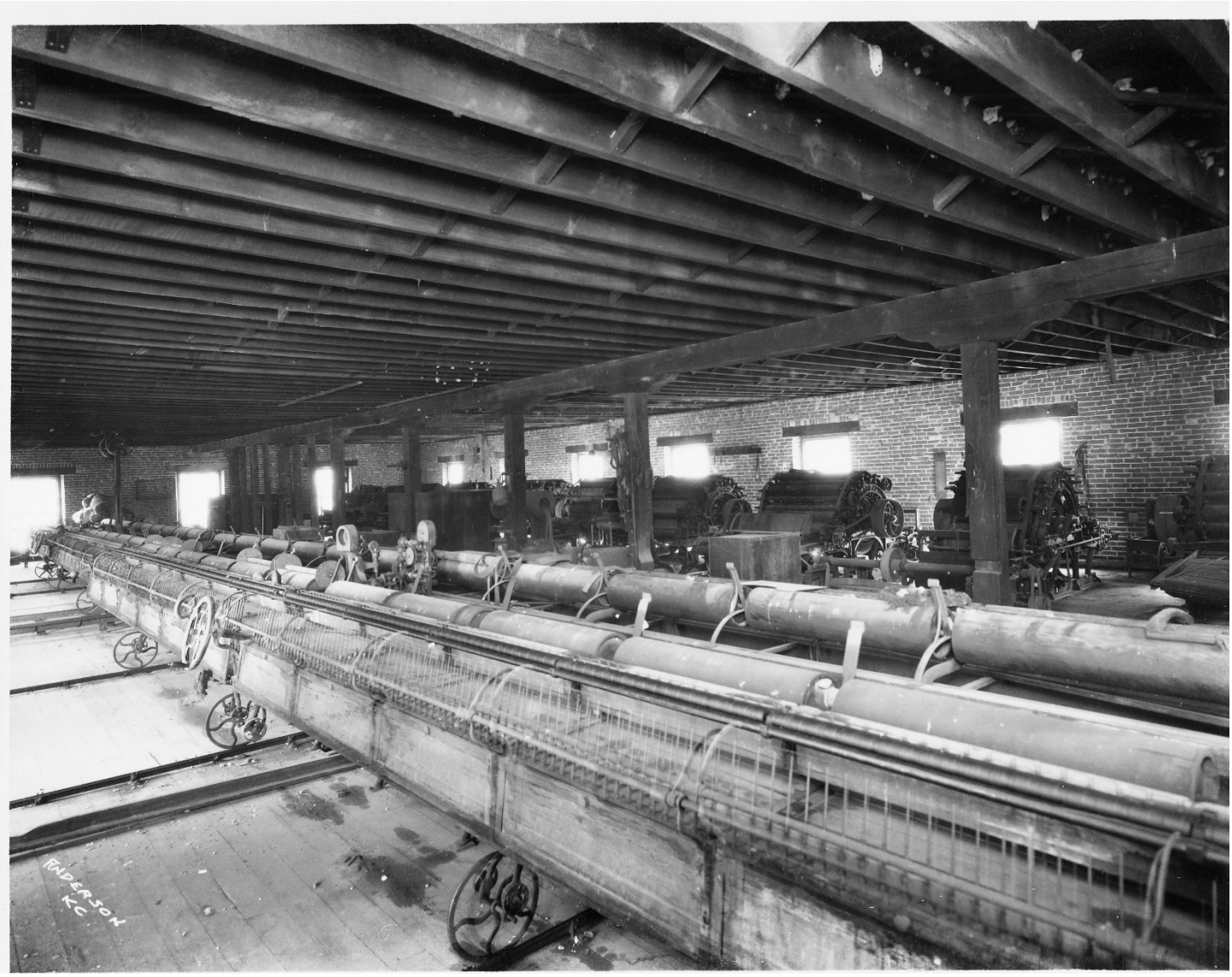


Photo 0004H
MO_Clay County_Watkins Mill_0004H
"Mill. House and Buildings in undated photo album. ca. 1900s." Third floor spinning jacks and cards looking northeast. Source: Undated photo album, Watkins Woolen Mill State Park Archives.

Figure and Photograph Log

Historic Figures

Name of Property: Watkins Mill
County and State: Clay County, Missouri
Name of Photographer: Unknown
Photograph Date: 1890
Location of Photographs: Watkins Woolen Mill State Historic Site Archives, Weber Collection

Photo 0001H
Image File Name: MO_Clay County_Watkins Mill_0001H
"Distant view of the mill, including corner of the blacksmith shop," looking northeast

Photo 0002H
MO_Clay County_Watkins Mill_0002H
"Front of house, ca. 1890-early 1900s," looking northwest. Source: Undated photo album, Watkins Woolen Mill State Park Archive. Looking northwest.

Photo 0003H
MO_Clay County_Watkins Mill_0003H
"Mount Vernon Church, c. 1931," looking southest. Source: Undated photo album, Watkins Woolen Mill State Park Archives.

Photo 0004H
MO_Clay County_Watkins Mill_0004H
"Mill. House and Buildings in undated photo album. ca. 1900s." Third floor spinning jacks and cards looking northeast. Source: Undated photo album, Watkins Woolen Mill State Park Archives.

Current Photographs

Name of Property: Watkins Mill
County and State: Clay County, Missouri
Name of Photographer: Melissa Dirr Gengler
Photograph Date: November 2020 - April 2021
Location of Photos: National Park Service, Midwest Regional Office

Photo 0001
Image File Name: MO_Clay County_Watkins Mill_0001
Pedestrian path from visitor center toward Watkins Mill, camera facing north

Photo 0002
MO_Clay County_Watkins Mill_0002
Family cemetery with main residence in background, camera facing northwest

Photo 0003
MO_Clay County_Watkins Mill_0003
View from family cemetery of main residence showing fencing, residence, summer kitchen, and fruit drying shed, camera facing northwest

Photo 0004

MO_Clay County_Watkins Mill_0004
Farmyard with fruit drying shed in foreground and main residence beyond, camera facing northeast

Photo 0005
MO_Clay County_Watkins Mill_0005
Summer kitchen and west side of residence, camera facing south

Photo 0006
MO_Clay County_Watkins Mill_0006
Main residence with smokehouse behind, camera facing southwest

Photo 0007
MO_Clay County_Watkins Mill_0007
Main residence, curved stair, looking west/southwest

Photo 0008
MO_Clay County_Watkins Mill_0008
Main residence, dining room, looking southeast

Photo 0009
MO_Clay County_Watkins Mill_0009
Bethany Plantation farmyard showing reconstructed icehouse in foreground, barn and mill in background, camera facing northeast

Photo 0010
MO_Clay County_Watkins Mill_0010
Bethany Plantation farmyard looking toward Watkins Mill, camera facing northeast

Photo 0011
MO_Clay County_Watkins Mill_0011
Watkins Mill, south and west sides, camera facing northeast showing one story wood-frame addition on east side

Photo 0012
MO_Clay County_Watkins Mill_0012
Watkins Mill, north side with sawmill area in foreground, camera facing south

Photo 0013
MO_Clay County_Watkins Mill_0013
Watkins Mill, north and east sides with wood pile in foreground, camera facing southwest

Photo 0014
MO_Clay County_Watkins Mill_0014
Watkins Mill, north and east sides with mill pond in the foreground, camera facing southwest

Photo 0015
MO_Clay County_Watkins Mill_0015
Watkins Mill, wood-frame addition at north and east side, showing well and former dye vat areas, camera facing east

Photo 0016
MO_Clay County_Watkins Mill_0016
Watkins Mill, first floor, finishing room, vertical teasel gig, camera facing west

Photo 0017
MO_Clay County_Watkins Mill_0017
Watkins Mill, first floor, wool cloth press machine, finishing room, camera facing south

Photo 0018
MO_Clay County_Watkins Mill_0018
Watkins Mill, first floor, skein dyer vat, finishing room, camera facing north

Photo 0019
MO_Clay County_Watkins Mill_0019
Watkins Mill, first floor, grist mill at northeast side, looking east

Photo 0020
MO_Clay County_Watkins Mill_0020
Watkins Mill, second floor, weaving room, camera facing east

Photo 0021
MO_Clay County_Watkins Mill_0021
Watkins Mill, second floor, weaving room, camera facing northeast

Photo 0022
MO_Clay County_Watkins Mill_0022
Watkins Mill, second floor, warping mill creel stand, weaving room, camera facing northwest

Photo 0023
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Watkins Mill, second floor, weaving room, camera facing southeast

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MO_Clay County_Watkins Mill_0024
Watkins Mill, second floor, weaving room, camera facing west

Photo 0025
MO_Clay County_Watkins Mill_0025
Watkins Mill, second floor, yarn hanker and hole in floor from repetitive use, camera facing southwest

Photo 0026
MO_Clay County_Watkins Mill_0026
Watkins Mill, second floor, picking machine, east room, camera facing northeast

Photo 0027
MO_Clay County_Watkins Mill_0027
Watkins Mill, third floor, cards, camera facing southeast

Photo 0028
MO_Clay County_Watkins Mill_0028
Watkins Mill, third floor, spinning jacks, camera facing northeast

Photo 0029
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Photo 0030
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Watkins Mill, attic, showing scrap wood, original packing crates, and spare parts, camera facing east

Photo 0031
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Lane with mill visible at right, barn at left and wool shed foundations at center, camera facing north

Photo 0032
MO_Clay County_Watkins Mill_0032
Visible foundation blocks from the blacksmith just south of the mill, camera facing southeast

Photo 0033
MO_Clay County_Watkins Mill_0033
Smokey Row area with some foundation blocks visible, camera facing north

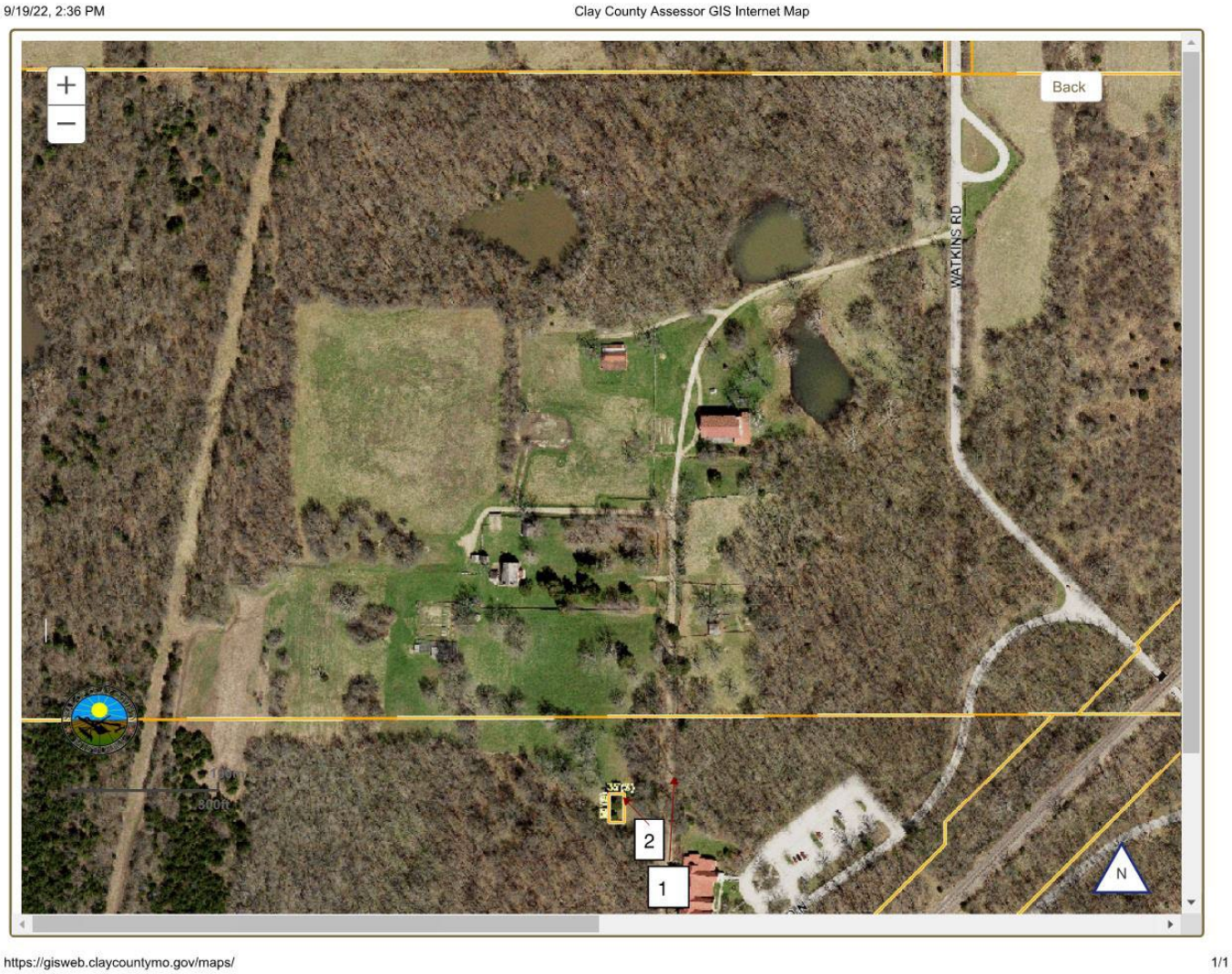
Photo 0034
MO_Clay County_Watkins Mill_0034
Mount Vernon Missionary Baptist Church oblique view, camera facing southwest

Photo 0035
MO_Clay County_Watkins Mill_0035
Mount Vernon Missionary Baptist Church Cemetery, camera facing north

Photo 0036
MO_Clay County_Watkins Mill_0036
Mount Vernon Missionary Baptist Church, interior, camera facing south

Photo 0037
MO_Clay County_Watkins Mill_0037
Franklin Academy, entrance, camera facing southeast

Photo 0038
MO_Clay County_Watkins Mill_0038
Franklin Academy, interior, camera facing north

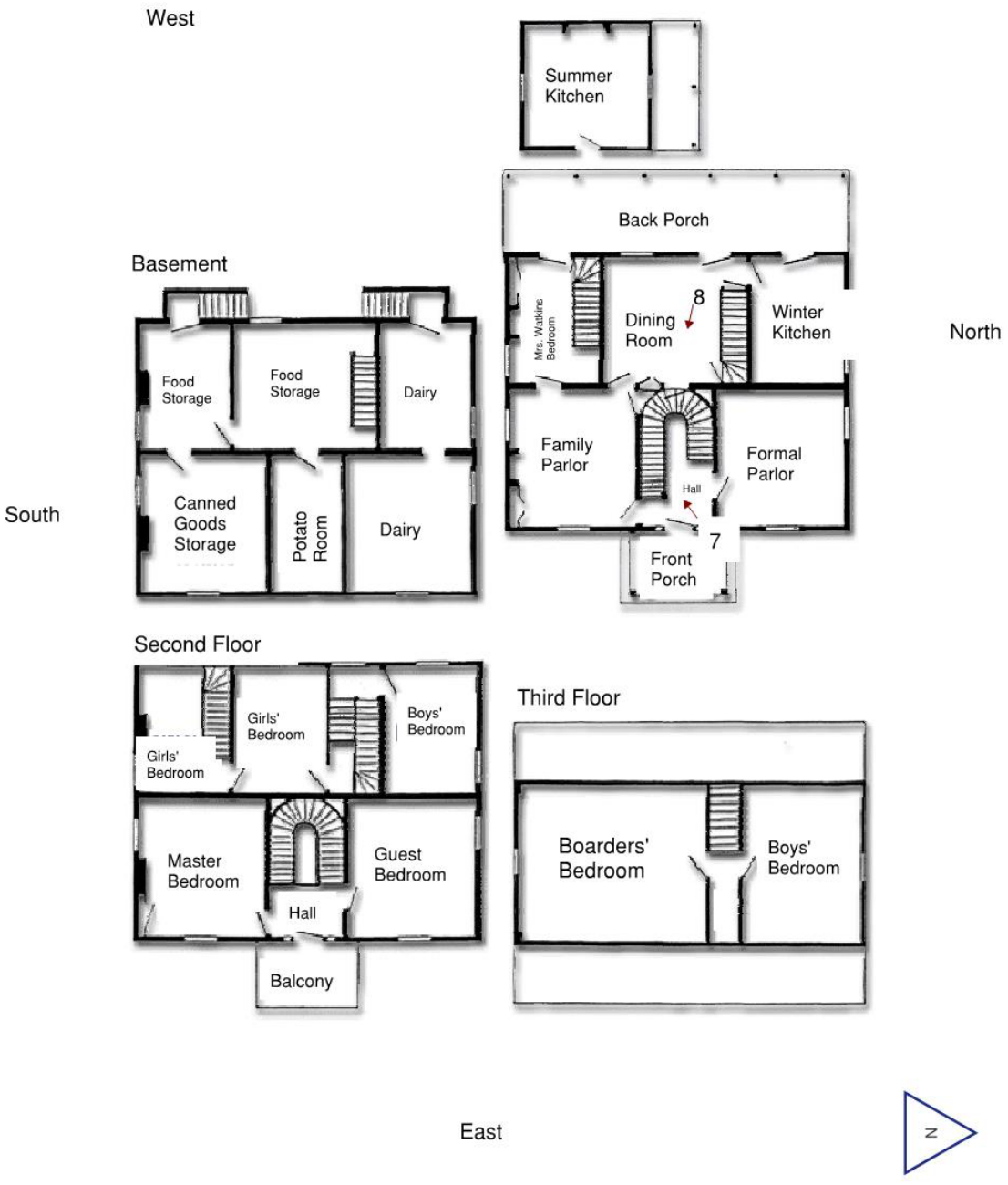


Watkins Mill Photograph Key
Bethany Plantation



Watkins Mill Photograph Key
Bethany Plantation and Mill

The Watkins House Floor Plan

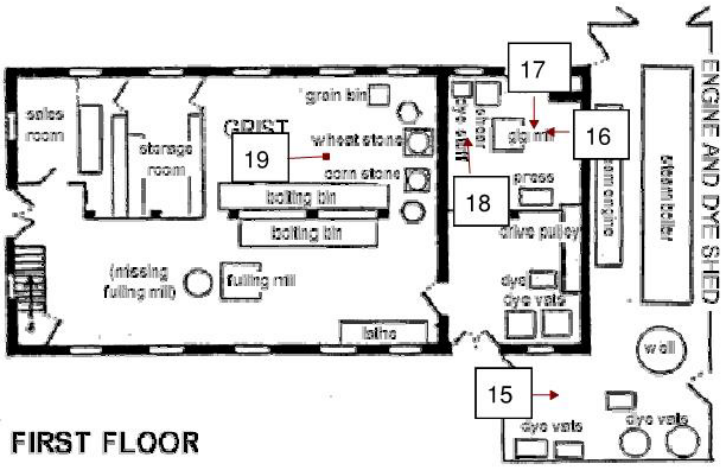


Watkins Mill Photograph Key
Main Residence Floor Plan
Source: *Waltus Watkins & His Mill* by Ann M. Sligar, p 32-35.

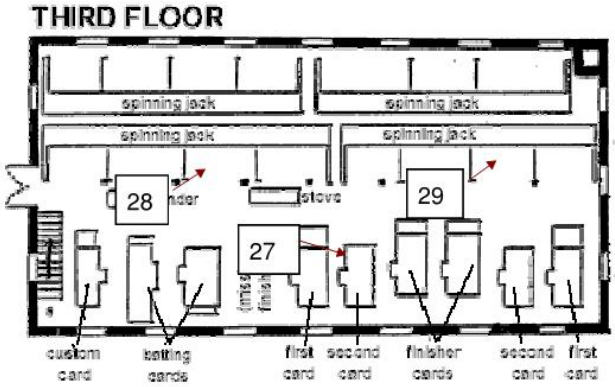


Watkins Mill Photograph Key
Smokey Row

Watkins Woolen Mill Floor Plan

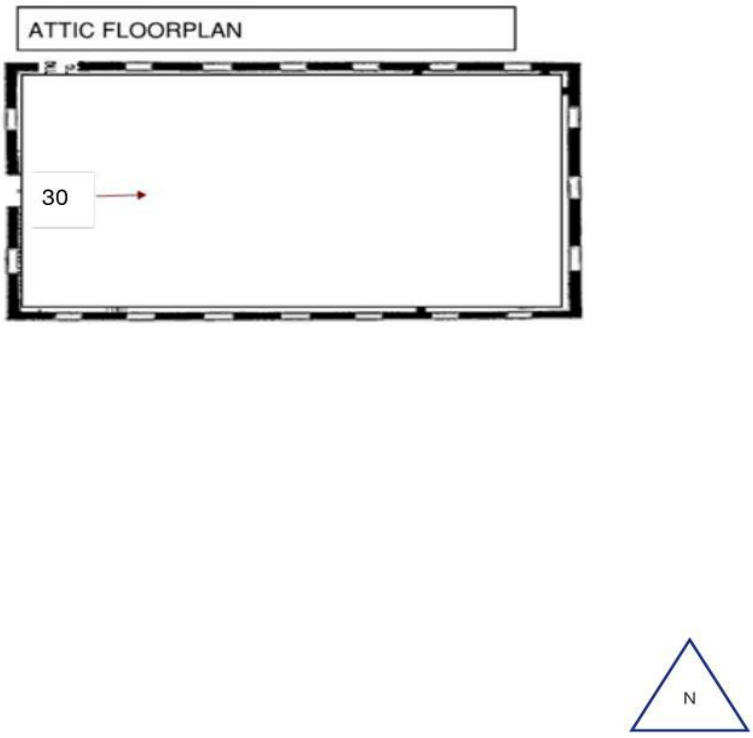








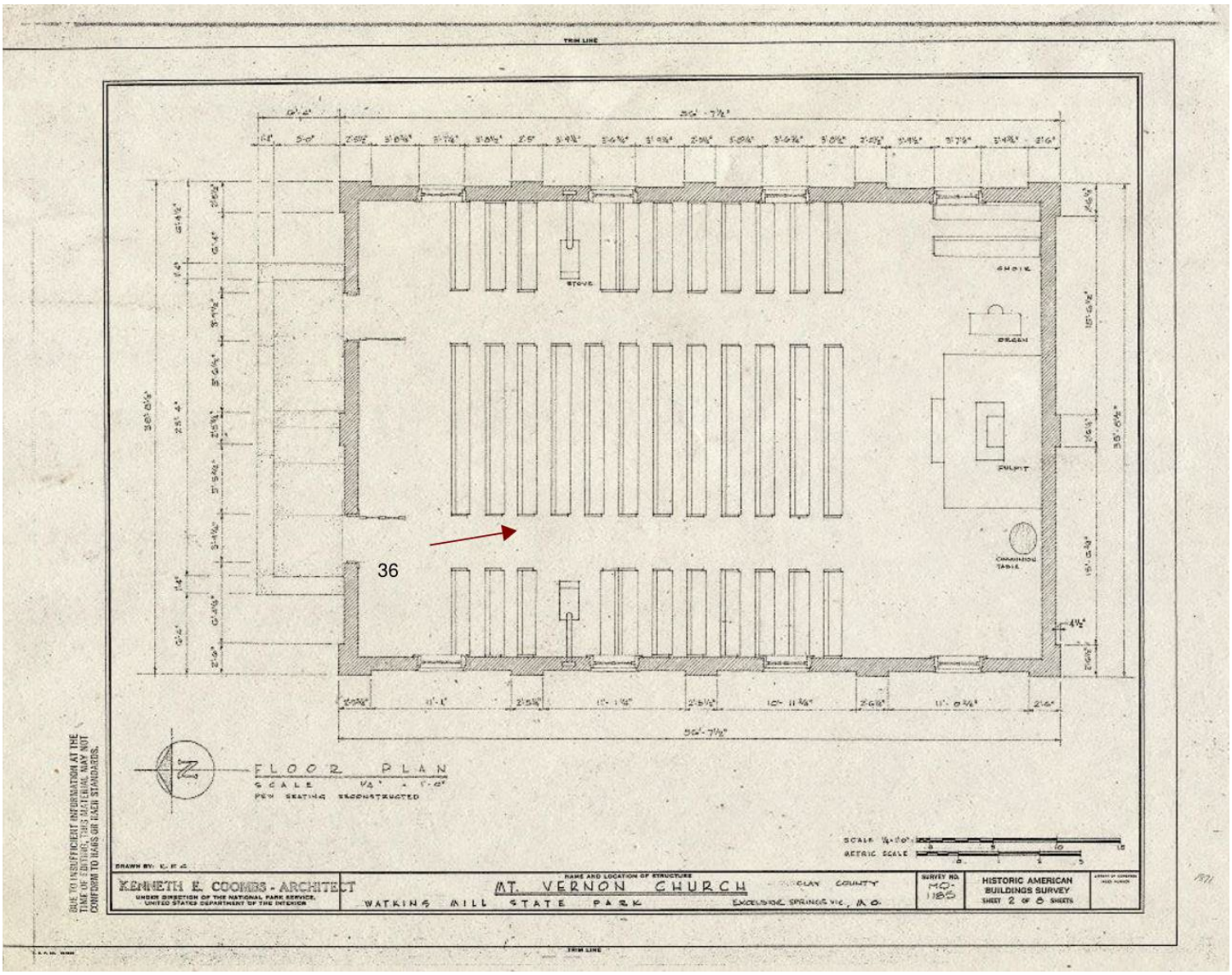
Watkins Mill Photograph Key
Mill Interior Floor Plans
Source: *Waltus Watkins & His Mill* by Ann M. Sligar, p 32-35



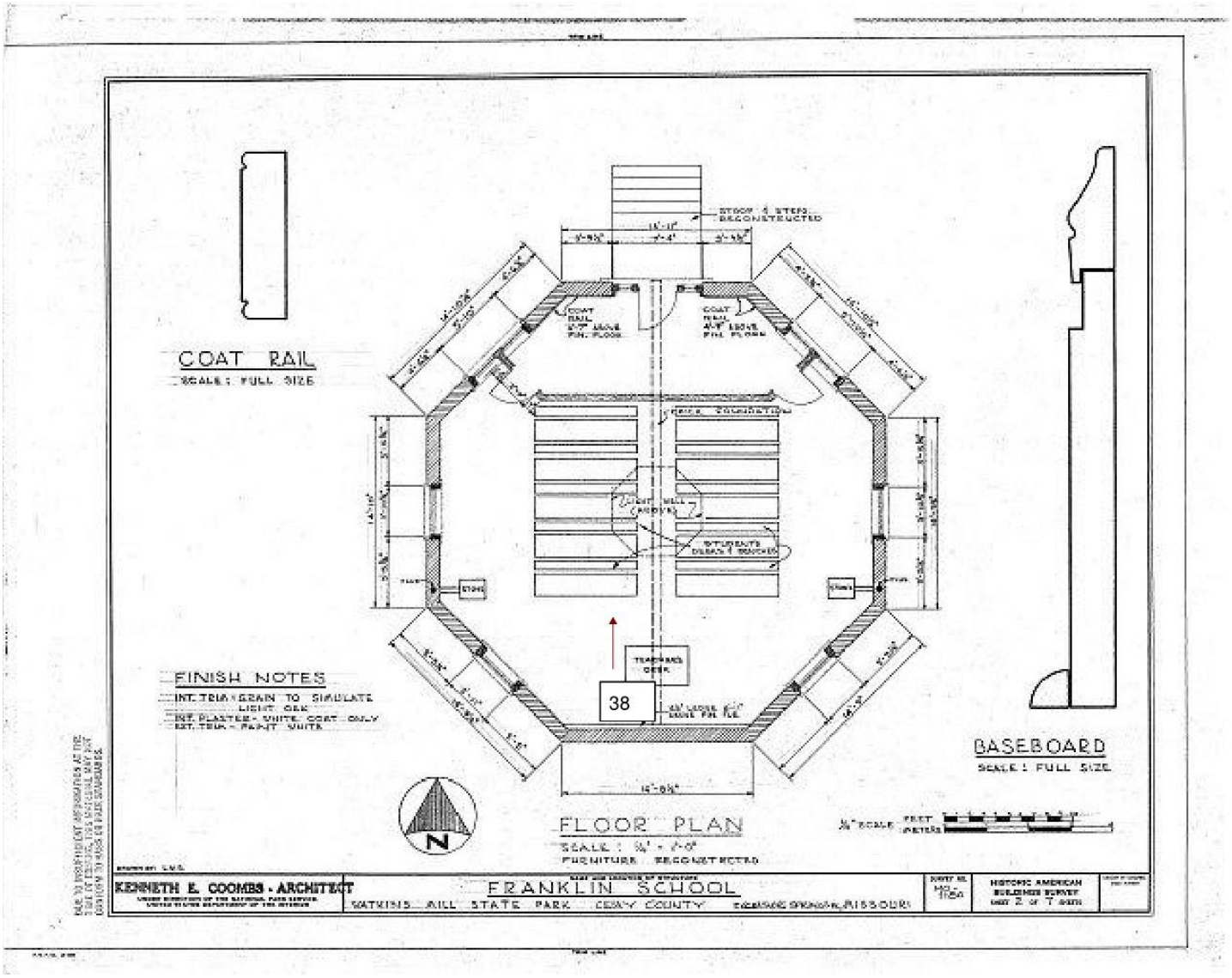
Watkins Mill Photograph Key
Mill Interior, Attic Floor Plan
Source: *Waltus Watkins & His Mill* by Ann M. Sligar, p 32-35



Watkins Mill Photograph Key
Mount Vernon Missionary Baptist Church and Franklin Academy



Watkins Mill Photograph Key
Mount Vernon Church, Interior
Source: Kenneth E. Coombs, Historic American Buildings Survey, HABS MO-1185 [HABS MO,24-EXPRI.V,2], Library of Congress



Watkins Mill Photograph Key
Franklin Academy, Interior
Source: Kenneth E. Coombs, Historic American Buildings Survey, HABS MO-1180 [HABS MO,24-EXPRI.V,1], Library of Congress

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