The Jonathan Browning Site: An Example of Archaeology for Restoration in Nauvoo, Illinois

Dale L. Berge

Follow this and additional works at: https://scholarsarchive.byu.edu/byusq

Recommended Citation
Available at: https://scholarsarchive.byu.edu/byusq/vol19/iss2/5
The Jonathan Browning Site: An Example of Archaeology for Restoration in Nauvoo, Illinois

Dale L. Berge

INTRODUCTION

Restoration in Nauvoo is an attempt to return at least a portion of Nauvoo to its original appearance during the 1839-1846 time range. Authenticity is a primary goal of Nauvoo Restoration, Incorporated, the foundation sponsored by The Church of Jesus Christ of Latter-day Saints to restore this former Mormon city. However, absolute authenticity in restoration is not possible because that process depends upon available evidence, correct interpretation, skill of construction people, materials used, funds, and other variables, all of which pose limitations.

One purpose of restoration in Nauvoo is for the city to serve as a valuable educational medium, teaching Latter-day Saints about their history while also educating visitors. A second goal of restoration in Nauvoo is to expand our knowledge of how the people lived in the 1840s. New historical and architectural data, even the bits and pieces of dishes, bottles, and other items recovered, reveal much about the people and their lives.

The Jonathan Browning home is an example of such restoration in Nauvoo. This discussion of the Browning site at Nauvoo will be more effective if it is preceded by a discussion of methods used in researching and restoring historic sites.

There are four steps to authentic restorations: (1) historical research, (2) archaeology, (3) reconstruction, and (4) decoration.

Historical research involves the examination of ownership records, including abstracts and tax records of past residents. It also includes the search of financial records to determine useful facts such as debts, contributions to the Temple, personal expenditures,

Dale L. Berge is an associate professor in the Department of Anthropology and Archaeology at Brigham Young University and a staff researcher for Nauvoo Restoration. He supervised the excavation of the Jonathan Browning site during the summers of 1968-1969.

A shorter version of this article was presented at the 27th Annual Symposium on the Archaeology of the Scriptures, Brigham Young University, October 1978.

201
Figure 1. Manufacturers’ Hallmarks from Ceramic Vessels Used to Date Sites or Features
and so forth. Biographical sketches are constructed from the historical data, correspondence, and genealogy. Other factors such as city regulations and ordinances, sidewalk or street dimensions, furnishings, and crafts of owners or renters need to be discovered and studied. Old photographs or paintings, where available, provide a basis for detailed reconstruction.

Archaeological investigation discovers buried foundations of buildings and such features as wells, barns, cisterns, outbuildings, paths, fence postholes, and more. It also includes analysis of the recovered artifacts.

It is impossible to know what older features are hidden by later landscaping, remodeling or destruction without digging for the evidence. The evidence revealed by archaeology can lead to broader interpretations of the site than can simple architectural restoration alone. The combination of architectural features and artifacts indicates the possible function of a structure or a room. For example, surviving artifacts in a particular room may differentiate a kitchen from a bedroom, whereas architectural evidence by itself is unlikely to provide the data needed for the archaeologist to interpret the function of a specific room with confidence. On the other hand, in historic sites the functions of a room may change through time, and artifactual evidence may not be available due to the collapse of wooden floors or the entire removal of objects from the room.

Of surviving artifacts, ceramics and glass are usually the most common objects found at historic sites. From hallmarks (Figure 1), manufacturing techniques, and other attributes, archaeologists can determine if the object were locally made or imported. These attributes provide information for dating specific features at the site, since manufacturing techniques change through time and are often documented historically. Finding specific hardware items such as hinges, doorknobs, or locks, by archaeological research at a site permits authentic restoration of the architectural details of the structures. Ceramic vessels, glass bottles, metal cooking vessels, knives and forks, and all the other artifacts unearthed indicate the types of objects which might be used for interior decoration of the restored home.

Individualism may be reflected by the distribution of artifacts. In the Webb blacksmith shop, for example, there were many tools and hundreds of broken pieces of metal scattered all through the site, while at the Browning gunsmith shop there were very few metal artifacts; in fact, only one small piece of metal identified as
Figure 2. Earthenware Vessels Made in Nauvoo from 1839-1846, the Mormon Period
Figure 3. Ironstone Ceramics (A) Transfer Printed, (B) Hand Painted, (C) Hand Painted Banded, and (D) Mocha Design
a broken gun part was recovered. Evidently one workshop was kept cleaned up while the other was not.

Bones and seeds recovered from excavations give clues to the diet of the occupants. Archaeologists can calculate, for example, the relative amounts of fowl and game consumed as opposed to domesticated animals consumed. Seeds indicate which fruits, vegetables, and grains were grown or purchased for household use.

Archaeologists can also derive evidence of social conditions from the excavated specimens. Such specimens indicate something of the economic activity of the community. Ceramics which were locally made (Figure 2) or imported, or trade bottles from St. Louis or London, tell about commerce. The quality and quantity of artifacts found at individual sites can distinguish the presence of wealthy inhabitants from the poor. At Nauvoo, this contrast is seen in the unusual size of the Browning house, which is approximately 75 feet long, as compared with other homes, which are 18 to 25 feet long. In large brick houses there are many more exotic items, such as transferware ceramics from England (Figure 3), while in small log cabins there is a much higher percentage of locally made earthenware.

The study of the settlement pattern indicates that Nauvoo was a well-planned community consisting mostly of log cabins but with a considerable number of brick or plank houses as well. Many of the ideas for construction were brought from New York, and many of the same concepts were used in Salt Lake City later.

Besides being affected by the factors listed above, reconstruction is done on the basis of plans developed by studying surviving architectural details of each structure. These are discovered by removing plaster and examining changes in nails, lathe, bricks, paint and plaster. Styles of construction changed through time and remodeling of older homes was done according to changes in fashion.

Finally, interior decoration of a restored structure must also take place. Visitors notice these details more than architecture or outside features; therefore, decoration needs to be done with as much care for realism and detail as in the first three steps. Both reconstruction and decoration need to pay heed to what archaeologists discover.

All the steps outlined for restoration require meticulous research and a team effort in order to make the project as authentic as possible to the features characterizing the time period involved. Restoration needs the efforts of the best professional expertise available—historians, architects, archaeologists, and craftsmen.
JONATHAN BROWNING, THE MAN

A classic example of restoration in Nauvoo is the home of Jonathan Browning. Jonathan Browning was born 22 October 1805, in Sumner County, Tennessee. He became interested in gunsmithing at an early age and learned soldering, brazing, welding, hand-forging, and tempering. At the age of nineteen, he was a competent gunsmith. On 9 November 1826, he married Elizabeth Stalcup. As people moved west, Jonathan's business grew. In 1834 he himself moved to Quincy, Illinois. While in Quincy, he was elected justice of the peace and made acquaintance with Abe Lincoln. His business prospered. During this time Jonathan invented one of the earliest repeating rifles.

By 1840, the Mormons had already begun to settle the nearby town of Nauvoo. A Mormon came to the Browning shop with a repair job and introduced Jonathan to the gospel. Jonathan became keenly interested in The Church of Jesus Christ of Latter-day Saints after reading the Book of Mormon and was soon baptized. In 1843, he moved to Nauvoo and on Main Street set up his business of repairing guns.

After the assassination of Joseph and Hyrum Smith in 1844, the Mormons began leaving Nauvoo. In 1846, Jonathan moved to Council Bluffs along Mosquito Creek. When a U.S. Army officer arrived in July of the same year wanting volunteers to help in the war with Mexico, Jonathan stood in line with other volunteers who later became known as the Mormon Battalion. But Brigham Young would not let him go, knowing that his talents for gunsmithing were needed to help the pioneers as they moved west. Later Jonathan wanted to move west with the first scouts picked to explore the trail, but once again he could not be spared.

Jonathan Browning advertised in the Frontier Guardian of Kanesville, Iowa, on 19 September 1849: “The subscriber is prepared to manufacture, to order, improved Fire-arms, viz: revolving rifles and pistols; also slide guns, from 5 to 25 shooters. All on an improved plan, and he thinks not equalled this far East. (Farther west they might be.)” The repeater gave greater protection to the

---

1For biographical data on Jonathan Browning, see the appropriate section in John Browning and Curt Gentry, John M. Browning, American Gunmaker (Garden City, N.Y.: Doubleday and Company, 1964).
2Ibid., p. 1.
people of the frontier. Indian attacks were reduced because of the firepower of the repeater over the less rapid single shot. For example,

Among the most famous tales of the West are those concerning the advent of these guns. The Indians over the years had developed a simple but effective tactic. After surrounding a wagon train, several Indians would stand and charge, making themselves clear targets. The pioneers would invariably shoot their single ball; then while they were reloading their weapons, the Indians would attack in force. Owners of early repeaters turned this trick to their own advantage. They would fire a single shot, then, when the Indians attacked, continue firing to the fatal amazement of the red men.³

In 1852, Jonathan moved west with the Saints and settled in Ogden, Utah. There he took two more wives—Elizabeth Clark and Sarah Emmett. He fathered a total of twenty-four children, only two of whom died in infancy, one of these in Nauvoo. His first child born after his arrival in Ogden was John Moses Browning, born in 1855. John Moses Browning became known as the world's greatest gun inventor. In 1931, Captain Paul A. Curtis, a well-known gun authority and author, wrote concerning John Moses Browning as follows:

His accomplishments are remarkable, whether they are measured by their innovations, their number, their duration, or their popularity. During those forty-seven inventive years, John M. Browning was issued 128 different patents, to cover a total of some eighty complete and distinct firearm models. They include practically every caliber from the .22-short cartridge through the 37-mm. projectile; they embrace automatic actions, semi-automatic actions, lever actions, and pump actions; they include guns that operate by gas pressure, by both the short and long recoil principle, and by the blowback principle; they include models utilizing sliding locks, rotating locks and vertical locks. Included among them are most of the successful sporting arms which appeared during this period, as well as many of the military arms. It is estimated that well over thirty million Browning-designed guns have been produced to date, by Browning, Winchester, Colt, Fabrique Nationale, Remington, Savage, and others.⁴

In Ogden, Jonathan Browning became interested in many activities other than gunsmithing. He was a good neighbor and helped the incoming settlers from the East solve many smithing problems until he died in 1879.

³Ibid., p. 20.
⁴Ibid., p. 219.
THE BROWNING HOME

The Jonathan Browning site in Nauvoo is located on the south half of Lot 2, which is the northwest quarter of Block 118. Block 118 measures 365.5 feet along Main Street and 397.8 feet along Munson Street. According to the original plat and survey (1839) of Nauvoo, Lot 2 of Block 118 measured 181.50 feet by 198 feet, as did most of the lots in the plat. The streets were 49.5 feet wide, except Main Street, which was 82.5 feet; Water Street, which was 64 feet; and that part of Munson Street west of Bain Street, which was 24 feet wide. Theoretically, therefore, the Browning lot was 90.75 feet by 198 feet. Included in this measurement was 8 feet of an alley to the back of the lot.

The Jonathan Browning property was acquired by Nauvoo Restoration, Incorporated, from the estate of Charles H. Hudson, who died 11 April, 1968. Mr. Hudson had lived in the Browning house for a few years when he was first married, but when the house he was building on the northwest quarter of Lot 2 was finished, he moved from the Browning house to the new home. This move took place in 1916, after which the Browning house was not reoccupied. Since 1916 the house was used mostly for storage and was allowed to decay. Mr. Hudson married Louise Schoell, who was the daughter of Fred Schoell, owner of the home from 1890 to 1912. Lot 2, Block 118, was originally purchased from Joseph Smith, trustee for The Church of Jesus Christ of Latter-day Saints, by Benjamin F. Bird in 1840. After Bird had paid nearly $300 on the lot, he requested a deed for the south half and reverted the north half back to Joseph Smith. However, no record of the deed has been located.

Jonathan Browning obtained the south half of Lot 2, Block 118, about 1843, the same year that he was baptized into the Mormon Church. He left Nauvoo in 1846 during the exodus of the Mormons, and sometime thereafter the mother of Joseph Smith, Lucy Mack Smith, temporarily lived in the Browning Nauvoo home and shop. When the trustees of the Church sold the property to Peter Poncin in 1847, records indicate that on the property there was a "good brick house," "also a good brick blacksmith


209
shop and a small frame barn and a log house."

During the historic Mormon period from 1839-1846, the northwest quarter of Lot 2, Block 118, was owned by George W. Harris, a watchmaker, while Heber C. Kimball owned the northeast quarter, which he subdivided into three smaller lots. The north half of Lot 3 to the south of Jonathan Browning was owned by Henry G. Sherwood. Shadrach Roundy and others owned the property to the rear of Jonathan’s property.

Jonathan Browning lived in the center of activity in Nauvoo. A few blocks south of him were the Mansion House, the Nauvoo House, and the Homestead of Joseph Smith; one-and-a-half blocks west stood the home of Brigham Young; a few blocks north was the Masonic Hall; and across the street were the Times and Seasons buildings. A clear view of the Temple could also be had to the northeast from Jonathan Browning’s home on the flats.

At the time of its excavation the Browning site had not been occupied since 1916, and the structures were in a very bad state of repair. The house could hardly be seen from the street because of the vegetation that had grown up around it through the years. Around the outside of the house the ground averaged 6 to 8 inches above the original ground level, the deepest humus fill accumulating around the house itself.

There were six standing structures on the south half of Tract 118-2 at the beginning of the excavation (Map 1). Structure 1 consisted of a two-story brick house 18.25 feet by 23.79 feet (Structure 1A), a slightly later brick addition 20.86 by 18.25 feet (Structure 1B), a later wooden addition 41.86 feet by 13.21 feet (Structure 1C), and a small porch adjoining Structure 1C to the southeast 9.73 feet by 6.084 feet (Structure 1D). Structure 2 was a carriage shed which had reportedly been constructed from the earlier barn built near the present garage. Evidence that materials from the earlier barn had been used to construct the later smaller shed was seen in the planks. Square nail holes clearly demonstrate the shape of nails used for the earlier barn, while round nails had been used in the later shed. Structures 3 and 4 were coops used for roosting and nesting chickens. Structures 5 and 6 belonged to the large house located in the north half of Tract 118-2 which was built by Charles Hudson and was completed in 1916. Structure 5 was an outhouse painted in the style of the Hudson house. Structure 6 was a two-car garage.

*Property deed of Peter Poncin, 1847, Hancock County Courthouse, Carthage, Ill.*

210
ARCHAEOLOGY OF THE JONATHAN BROWNING PROPERTY

It was first thought that by locating features around the standing buildings the archaeological investigation of the Jonathan Browning site would be relatively simple. Trenching soon proved this initial premise to be false.7

Structure 1A (west side)

Structure 1A (Figure 4) was the main living area and constituted three floor levels. Level 1 is the basement divided into two brick-paved rooms. The walls of the basement are constructed of quarried limestone with the north room plastered and painted white. The walls of the south room appear to be painted only. Set in the north wall is the foundation to the fireplaces of the upper floors. Level 2 is the ground floor consisting of a small entrance room, two staircases—one leading upstairs and the other to the basement—and a living room, which had a large fireplace in the north wall. Level 3 is comprised of two bedrooms. The smaller of the two, located to the north, had a fireplace directly above those on levels 1 and 2. The three fireplaces were built jointly but had separate flues, which opened into a combined chimney at the roof.

On the outside, the door and window lintels and sills of the west wall are made of tooled limestone. The bricks of this house section are a dark red color but at one time had been painted, apparently a shade of white. The bricks appear to be consistent in their red color.

Front Entrance: The height from the historic ground level to the base of the door sill is such that there must have been some type of stoop in front of the door to enter the house. The large stoop was probably no wider than the door since there was a basement window next to it.

Two large tooled stones which were more than likely part of the front entrance were unearthed while archaeologists were excavating within Structure 6. It is doubtful that other entrances had hand-cut, tooled stoops and steps. The larger stone, the stoop, measured 2.5 feet by 1.5 feet by 0.5 feet with bored holes in both edges for shoe scrapers like those found at the Brigham Young house (Figure 4).8 The smaller stone, a step, measured 2.25 feet by

---

7Berge, Jonathan Browning Site.
Figure 4. Front of the Jonathan Browning Site After Excavation

Courtesy of Nauvoo Restoration, Inc.
0.92 feet by 0.4 feet—shorter in length than the other stone, but an end had been broken off. The width of the front door is 2.92 feet, slightly larger than the length of the stoop.

**Brick Walk**: Extending around the east, south, and west sides of Structure 1 was a brick walk. In many places the walk was not more than an inch under the surface but most was buried 3 to 6 inches under soil fill. This walk was not made during the Mormon period. The bricks for the walk may have been obtained from the destruction of the blacksmith and gunsmith shops which may have taken place around 1870. The evidence for this date was derived from a field examination of artifacts excavated from the stone root cellar (Structure 1G).

**Basement Entrance**: Upon removal of the brick walk, which passed directly over the basement entrance fill, the bulkhead walls were readily visible. The walls measured 3.92 feet apart on the inside and averaged 1.09 feet in width. The slope of the natural soil where the fill had been removed was a 3.77 foot drop in 3.3 feet. The inside of the walls was plastered and appeared to have been painted white. Very possibly the steps into the basement were made of brick. Within the fill and rubble, and particularly at the bottom of the filled-in entrance, there were several broken and whole bricks and pieces of mortar. These bricks could have been part of the steps of the outer door support which were pushed in when the entrance was filled.

**Basement Windows**: Adjoining both sides of the bulkhead are basement windows. The north window is not covered while the other has been bricked up. The north window has a brick frame placed on a stone foundation built to the outside of the window. The stone foundation is above the historic ground level and therefore may not have been part of the original design.

As the ground level rose through time, either by natural accumulation or filling in, it became necessary to provide some means to deflect water from the basement windows. With the ground level higher than the windows, water would have run into the basement. Therefore, a stone foundation was built and a brick lining added. Over the top of this construction there may have been a slanted wooden box which aided in diverting rainwater away from the building and the basement windows.

**Stone Walk**: A considerable amount of broken limestone was discovered spreading horizontally from near the front entrance steps south for approximately 15 feet. This was a stone walk and most likely represents the historic ground level. It is very much
like the one in front of the Brigham Young house (Figure 4). Located within and penetrating through the stone walk are evidences of postholes. These posts were probably situated very close to the west boundary of the Browning property, which is 8 feet from the building. This walk was located inside the fence on the Browning property and was not part of the public sidewalk.

*Structure 1A (south side)*

*Door Step:* There is in the south wall a filled-in doorway (Figure 4). Archaeologically there is no definite evidence for a porch. There was one posthole, however, near the house in line with the door. This post may have been used as a brace for a wooden porch or a later post set close to the house. The window lintels and sills are not of stone in this wall and possibly the porch was constructed of wood also. There is no evidence of a foundation for a stoop like the one in the front of the house, and to the sides and rear similar features were made of wood. It seems to have been fashionable to use quarried limestone in the front of the house, while to the sides and rear similar features were made of wood.

*Basement Window:* There is only one basement window in the south wall. A wood frame is still in place as is the wood lintel. This window has a 3-foot opening in the stone foundation for the placement of the wood frame.

*Brick Walk and Arbor:* Evidence of the brick walk extending around the south side of the house from the front was discovered. Early photographs of this side of the house reveal that there was a grape arbor (?) situated in this area. This arbor was bordered by bricks set on their long edge (which were discovered archaeologically). The walk did not extend out around the arbor—only the brick border enclosed the arbor area. The arbor did not date to the Mormon period since it would have covered an earlier well (Well No. 2) located in this same area.

*Structure 1B (north addition)*

Shortly after the main house was built, Structure 1B was added to it, either by Jonathan Browning or prior to his occupation of the house. Both sections are built out of the same type of dark red bricks. There are differences in the technique used to finish the outside mortar of the two buildings, indicating that two

---

9Ibid.
different individuals laid the wall bricks. The doors and windows of this northern addition have wooden lintels and sills, including those in the front, further denoting different construction techniques than those used in Structure 1A.

The brick walk found in front of Structure 1A extended along the front (west) of 1B but not along the north side. The bricks terminated as they curved to form an entrance path into the double door at the north end, west of the building.

Interior: It was thought at first that evidence of the gunsmith and blacksmith shops of Jonathan Browning would be found in this addition. In order to establish this assumption, the post-Mormon wooden tongue-and-groove floor was removed to expose the ground soil beneath. The ground under the floor had been extensively burrowed by animals. Even so, evidence was found on the south side for the existence of an earlier floor. Physical remains and impressions of joists running east and west gave clues to this earlier floor. Above this floor were found the most recent joists which had supported the removed floor.

A stone foundation wall was also discovered extending east-west 5.09 feet from inside the north wall (Map 2). Along the top of this wall was a single row of bricks. This quarried limestone wall had been interlocked as much as 12 to 16 inches with the north-south foundation walls of Structure 1B. Pockets had been left purposefully in the brick sections of the north-south walls for the placement of interlocking bricks for this interior wall. There can be little doubt that this was part of the original construction of Structure 1B.

On the inside of the north foundation wall were found short sections of joists which might have extended over to the inner foundation wall. These joists indicate that the north wall had been added later since they do not run east and west like the rest of the joists in the floor area. This north wall was very loosely interlocked with the north-south foundation. One or two of the stones had been set in the north-south wall not more than 3 to 4 inches while the rest abutted the wall. This is much less interlocking than that found for the interior wall.

Brick Constructions: The brickwork of this section of the house needs special consideration. The brick construction reflects considerable alterations to this segment of the house. The bricks used to build the second story are a pale orange color, which is very different from the dark red type used on the first floor of Structures 1A and 1B.

216
Map 2.
On the inside of the south wall of the second floor of 1B are remnants which indicate that at one time the roof had been raised from its original position in order to add the second story.

North Wall: Additional alterations at the same time included the placement of the north wall in its present location. This wall was constructed of both orange and red bricks. Possibly some of the red bricks were reused in this wall when the northern section of the structure was destroyed. Another difference in the construction of this wall can be seen in the brickwork over the wood lintels. The north wall was very likely built at the same time the second story was raised.

The foundation stones of the north wall have been slightly interlocked with the north-south foundations. Only two or three stones are interlocked with the north-south foundations, and these are set in about 3 or 4 inches, whereas the interior foundation wall is interlocked from 12 to 16 inches. This difference is the primary reason for concluding that the inner wall was possibly original and this north wall later.

Structure 1C (Wood and Brick Building)

Structure 1C was a wood and brick building added to the east side of Structures 1A and 1B. The northern section was constructed of wood which had been placed on a brick and stone foundation. The southern section was constructed of brick laid on shallow stone foundations. During the excavation of this structure it became obvious that this part of the building did not date to the Mormon period. From historical documents we knew that there had been a log house on the property when Jonathan Browning lived there. Footings believed to have belonged to this log house were located underneath Structure 1C (see later section on “Log House”); therefore, Structure 1C belonged to a later time period. Also, an east-west stratigraphic profile of Structure 1C revealed that the brick walk extending around the house was built after the wooden structure had been built. The brick walk and Structure 1C were added after soil had been added to the historic ground level.

Structure 1C was carefully drawn, photographed, and then removed in order to outline the log house remains.

Structure 1D (Wooden Porch)

Structure 1D, a small wooden porch, was eliminated at the
same time as Structure 1C because 1D was more recent in construction. It had been built over part of the brick walk.

**Structure 1E (Gunsmith Shop)**

As excavation of the north grounds proceeded, new foundation walls began to be unearthed. A room 15.33 feet by 13 feet was soon revealed and designated Structure 1E (Figure 5). The north-south foundations were an extension of those belonging to Structure 1B. Structure 1B.

This room once extended into Structure 1B to the unearthed interior foundation, making the room 6.42 feet longer. The double door led into this expanded room of Structure 1E, which may have been Jonathan Browning’s gunshop. The double door seems better suited to a shop than to a living area, such as a bedroom. There would also be more space for his lathe, bench and counter in this room than in the blacksmith shop. In the opposite wall from the door was a filled-in door that once led to the backyard and kitchen.

The basal remains of a brick fireplace were found in the north wall. The hearth opening was 3.85 feet wide and set in the center of the wall. The entire north wall was constructed of brick down to the sterile clay soil on a relatively shallow foundation. This wall had not been laid on a stone foundation, the bricks lying directly on the ground.

**Structure 1F (Blacksmith Shop)**

As excavation continued, more foundations were discovered north of Structure 1E. A room measuring 15.85 feet by 24.66 feet was found in this location. There can be little doubt that this was the blacksmithing area (Figure 5). Coal, small metal scraps, and clinkers covered much of the floor. In several small areas fragments of metal were concentrated, and in one area in particular slag metal was unusually abundant. This heavy concentration of slag was directly behind the fireplace in Structure 1E. Jonathan Browning might have molded many of his gun parts by pouring the molten metal into prepared molds in the ground. Possibly there was a way in which metal could have been smelted in the forge at least in small amounts. Burnt coal was generally found over most of the floor, but the northwest corner of the room was noted for having unburnt coal. Coal might have been used to obtain a hotter fire than that produced by charcoal. The hot fire obtained by the use of coal would have been sufficient to melt iron for molding.

219
Figure 5. North Side of the Browning Site After Excavation, Showing the Foundations of the Gunsmithing Shop and Kitchen
The blacksmith shop had been constructed after Structure 1E. A stone foundation had been placed against the northern brick wall of 1E and on this foundation a single row of brick had been laid for the south blacksmith shop wall. Mortar had been used to fill in between the two walls, which were not interlocked. One to two inches of mortar fill was found between these walls. It is apparent that the two walls were not constructed as one wall and that the blacksmith shop wall was placed against the gunsmith shop wall.

Remains of the forge foundation were found connected to the inside of the north wall of the blacksmith shop. Part of the forge and north wall is missing. A pit had been excavated through both, destroying some of the archaeological evidence.

Curb

Along the front of the house and parallel to the street was a stone curb (Map 2). It was 17 feet from Structure 1A. The upright stones were leaning slightly toward the street. On the street side, supporting stones had been placed to brace the upright stones. The curb on the opposite side of the street is 60 feet from the Browning curb.

At the Browning site the curb had been placed into and through the brick walk leading into the blacksmith shop. It had to have been placed after Browning had this brick walk built up to his shop. This stone curb, therefore, was placed either in the late Mormon period or after.

With the property line 8 feet from the house, and the curb 17 feet from Structure 1, the sidewalk in front of the house must have been 9 feet wide.

Structure 1G (Root Cellar and Summer Kitchen)

Directly behind Structure 1E was unearthed a subterranean root cellar (Figure 5). The walls were constructed of limestone and possibly painted white. On the west end of the cellar was a stone bench 1.33 feet wide and nearly 3.5 feet high (Map 2). This bench might have been used to store crocks of milk or other foods requiring a cool atmosphere. This bench also gave support to the west wall and prevented Structure 1E from caving into the cellar.

The cellar had been constructed against the foundation wall of Structure 1E; therefore, it was built later than 1E and, by the
same reasoning, also later than 1F. The cellar was originally 13 feet by 11.25 feet, but an interior wall had reduced this dimension through later renovation.

**Interior Wall:** On the east end of the cellar several changes had taken place. One of these changes was a wall 1.66 feet wide running north-south 2.60 feet from the inside of the eastern wall. This wall was made of stone upon which brick had been laid. In addition, a single row of brick, which appears to be the remains of a staircase wall into the cellar, had been laid on the south side of the east wall and at right angles to it, extending to the interior wall. The bricks between the two walls were laid on dirt fill.

**Cooler:** On the north side of the staircase was a circular cooler. The wall of this cooler was two bricks thick with an overall diameter of 3.5 feet. This cooler probably was higher originally, extending up through the floor of a structure over the cellar.

Part of the east wall had been torn out in order to build the cooler, and a section of the east wall still runs through the cooler, demonstrating that the cooler had been built last. The high water table allowed the excavation of only 10 feet into the cooler.

**Fireplace:** The basal remains of a fireplace were located in the middle of the south wall. This indicates that above the cellar there was a second story, which could have been a kitchen.

**Cistern**
The only cistern found is located at the southeast corner of Structure 1G and the northeast corner of Structure 1C (Map 2). It appears to be modern since the top of the cistern is above the historic grade and is constructed of brick and lined with cement. From top to bottom it is 10 feet deep.

**Log House**
After Structures 1C and 1D were removed and the debris cleaned up, there began to be uncovered more foundation stones not aligned with those relating to the modern sections of the house (Figure 6). These stones were rectangularly aligned, relatively shallow, and were only one or two stones deep. These foundation stones are not sufficient to support a brick wall. They were possibly the foundation stones for log walls. This foundation measured 25 feet by 16 feet.

Shallow foundations could also indicate a frame structure, but since these stones date to the Mormon period, they could only be
Figure 6. Back of the Browning Site After Excavation, Showing the Foundations of the Log Cabin, Kitchen and Outhouse
the remains of the log house. No historical documents substantiate a frame structure except for the barn, and the barn would not have had a fireplace and a root cellar.

There are indications that the log house consisted of two rooms. In the southern room was found a large pit 10.5 feet by 6.5 feet. This suggests a root cellar with possible access through a trap door in the log house floor.

The fireplace stood next to the cellar in the east wall. When the cellar was dug, burnt stones were found laid neatly in an east-west direction in the hole. It appeared that the fireplace had been pushed over into the cellar from the east wall.

**Well No. 1**

East of the Structure 1C there is a well operated by a metal hand pump on top of a cement platform. This well has undoubtedly been modified in modern times, since it sits quite a bit above the historic ground level. The well itself is constructed of stone and possibly this section dates to an early time period (Map 2). The brick walk which extended completely around the house passed around both sides of the well.

**Outhouse No. 1**

Southeast of the log house was unearthed an outhouse 5.7 feet by 4 feet and 2.5 feet deep (Figure 6). The west foundation wall and part of the east wall were constructed of bricks, while the rest was constructed of limestone. There was a clean-out opening in the south wall.

This outhouse may not belong to the Mormon period since artifacts, such as green wine bottles and chemical bottles, recovered inside the structure generally date from the 1850s and 1860s.

**Well No. 2**

A second well was discovered south of Structure 1A (Map 2). This well was below the brick walk level and therefore earlier than the walk. What was left of the well was constructed of stone without mortar, or laid dry. The well opening was 2 feet in diameter.

**Structure 7 (Barn)**

Historical documents verify that there was a small frame barn on the Jonathan Browning property in 1846. What was probably
part of the quarried stone foundation for this structure was located west of the garage (Structure 6).

Unfortunately, only a very small segment of the foundation is still in its original position. Construction of the later garage and outhouses in the vicinity apparently destroyed the remainder of this foundation. All that can be said about the physical size of this structure is that it was 18 feet wide. There is a break in the foundation stone which may have been a front door; if so, then this door was approximately 6 feet wide and faced the street, or west.

**Outhouse No. 2**

All that remained of this outhouse were the quarried stones of the foundation. Remnants of brick on top of the stone and a quantity of brick in the vault itself indicated that the upper structure had been made of brick.

The foundation measured 5.4 feet by 6.3 feet and 2.5 feet deep (Map 2). On the north side was a clean-out opening 1.35 feet wide. A large area containing artifacts similar to those found inside the vault lay just outside the clean-out area.

Artifacts within the vault were similar to those found in Outhouse No. 1 except that in No. 2 there was a higher percentage of earthenware artifacts. Most of these earthenware bowls and jars had brick-red pastes and were glazed, primarily on the inside.

**Gravesite**

Just south of the southeast corner of Structure 6 an infant burial was unearthed. The child had been buried in a small rectangular hole 1.1 feet by 2.2 feet at a depth of 2.6 feet from the present surface. Burial might have been in a wooden box since two nails were found with the bones. The infant might have been wrapped in a blanket, because decayed fragments of green cloth were found with the remains, or the fragments might have been from the lining of the box or the clothing of the infant.

The age of the child might have been between newborn and six months. The bones were small and extremely decomposed. The long bones of the legs and arms were best preserved, as were a few vertebrae.

Finally, a series of other features were excavated which post-date the Mormon period. These later structures are the outhouses, the sheds, the fences, and the garage.
SUMMARY

Of greatest interest in this article are those features which most likely belonged to the Mormon period (Map 3).

Archaeology has revealed that the original log house consisted of two rooms, the larger containing a stone fireplace and a root cellar. The fireplace was built in the east wall across from the root cellar. The smaller room may have been a bedroom.

To the outside of Structure 1A were discovered the basement entrance, a stone walk, and a well. Structure 1B was found to have had several features modified in post-Mormon times, such as the raised roof and the north wall. Inside under the floor were the remnants of a wall foundation, which was the south wall of Structure 1E, the gunsmith shop. Structures 1C and 1D clearly do not belong to the Mormon period, since they overlie the log house and have their foundations well above the historic ground level. Structure 1E could have been the area in which Jonathan Browning did the fine work on his guns. In addition, he might have sold parts, ammunition or other items in this shop. The only feature identified in this structure was a fireplace in the north foundation wall.

There can be no doubt that Structure 1F was the blacksmith shop. This fact is evident by the clinkers, metal fragments, and coal found on the floor, plus the foundation of a forge. More subtle features included a front and back door, plus a brick walk in front of the shop. Directly behind and attached to Structure 1E were the kitchen and storage cellar. This building had been modified by adding an interior wall, a cooler, and possibly a staircase. Built into the south wall were a fireplace and a basement window. There might have been another window in the north wall. Just outside the southeast corner is a cistern. This cistern may be in the location of an earlier cistern but seems a little far from the kitchen to actually belong to it. The present cistern is modern, as evidenced by its cement construction.

The barn lay to the northeast of the main house. Probably few, if any animals (other than a horse), were kept in it. It appears to have been the size of a carriage shed rather than of a barn. It is not wholly clear whether this was Jonathan Browning’s barn.

Well No. 1 might have belonged to the Mormon period. It was built of stone and later capped with cement for the placement of a hand pump. Outhouses nos. 1 and 2 might have belonged to the Mormon period. In both cases the artifacts date to the
Jonathan Browning Prop.- Nauvoo, Ill.
archaeological features suggested as belonging to Mormon period.
1840–1860 period. There are differences in types of artifacts in the two. Outhouse No. 1 had many green wine bottles and chemical bottles, while Outhouse No. 2 had many earthenware bowls and jars.

Post-Mormon reconstruction was evident inside the existing buildings. Several changes had taken place outside also. Structures 1E, 1F, 1G, and the log house had been torn down. Still later the barn was removed and a garage and other structures were built. Through time nine outhouses and one well had been buried. In the late nineteenth century, possibly from debris of the destroyed structures, a brick walk had been built around the house.

Judging from photographic evidence, the modifications that took place outside occurred prior to the turn of the century. This premise is further substantiated by the fact that the house fell into disuse after 1916.

At present, all those features post-dating the Mormon period have been removed while those belonging to the Mormon period have been restored. The restored Jonathan Browning home (Figure 7) will very likely be among the larger homes restored in Nauvoo. It is a fitting monument to a great inventor, a faithful man and a Mormon pioneer.
Figure 7. Restored Structures of the Jonathan Brownign Site

Courtesy of Nauvoo Restoration, Inc.