McConnell Springs
in
Historical Perspective

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Preface

This report is a synthesis of the culture history of McConnell Springs and expands on information included in an earlier report, The Culture History and Archaeology of the McConnell Springs Natural and Historic Site, written by Nancy O'Malley in 1996 and prepared for the Lexington-Fayette Urban County Government and the Friends of McConnell Springs as well as a document entitled "A Brief History of McConnell Springs: From Native American Settlers to Current Urban Park and Education Center" prepared by O'Malley and A. Gwynn Henderson (Kentucky Archaeological Survey) for use by teachers in a *Project Archaeology* workshop conducted in June of 2002. Research on the culture history of McConnell Springs is ongoing and this report represents a summary of what has been learned to this point.

The 1996 report outlined the findings of an archaeological survey conducted along the proposed primary trail system that has now been installed. Several cultural features were documented, artifacts were recovered, and the general outline of historical functions, events, and people associated with the springs became apparent. At the conclusion of that early phase of research, the springs' history was linked to Native American use, the pioneer settlement of Kentucky, gunpowder production, the War of 1812, the cholera epidemic of 1833, stock farming, commercial bourbon whiskey production, and commercial dairy farming. Subsequent research discussed in this report uncovered additional information that expanded what we knew from the survey work and added linkages to other significant historical events, specifically tying the site to the westward expansion of the frontier, the Indian fur trade of the early 1800s, and the trotting horse industry.

During the course of the research that has taken place since 1995, the potential interpretative power of the site for public education began to unfold. Perhaps most remarkably, this relatively small piece of land has a history with local, national, and international links to a very diverse array of historical events and trends. The research helped direct a consideration of the many ways in which the site could be used to educate visitors about local, national and international history. But the diverse history of the site also posed a challenge to accurately identify all the extant physical features and other evidence that still exist to help tell the story. An archaeological site, by the very nature of its formation and land use history, is imperfectly preserved. Not all evidence survives natural decomposition processes, earlier evidence is erased by subsequent human action, and some events leave no physical trace at all. We are fortunate at McConnell Springs that the preponderance of archaeological evidence at the site dates to the historic era and can be bolstered by historic documentary data. But the story of McConnell Springs could conceivably be changed, and expanded indefinitely as new information comes to light. So this report should be considered a stopping point along a journey, a point at which we examine what we know and do not know and consider how we can use the accumulated information and knowledge about the site for the education, enjoyment and enhancement of the visitor experience to McConnell Springs.

Acknowledgements

Research conducted over a long period of time, in this case, off and on for eleven years, always accumulates many debts to people who helped along the way. I was fortunate to meet many helpful people during the course of the research and I would like to acknowledge their contributions here. First, I am indebted to the board and members of the Friends of McConnell Springs and the Department of Parks and Recreation for giving me the opportunity to conduct research at this fascinating site. Dr. Betsy Adler, former executive director of the Friends, was and continues to be a great source of support, help, advice, and feedback, as well as a treasured friend. The earliest phases of the research were facilitated by Morgan McIlwain and his staff, particularly Jane Wooley. Carolyn Murray Wooley was very generous with her research as well. Gary O'Dell of Murray State University shared information, traded ideas, and discussed interpretations with me for the entire course of the project and I am very grateful for his generous nature, prodigious historical knowledge and keen insights. Dr. John Kiefer and Joseph Ray took time out of their busy schedules to discuss the spring hydrology on site with me during an informative afternoon that furthered my knowledge considerably. I also profited from Jim Rebmann's long familiarity with the site. George Brown graciously lent me historic aerial photographs and shared his experiences and memories with me. Staff members at several archives--University of Kentucky Special Collections, Transylvania University, State Libraries and Archives in Frankfort, National Archives in Washington D.C. and Hagley Museum in Wilmington, Delaware—were unfailingly helpful in locating archival sources.

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Introduction

A visit to McConnell Springs today exposes the viewer to a seemingly natural landscape, with springs bubbling to the surface (Figure 1) and dense tree cover; a closer look reveals remnants of stone fence and foundations (Figure 2) that hint at the cultural past of the place. Modern asphalt paths wind through the site, drawing the visitor in but also constraining exploration of the areas not traversed by the trail system. For the visitor who arrives with no knowledge of what has gone on in the past at this place, a visit might be little more than a pleasant walk, perhaps to be repeated, perhaps only a one-time experience. But, as with any place, further inquiry, closer examination, and deeper analysis reveals a much more complicated story. Many events have taken place at McConnell Springs; many people have played a role in making it what it is today. Some of these events and people are known because evidence has been found to identify and describe them. Further discovery is ever on the horizon.

Figure 1

Figure 2

The many people who support the effort to save McConnell Springs from industrial development consider the place to be important. But why should this place be preserved? Part of the value of McConnell Springs is derived from the natural environment: the springs, the karst features, and the remnant native vegetation. The rest of the significance of this place is derived from the human activities that left discernible traces on the landscape (in the form of culturally altered soil deposits, structural foundations, stone fences, dam abutments, vegetational patterns and the like). Without detailed documentation, understanding the exact nature, date, and meaning of these human activities can be difficult, and insufficient or ambiguous information may lead to their misinterpretation. While there is

still more to be learned about McConnell Springs, the following represents the current state of our knowledge about what has happened at the springs over the last few millennia. It is not nor should it be a static story. Rather, the past of McConnell Springs is seamlessly connected to its present and its future.

Archaeological and Historic Research in the McConnell Springs Area

McConnell Springs is located in northwest Lexington, Kentucky south of Old Frankfort Pike and west of Forbes Road (Figure 3). The springs system forms what geologists call a "karst window," characterized by a hydrologic system that flows largely underground and emerges at the surface as springs. The McConnell Springs system enters the park property from the east. A seasonal pond develops in a low area south of the visitors' center, then the water returns to an underground channel and emerges at another pool called the "Blue Hole." The water flows on the surface for about 125 feet, and disappears again via a swallet at the western end of the pool.[1] The water emerges again as an artesian spring called "The Boils," an apt moniker since the pressure that forces the water to the surface is great enough to make the water bubble or "boil," particularly during times of heavy rainfall. The water flows along the surface for nearly 500 feet until it reaches the final swallet at the west end of the park property where the water again plunges underground. The springs system is within a sink or an area of low elevation, typical of karstic landscapes, a characteristic that led to the springs being called "sinking springs" when they were first discovered by incoming settlers.

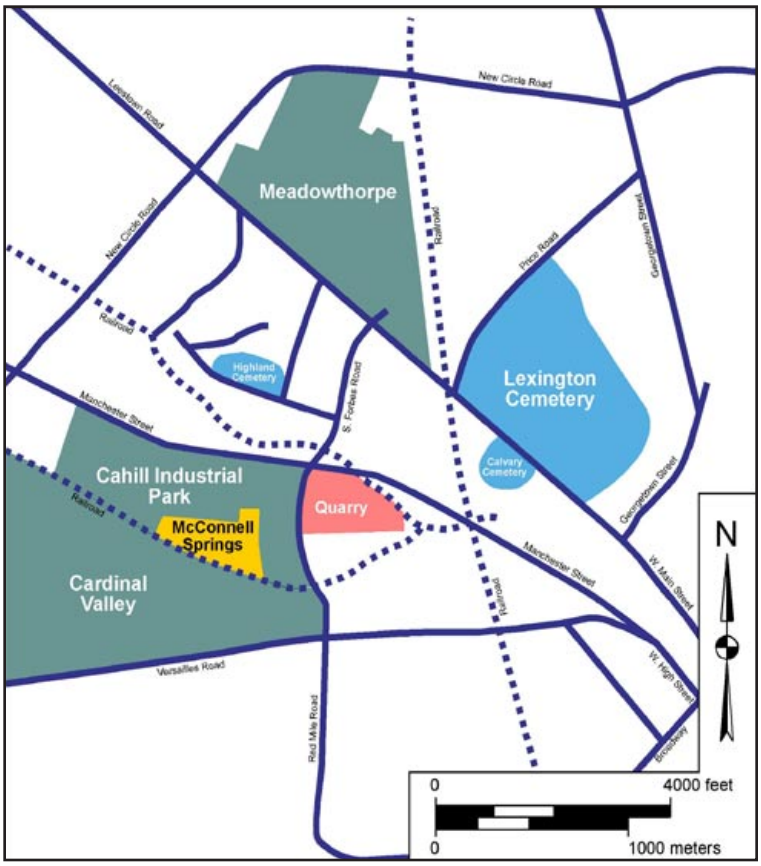


Figure 3

Moving away from the sink, the surrounding land increases rather abruptly in elevation to form the gently rolling landscape typical of the Bluegrass Physiographic Region. Much of this surrounding landscape has been radically modified by the development of the adjacent industrial park to the north and the construction of the railroad on the south.

When Lexington was first established, the springs were outside of town about a mile from the courthouse square. The springs area remained essentially rural; however, by the early nineteenth century, a mixed industrial/agricultural functional pattern was established at the springs that persisted

through most of the nineteenth century. By the early to mid-twentieth century, urban growth gradually began to encompass the area where the springs are located. Today, the springs and the surrounding park form a small green space within a heavily industrialized landscape.

The McConnell Springs archaeological site consists of physical evidence in the form of cultural features and artifacts that reflect the many historic functions that have taken place here since the late eighteenth century. Historic archaeological research involves the use of documentary sources as well as the recording of archaeological remains such as foundations, fence lines, and artifacts. The springs themselves also constitute part of the archaeological evidence even though they originate as features of a natural environment. But many manmade influences have had an impact on McConnell Springs and, as "natural" as it may appear to modern eyes, its current condition is the result of over 200 years of manipulation and modification by its human occupants. Human-induced changes in the natural environment of the springs produced what might be characterized as a palimpsest—something reused or altered but still bearing visible traces of its earlier form. Although originally coined to describe a manuscript on which more than one text has been written with the earlier writing incompletely erased and still visible, the word is an apt metaphor for archaeological sites such as McConnell Springs.

The challenge for the archaeologist is to compile detailed and comprehensive evidence of the history of a site—who occupied it, what activities took place there, when the occupations took place, where specific activities and events occurred, and how these historical events and activities formed the landscape we see today. This "who, what, when, where and how" process requires painstaking research in historic documents as well as careful observation of physical clues on the ground. Diverse sources of evidence then must be analyzed and pieced together, much like a puzzle, so that physical evidence is correctly interpreted in light of the historic documentary evidence. Each line of evidence carries its own value and its own bias; each has the potential to strengthen or refute assumptions and conclusions that the researcher may hold. The final analysis and interpretation must rest firmly on a credible evidentiary foundation.

The research conducted on McConnell Springs covers a vast array of evidentiary sources. Public records such as deeds, wills, inventories and court case files were instrumental in determining landownership over time. Private and commercial sources such as newspaper accounts, family papers, business records, hydrological measurements, secondary histories, genealogical information, personal recollections, photographs, and historic maps helped to flesh out the story. Finally, features such as building foundations, fence lines, vegetation patterns, topographic characteristics, local geologic formations, stream channels, spring outlets, artifacts and culturally altered soils provided a tangible, observable physical framework that related to and informed the documentary record.

The documentary evidence was a very important component of this research project. Identifying past occupants and how they used the land was essential to the recognition of extant archaeological remains representing those occupations. Once the major occupational episodes were known, the

archaeological survey team knew what to look for on the ground. If physical evidence was not found, research then focused on determining why it was absent. When physical evidence was found, research could then focus on determining what it could tell us about the historical event, activity or occupation that it represented.

Research was initiated as part of the compilation of a master plan for developing the McConnell Springs area as a natural and cultural sanctuary (Figure 4). A trail system was designed by Morgan McIlwain and Associates, Inc. Following preliminary documentary research that identified major

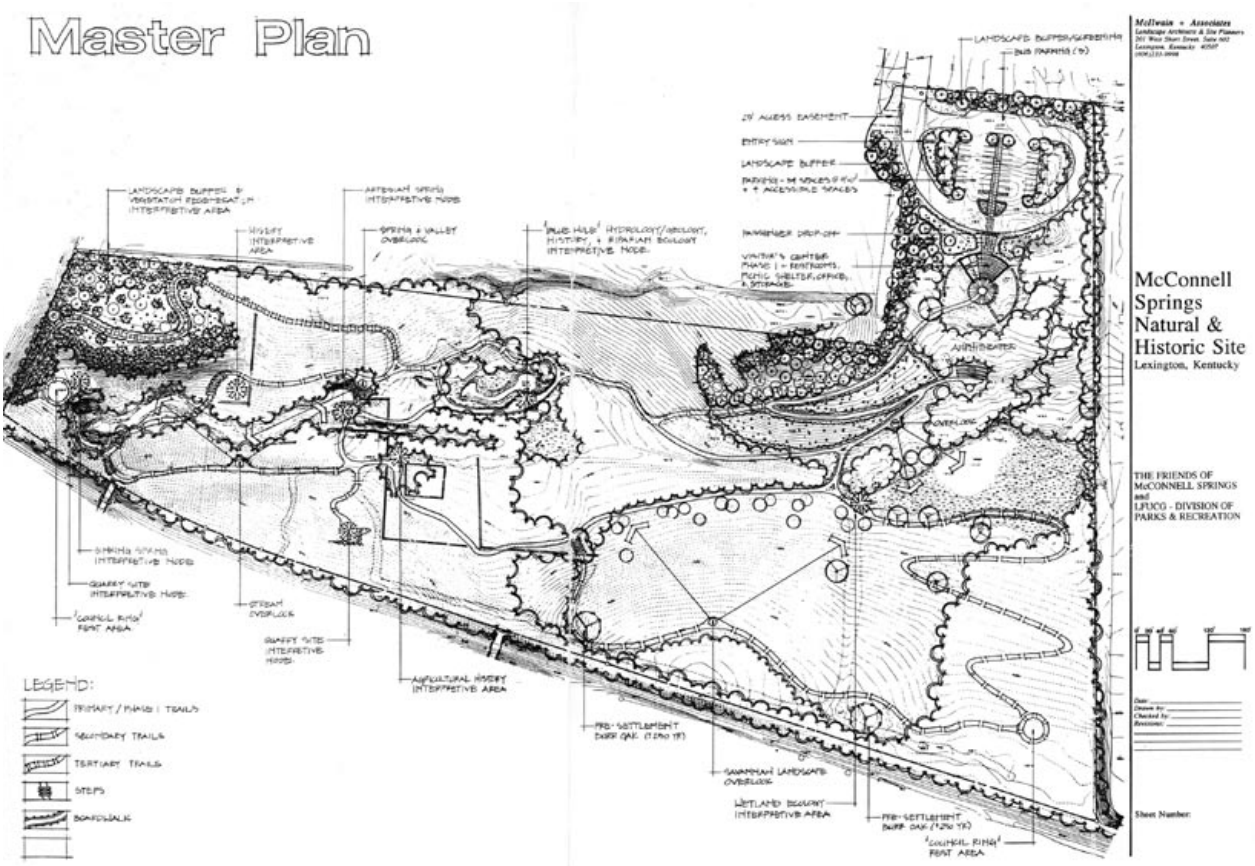


Figure 4

historic events, activities and occupations that took place on the site and provided clues as to the possible archaeological features that might still be present, archaeological survey of most of the primary trail was carried out by the University of Kentucky Archaeological Field School in June of 1995. The main purpose of this survey was to record all observable cultural features or deposits and determine if and how the proposed trail alignment would disturb them. After the survey of the primary trail was completed, selective survey of other areas was undertaken along with limited excavation of archaeological deposits associated with the stone foundation at the Blue Hole. The results of this early fieldwork were outlined in a report by O'Malley in 1996 that identified several cultural features associated with various historic uses of the land. These include a stone foundation at the Blue Hole, a stone foundation downstream from the Boils on the south bank of the water course, a brick floor, stone foundations and a subterranean hearth indicating a former building on an upland

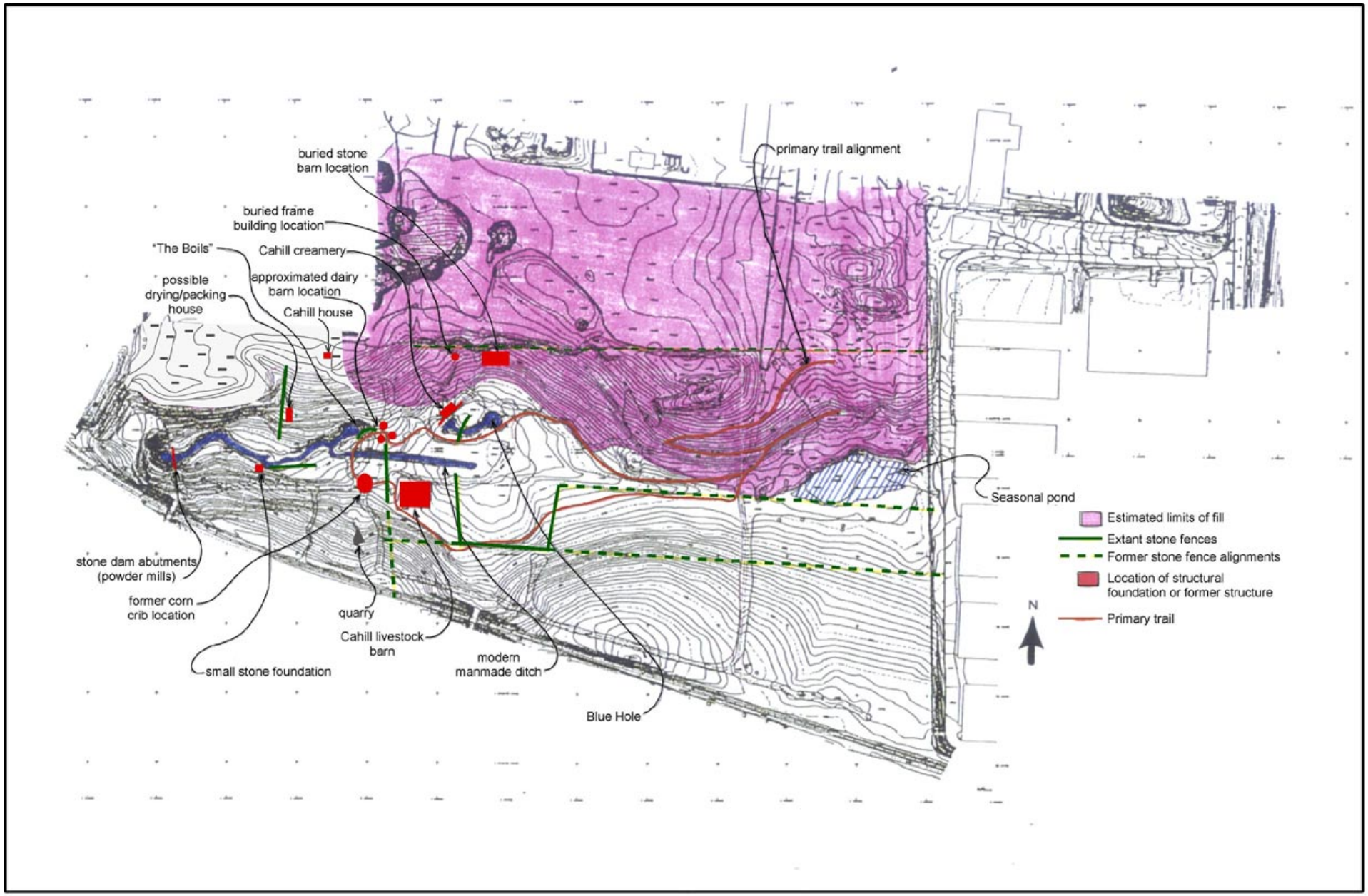


Figure 5: Topographic map of McConnell Springs with all known cultural features.

bench on the north side of the water course emanating from the Boils, dam abutments at the Final Sink, and a post-and-concrete barn foundation. Remnants of stone fences and a stone quarry location were mapped. Subsequent survey in 2001-2002 gathered additional information on known cultural features and identified the location of remnants of the Cahill house complex at the boundary of the park property. Documentary evidence indicated that several other buildings had once stood on the property, including a dairy barn with a gambrel roof, a frame building with stone end chimneys, a stone barn, and two other buildings of questionable function. Survey of the area where the gambrel-roofed dairy barn once stood failed to locate archaeological evidence of this structure. The dairy barn location appears to have been completely bulldozed. The area where the frame building with stone end chimneys and the stone barn is now covered with fill. The remaining two buildings were located very close to the "Blue Hole" but no physical evidence of them was found. Survey of the remaining portions of the park on the east half of the property was also conducted without any further documentation of additional cultural features. This part of the park property is located on high, relatively steep topography that probably was maintained as woodland or pasture during the historic era. The bulk of the cultural features are concentrated around the springs system.

Figure 6

Additional fieldwork conducted from 2001-2003 consisted of limited excavation at the stone foundation at the Blue Hole, clearing and mapping the barn foundation, limited excavation at the stone abutments at the final swallet, and clearing, measuring and mapping the stone foundation located along the stream emanating from the Boils (upstream of the dam abutment). Some additional survey was also done in areas that were too overgrown to examine adequately in 1995 but were subsequently cleared. As a result of these combined investigations and continued documentary research, a number of structural features associated with various aspects of the historic use of the McConnell Springs site (designated by the site number 15FA237) were identified. A master map showing extant archaeological features as well as features that were identified through documentary research but are no longer visible was compiled (Figure 5).

The archaeological fieldwork was coupled with extensive and in-depth documentary research to reconstruct what had happened at the springs in the past, and link these events with extant archaeological evidence where possible. Knowing what happened specifically at McConnell Springs was not, however, enough. The history of the site is linked to the gunpowder industry, Bluegrass style stock farming, bourbon whiskey production, commercial dairy operation, and the trotting horse industry. Discovery of these links led to research on the broader history of all these site functions so that McConnell Springs' historic place or context could be better understood.

Prior to the historic settlement of Kentucky and the establishment of Lexington, American Indians inhabited the land. Prehistoric use of McConnell Springs is suggested by verbal reports of Native American artifacts being found around the springs, the recovery of a few pieces of chert (representing byproducts of tool manufacture) in 1996 during the archaeological survey of the park's proposed primary trail system, and, most recently, the recovery of a chert projectile point dating to the Late Woodland Period, about 1000 years ago (Figure 6). The sparse evidence for American Indian use of the springs does not mean that Indians did not visit McConnell Springs. Judging from the abundant evidence elsewhere that prehistoric and historic Indians made frequent use of Kentucky's abundant freshwater springs, there is no reason to think that McConnell Springs was not utilized. However, subsequent heavy use of the site during historic times has probably erased much of the evidence of Native American occupation.

The general outline of prehistoric culture history in central Kentucky is applicable to the McConnell Springs locale.[2] Archaeologists divide this approximately 12,000 years of human occupation prior to the entry of Old World-derived immigrants into four prehistoric and one historic chronological periods. These periods are useful for describing the long and complex timespan of Native American occupation in the New World.

Many changes in lifestyle, settlement pattern, subsistence, social organization, ritual behavior, and the like took place during Kentucky prehistory. These changes were not always synchronous and many factors affected how these prehistoric peoples responded to their environment. However, some major cultural changes are recognizable in the prehistoric archaeological record. The following sections describe the five chronological periods that have been defined by professional archaeological research. McConnell Springs may have been visited by Native Americans during any or all of these periods.

The Paleo-Indian Period (12,000-9000 years ago)

The earliest chronological/cultural period is termed Paleo-Indian.[3] It begins approximately 12,000 years before present and ends about 9000 years ago. A critically important aspect of the Paleo-Indian period is that it covers human occupation of Kentucky during the Pleistocene epoch, the last major glacial age to occur in the New World. Human groups moved into North America during the Paleo-Indian period, crossing a land bridge between present-day Alaska and Siberia. Through time, successive groups of immigrants made their way south into the interior of North America, eventually taking up residence in all parts of the continent, including Kentucky.

Kentucky was essentially ice-free during the Pleistocene epoch, but glaciers did periodically extend as far south as Covington. The environmental effects of these massive sheets of ice were profound and greatly influenced the development of human societies. Local climate was much colder and vegetation resembled the forests of present-day upper Michigan and Minnesota. Many of the

state's larger rivers were dammed by huge gravel deposits in the Ohio River, causing inland lakes to form. The subterranean hydrologic system of which McConnell Springs is a part probably took shape during this period. Wildlife also was very different. Now-extinct species of bison, mastodon, and other animals in much larger body forms than their modern descendants roamed the Kentucky landscape. These conditions influenced the ways humans adapted to their environment, such as hunting communally, producing warm clothing, foraging for food over great distances, and maintaining egalitarian social organization. Population in Kentucky during Paleo-Indian times was probably very low, consisting of small kin-related groups who moved frequently over large territories.

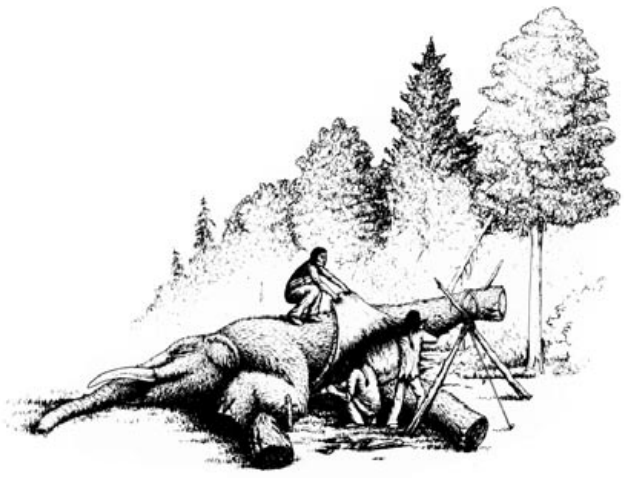


Figure 7. Image courtesy of Kentucky Heritage Council

Because Paleo-Indian population was so low, these peoples left fewer sites than those who followed them. Also, the environmental and land use changes that have taken place since Paleo-Indian times have destroyed or severely impacted many archaeological sites from this time period. Whatever the reasons, our knowledge of Paleo-Indian life is limited. We know that they manufactured tools from a silica-rich rock called chert or flint. The most distinctive examples were beautifully chipped spear or dart points that often had a long, narrow channel extending down the center, which was created through the removal of a single flake. These tools are called fluted points. Archaeologists assign type names to points as a way of classifying them. A common Paleo-Indian point type is the Clovis point. These tools were attached or hafted to shafts and used to hunt large game animals (Figure 7) . Other smaller animals probably also were hunted and the limited inventory of edible plants available in boreal forests were no doubt exploited. Paleo-Indian peoples also made stone scrapers for processing animal hides. They often sought out particularly fine deposits of chert (which occur within limestone formations) to make their tools.

By about 9000 years ago, the huge glaciers had retreated north and Kentucky's environment underwent another series of major changes. The climate warmed considerably, large game animals became extinct, boreal forests of evergreen trees changed to deciduous forests, and other plants common to temperate climatic conditions appeared. Environmental change prompted new adaptations by human groups. Archaeologists mark this shift in environment and cultural response by a chronological/cultural period known as Archaic.

The Archaic Period (9000-3000 years ago)

The Archaic Period lasted longer than any other recognized chronological period in Kentucky prehistory, extending from approximately 9000 to 3000 years ago.[4] Although many changes took

place during the Archaic Period, its hallmark is the highly efficient and successful development of a hunting and gathering subsistence strategy. Historic and modern societies commonly associate stability and security of food supply with food production through agriculture; however, given the right environmental circumstances, human groups can provide for themselves very well by hunting and gathering wild food sources.

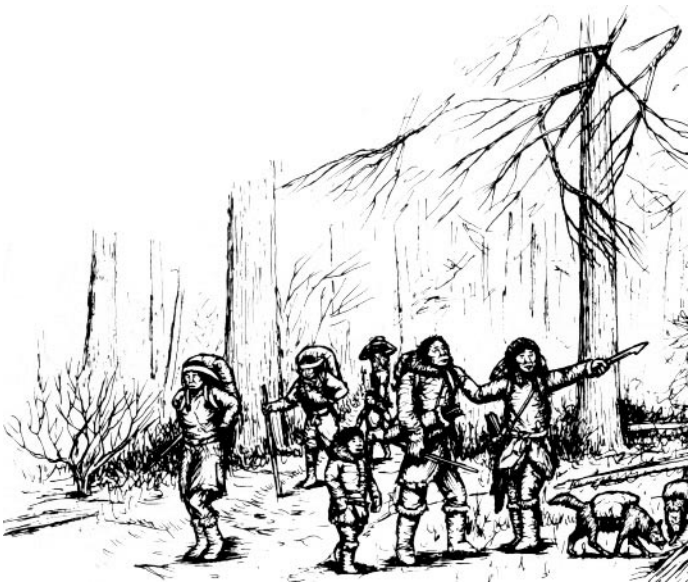


Figure 8. Image courtesy of Kentucky Heritage Council

Kentucky was tailor-made for such a subsistence strategy during the Archaic Period. In fact, this hunting and gathering lifeway was so stable during this period that human populations increased substantially (Figure 8). Archaic peoples sampled liberally from the natural smorgasbord of Kentucky's food resources, but their staple foods included white-tailed deer and nuts. Deer provided meat, hides for tanning, and bone and antler for making tools. Nuts were not only consumed in season, but also could be stored for use during leaner times of the year. Other kinds of foods also were eaten, including many different animals, fish, shellfish, wild fruits and berries, and various herbaceous plants. Many native plants also had medicinal value that was recognized and utilized by Kentucky's native peoples.

The rich diversity of Kentucky's post-glacial age environment offered many opportunities to its human inhabitants. Human groups did not have to travel as far as their Paleo-Indian ancestors to find food. Accordingly, smaller territories developed and, as population increased, differences between groups in various territories increased, leading to more complex social interactions. Archaeologists have documented the development of ritual life involving specific belief systems during the Archaic Period. Death rituals and religious ceremonies that utilized special artifacts, some of which were made from materials obtained through a vast trade network that spanned what is presently the eastern United States, were a fundamental and important part of the lives of Archaic groups.

Other innovations that occurred during the Archaic Period involved the invention of specialized tools and weapons that increased hunting efficiency and allowed for the development of woodworking skills. The development of the spear or dart thrower was an important technological improvement over the hand-thrust spear. The thrower was a separate tool that allowed the dart or spear to be hurled farther distances and with greater force and accuracy. Tools for fishing, as well as

traps and snares also helped improve the chances for procuring a steady supply of meat.

The invention of the grooved axe was a major technological leap that enabled Archaic peoples to clear forests and create favorable game habitat as well as expand their woodworking capabilities. With these tools, they could more easily cut wooden posts and build larger, more substantial homes. They could fashion more efficient water craft, allowing easier transportation of people and goods over Kentucky's waterways.

Figure 9. Image courtesy of Kentucky Heritage Council

Toward the end of the Archaic Period, native peoples began to experiment with plant cultivation.[5] One of the earliest cultigens was a form of squash that resembled miniature pumpkins. People probably used these fruits first as containers, but later genetic modifications generated edible varieties. They also domesticated weedy plants that produced starchy or oily seeds, such as sunflower, goosefoot and maygrass. These subsistence innovations were accompanied by other cultural changes, leading to the next chronological/cultural period recognized by archaeologists and termed Woodland.

The Woodland Period (3000-1000 years ago)

The Woodland Period began about 3000 years ago and lasted for approximately 2000 years.[6] While some aspects of life changed little from the Archaic Period, other important changes took place, particularly in religious and subsistence systems, and probably also in social organization. Experimentation with domesticating native plants continued and gardening became as important a source of food as hunting and gathering. Some tools underwent technological improvements, particularly woodworking implements, which allowed for more sophisticated uses of wood.

One important development was that native peoples began to make ceramics (Figure 9). This had significant implications for cooking practices, food storage and other subsistence-related issues. Pottery also provided a new medium for artistic expression. The adoption of pottery also may have had an impact on certain aspects of native settlement, since ceramic vessels, particularly large ones, are more cumbersome to transport than other containers such as baskets or bags.

An intriguing and significant cultural development during the Woodland Period was the practice of burying deceased individuals in earthen mounds (Figure 10). Woodland people placed their dead in log tombs within these mounds, and over time, the mounds increased in size as additional burials were added. Trade in exotic materials, such as copper, mica, and marine shell is reflected in the objects placed with the dead. Woodland peoples also built other kinds of earthworks that appear to have had ceremonial or religious significance. Enigmatic doughnut-shaped earthworks occur in the central Kentucky area and may have been associated with astronomical observations. This elaboration of religion and spiritual belief systems undoubtedly had social implications as

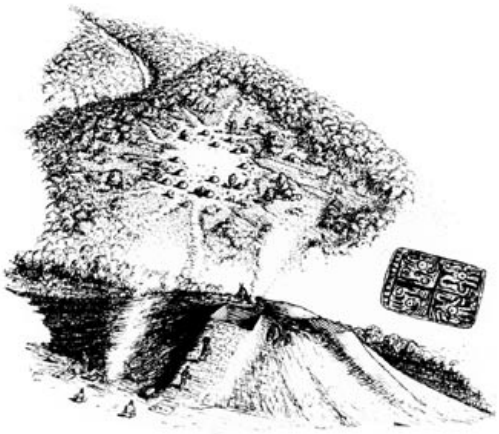


Figure 10. Image courtesy of Kentucky Heritage Council

well, although the exact nature of these influences is not known for certain. However, designs on stone tablets, shell ornaments and pottery all speak to a rich symbolic vocabulary that drew heavily on natural and supernatural characters.

Toward the end of the Woodland Period, even more changes occurred. Woodland peoples stopped building burial mounds, adopted the bow and arrow, and inhabited more intensively occupied, carefully designed villages. The incorporation of nonlocal species, such as maize, into the diet also introduced changes in native subsistence that would have important consequences later. Population continued to grow, and may have reached a point where competition for resources created conflict between different groups. The Woodland Period ended in a state of flux that was resolved with new and innovative solutions in the next cultural tradition, termed Fort Ancient, subsumed within the more general Late Prehistoric Period.

The Fort Ancient Tradition in the Late Prehistoric Period (1000-250 years ago)

Fort Ancient is the name archaeologists have given to the peoples living in central and eastern Kentucky during the Late Prehistoric Period, which dates from A.D. 1000 to 1750.[7] This period is marked by a shift from a hunting-gathering-gardening subsistence economy to an agricultural economy in which a greatly increased food supply could be produced. While hunting and gathering was not abandoned, farming became the basis of the native economy. Rapid population growth resulted, and people established permanent villages, often quite large, that were inhabited year-round (Figure 11). The conglomeration of larger groups of people necessitated more complex social organization and the institution of more complex political systems to adjudicate disputes, organize fair distribution of food, and handle other societal issues that arise when large groups live together in one place.

Figure 11. Image courtesy of Kentucky Heritage

While there were many benefits to the changes that transpired during the Late Prehistoric Period, there were drawbacks as well. Agriculture was more labor intensive than hunting and gathering. Centralized authority provided needed

leadership, but also restricted personal freedoms. Health was sometimes compromised by crowded unsanitary living conditions in the large villages. However, these drawbacks probably were acceptable tradeoffs when compared to the improvements in subsistence, social life, and other aspects of human interaction.

Several lines of evidence indicate that Fort Ancient peoples occasionally had to contend with conflict. Villages with stockades around them have been documented, as have burials containing individuals that exhibit evidence of having been scalped or having died violently. Symbols on marine shell ornaments suggest that conflict was part of the overall ritual system and the role of the warrior may have been important in Fort Ancient society. The Fort Ancient people are considered by archaeologists to be the most likely ancestors of some of the Native American groups Europeans encountered in central and eastern Kentucky.

The Historic Contact Period (A.D. 1540-1795)

The earliest contacts between Native Americans and Europeans took place along the Eastern Seaboard and in the Southeastern United States long before European traders and explorers, and later settlers, physically entered the region that would become Kentucky. As a result of these distant contacts, and in advance of an actual European presence, Native Americans living in Kentucky were affected by European diseases, such as smallpox, for which they had no immunity.

The arrival of the first Europeans in Kentucky, predominantly French trader-explorers, possibly occurred as early as the late 1660s and 1670s. But even as late as the early 1750s, the European presence in Kentucky was a mere trickle of men seeking furs and deerskins, like George Croghan and his trading partners from the Pennsylvania colony, who worked out of his trading house at the lower Shawnee Town.[8] Trade goods, such as firearms, copper pots, and other items, were catalysts for native culture change.

The Treaty of Fort Stanwix, signed in 1768, established the Ohio River as the boundary between Indian lands to the north and English lands to the south, and so by the late 1760s, European explorers began to penetrate Kentucky in greater numbers. Official land surveys and fortified settlements such as Harrodsburg and Boonesborough were established in the 1770s.[9]

Native American settlements were greatly decreased in number. The distribution of their permanent villages across the landscape also contracted, perhaps in response to threats from the British during the French and Indian War (1754-1763). This change in settlement pattern led to the mistaken notion that Kentucky was unclaimed land, and open for the taking. [10]

No information indicates that McConnell Springs ever was the site of any extended historic occupation by Native American tribes. However, it certainly may have been periodically visited, since it represented a reliable water source that attracted game. Settlers coming into Kentucky in the 1770s

found no contemporary occupied Native American sites in the Lexington area, but they soon learned that the land was not considered by Native Americans as "up for grabs".

The arrival of the first Europeans in Kentucky signaled a major change in regional human history and the history of McConnell Springs and its environs. The region's native peoples and their farming way of life disappeared. They were replaced by foreign immigrants, settlers looking for new homes and new opportunities. Although Kentucky was claimed by Virginia as part of her territory, incoming settlers hailed from other colonies as well. William McConnell, for whom the springs are currently named, was born in Pennsylvania, probably in Cumberland County. Others came from North Carolina, Maryland or other colonies. Ultimately, most settlers traced their genealogy back to the British Isles or Europe. Slaves were the exception—immigrants who did not come to Kentucky by choice but were brought here by their masters. Their African ethnic origins, modified and changed by assimilation in the developing American culture, added different perspectives, practices, and beliefs to the mix of folk on the frontier.

From the early survey of McConnell Springs in 1775 to the springs' current use as a city park, its history in many ways provides an opportunity to view broader changes in Kentucky life and culture: themes of initial settlement and discovery; local industries, like gunpowder manufacture that was important to the developing national economy; agricultural activities relating to the horse racing industry and association with the production of bourbon whiskey for which Kentucky has achieved national and even international fame.

The Revolutionary War and Settlement of McConnell Springs (1775-1810)

McConnell Springs enters the historic record during the Revolutionary War, a time of insecurity and danger as European colonists were settling the Kentucky frontier. Kentucky was a magnet for settlers seeking to improve their fortunes. Among them was William McConnell who, with his brother Francis, came to Kentucky in 1775, intent on acquiring land. The McConnell family was Scots-Irish in origin, whose Scottish and English ancestors had colonized Scotland and northern Ireland in the seventeenth century. They were part of a major emigration stream to the American colonies in the eighteenth century. Many of the McConnells settled initially in Pennsylvania and later spread into Virginia via the valleys of the Allegheny Mountains. Their Presbyterian faith attracted them to the frontier where religious differences were tolerated and they could worship as they pleased. But perhaps the greatest attraction was the promise of large expanses of fertile land.

There were many other McConnells who entered Kentucky during this time, and these individuals were kin to William, Francis and James, another brother of theirs, in various ways. The names William and Francis were popular family names; there were two Williams in Lexington, including the one who settled McConnell Springs. He was nicknamed "Buck Elk". William "Buck Elk" McConnell married Elizabeth Thompson and they had five children, Martha, James Francis, Robert, Mary (Polly), and William Lindsay.[11]

William McConnell made his first exploratory trip to Kentucky in 1774, and returned in the spring of 1775 with his brother, Francis, his cousin Andrew McConnell, William, Alexander, and John McClelland, and Charles Lecompt. By May of 1775, the party had reached the forks of the Elkhorn River and also included John Smith, John Maxwell, Hugh Shannon, William Lain, and Cyrus McCracken. Traveling up the North Elkhorn Creek, they established a camp and commenced surveying and marking land and building crude "improvements" with the intention of eventually claiming them under Virginia land laws. Typically, a surveying party established a base camp where they reunited after surveying in groups that included a surveyor who established the direction of the survey lines with a surveying instrument and chainmen who measured the distance of each line with surveyor's chains. Completing their surveys on North Elkhorn, the party made their way to the middle fork of Elkhorn, the major tributary of the South Fork of Elkhorn that later was named Town Branch.[12] William and Francis McConnell each claimed a 400-acre settlement and a 1000-acre preemption that joined one another (Figure 12). William claimed land around "sinking springs" (known today as McConnell Springs) while Francis' land joined on the east. Local tradition claims that Francis and William were at a camp established at the sinking springs in the summer of 1775 along with Andrew McConnell (a cousin), William, Alexander and John McClelland, David Perry, Charles Lecompt, John Maxwell, John Smith, Hugh Shannon, Cyrus McCrackin, and William Lain, as well as possibly John Laffity, Patrick Jordan and John McCrackin, when the news of the battle of Lexington reached them and the group decided to appropriate the name, either for a planned town or for their camp.[13] After finishing their surveys, the group then returned to Pennsylvania to prepare for a more permanent move to Kentucky in the fall.

In April of 1776, after having spent the winter at the station John McClelland established at the Royal Spring (now Georgetown, Kentucky), William McConnell and his brother Francis built a crude improvement log cabin at the sinking springs William had claimed the previous year.[14] As the Revolutionary War gained momentum, the British began to encourage their Indian allies to attack the Kentucky settlers. The year 1777 was called "the year of the terrible sevens" because of the greatly increased Indian raids and attacks. A cousin of William and Francis McConnell, also named Francis and brother to Alexander McConnell, was killed at Harrodsburg in 1777, leaving his land to be later claimed by his brother Alexander in 1780 when the land commissioners held court to adjudicate conflicting land claims. The Kentucky frontier nearly emptied as settlers fled back to the eastern colonies. Those remaining holed up in a few forts: Fort Harrod, Fort Boonesborough, and Logan's Station. William and Francis McConnell took refuge at Fort Harrod and remained there until 1779 when they returned to the Lexington area to help establish a settlement, and, perhaps more to the point, protect their land interests as more settlers poured into the Kentucky frontier. They helped build a stockaded fort in Lexington between April 15 and 19, 1779 to provide a place of sanctuary for settlers during Indian attacks. Settlers fanned out to their land claims and continued to improve them, returning to the blockhouse only when Indian attack threatened.

Kentucky experienced a great influx of settlers in 1779-1780 and numerous defensible stations were established over the central Kentucky area. The McConnell brothers constructed a stockaded

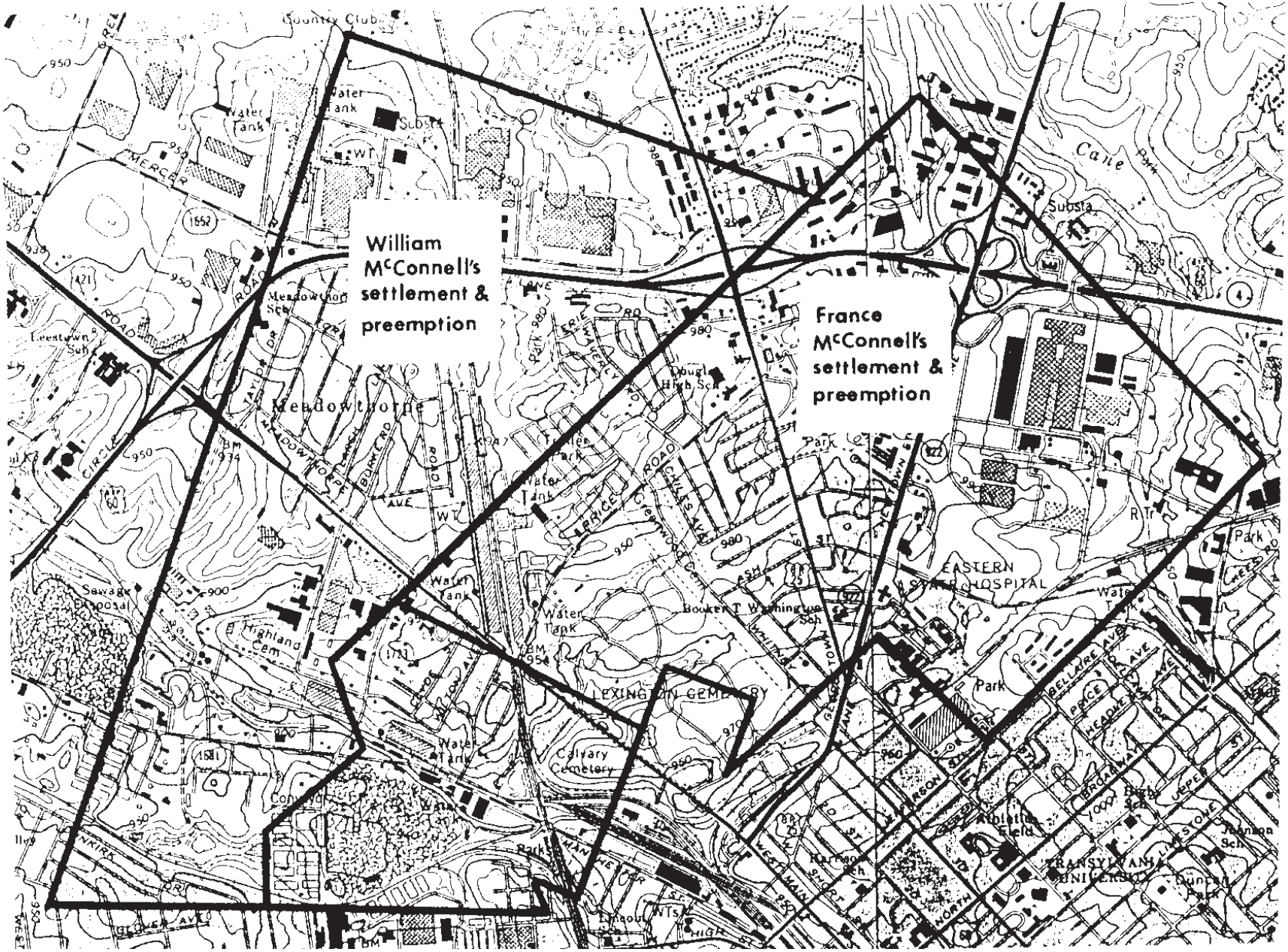


Figure 12. William and Francis McConnell's land claims.

station on Francis' claim in the spring of 1780. Brother James and his family also lived at the station. Jane Stevenson came to live at the station when it was first settled.[15] She described its location as being where Royal's Mill later stood. Charles Staples further identified the site as later being where the Headley Distillery (officially named the Henry Clay Distillery) stood.[16] Later yet, the Blue Grass Pork House occupied the site and finally, the J.E. Pepper Company built another distillery there.[17] These later businesses were located on the southwest side of Old Frankfort Pike between the road and Town Branch of Elkhorn Creek.

The type of site called a station was a curious hybrid of residential and defensive architecture. Unlike the traditional, European-derived military designs of major forts such as Fort Pitt with their diamond-shaped corner bastions, rammed earth ramparts, salley ports and other defensive features, a classic station design was composed of log cabins arranged in a rectilinear enclosure, with the walls of the cabins forming part of the enclosure. The gaps between the cabins were filled with log stockade. Access to the interior was controlled by gates. For example, Strode's Station, located near Winchester in Clark County, Kentucky had a larger gate that allowed livestock to enter, and a smaller gate for human foot traffic in another wall. Stations varied in size, according to the number of inhabitants living there. The occupants usually were families, often related or hailing from the same area, and single young men who rotated between stations as hunters, "spies" or patrollers who looked for signs of Indians. A much smaller number of slaves were also brought to the frontier by their owners.[18]

Josiah Collins listed the following inhabitants at the station: William, John, Samuel and Thomas Stinson (or Stevenson), John Wallace, Francis and William McConnell, Mr. Wiley, William Dickinson, old Mr. Campbell, and Joseph Wallace, all with families.[19] The context of his interview suggests that these people were living in the station in 1783. Jane Stevenson identified Robert Edmiston, Daniel Campbell, William Hadden, John Brookey, two men named Mooney, John Nutt, Matthew Harper and John Stevenson as inhabitants of the station along with the McConnells. The son of John Wymore reported that Samuel Stevenson, possibly William Stevenson, and John Nutt lived at the station. Mr. Wymore also commented that the McConnells never left their station (to take refuge in a stronger fort) and that John Nutt had a gunpowder mill that produced, to Wymore's knowledge, the earliest gunpowder made in the area. This mill was probably little more than a rudimentary arrangement.[20] The station inhabitants were largely Presbyterians with ties to Pennsylvania.

The attack on the Martin's and Ruddell's Stations in June of 1780 prompted the construction of a stronger defense in Lexington. William McConnell was one of four "pushing men" who helped supervise the building of a stockaded fort of traditional military design at Lexington in March and April of 1781 under the command of Col. John Todd. His team included a James McConnell, who was probably his brother recently arrived, along with thirteen other men. Another William McConnell is listed as part of the team headed by William Martin, but this William is probably the man nicknamed "Tanner" who later ran a tanyard on a Lexington town lot and eventually emigrated to Missouri where he died. Expenses for wood work on the gate were paid to "McBride, Torrence,

and McConnell". This McConnell may have been William's brother, Francis, who was supposed to have been a good carpenter.[21]

Although the McConnells helped construct the stockaded fort at Lexington, they lived at the station on Francis' land most of the time. The station was built where the offices of the Midsouth Division of the Vulcan Materials Company are now located. Francis was killed during an Indian attack at the station in 1783. He left no direct descendants and his elder brother, James, inherited his property. A stone structure, built as a residence but now serving as storage, still stands on Manchester Street opposite the offices of the Midsouth Division of the Vulcan Materials Company, formerly the station site (Figure 13).

Figure 13. Image courtesy of Kentucky Historical Society

This house was built by James McConnell on the land grant property he inherited from his brother, Francis. James also built an early grist mill on the property that his wife managed after his death and sold to Thomas Royal. James died between 1790 and 1796, leaving his estate to his wife Mary, and children, John, Mary (Humphries), Elizabeth (Dickenson), James (later interviewed by John Dabney Shane), William, Francis and Margaret.[22] This branch of the family eventually relocated to Woodford County and sold their Lexington property in the early nineteenth century.

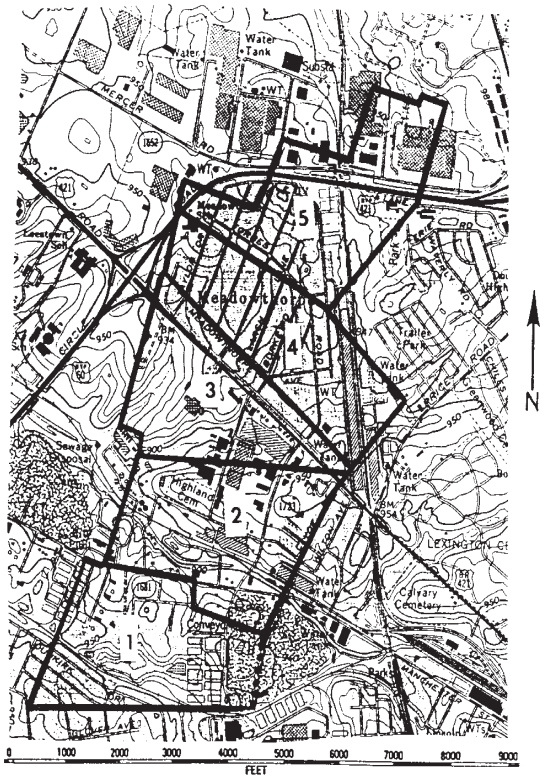
William McConnell established himself as a civic-minded man who readily volunteered for military duty. He served as a captain in the militia under Robert Patterson, Daniel Boone and George Rogers Clark and was one of many men who helped secure the Kentucky frontier during the Revolutionary War. He also participated in the lottery held in 1781 to draw town lots in the newly surveyed town of Lexington. He, along with other early settlers, was eligible for a half-acre in-lot and a 5-acre out-lot. Although he apparently never improved his lots, and they were ultimately forfeited to the town trustees, he had sufficient interest in the town's development that he served as one of the town trustees in 1782 and again in 1786, when he resigned his position because it had become "inconvenient to serve."

No evidence specifying the precise date at which William McConnell left the station on his brother's property to build his own permanent home has been identified. He probably left once the Revolutionary War was over when conditions were safe enough to settle on one's own land. He built

a stone house which is still standing on Forbes Road, and is mentioned in his will and referenced in the land division among his heirs.

William McConnell died in late 1792 or early 1793.[23] At the time of his death, all of his children were still underage and his wife was left to rear them to adulthood and manage her husband's estate on their behalf. William's family included his wife Elizabeth (Thompson), sons Robert, William Lindsay, and James Francis, and daughters Martha and Mary. William McConnell wrote a will in 1787 that was probated in 1793. Delay in settling an estate was not uncommon when the children of the deceased were still underage. By 1805 when a division of land between the heirs was filed with the county court, William's daughter Martha was married to George Robinson (in 1804) and most of the other children probably had reached or were near legal age.[24] During his lifetime, William sold or lost some of his acreage from his settlement and preemption grant, but kept most of it. At his death, 817 acres remained to be divided between his children. His wife, Elizabeth, did not claim her dower right in the estate. However, she continued to live in the stone house William had built until she left Lexington to take up residence in Woodford County.[25]

Figure 14



1, Robert McConnell
2, Martha Robinson
3, William McConnell jr.
4, Mary McConnell
5, James McConnell

All of the divided acreage was part of his settlement and preemption grant. The land ran from approximately where the current L & N railroad track runs south of Old Frankfort Pike northeasterly to beyond Mercer Road. Five lots were designated to each of the children. Lot 1, containing the sinking springs, went to Robert McConnell. When the estate divisions are platted and placed on a modern map, most of Robert McConnell's northern boundary appears to run along Old Frankfort Pike. A small part of his sister Martha's tract (Lot 2, located adjacent to Robert's land) extended to the south side of Old Frankfort Pike.[26] Lot 3, assigned to William Lindsay McConnell, Jr., was a triangular shaped parcel that contained the "mansion house," where William was living when he died. Elizabeth McConnell continued to live here with her youngest son after her husband's death. Although she relinquished her dower right in the estate, she had the right to occupy the house in which she had been living until her death, remarriage or departure from Lexington. William McConnell's stone house now occupied by the company Eugene Barber and Sons stands on this parcel. Carolyn Wooley concluded in her book, *The Founding of Lexington*, that William McConnell,

Sr. built this stone house. (Figure 15).

Figure 15

Another stone house also once stood on the part of William McConnell's land south of Old Frankfort Pike that was inherited by his son, Robert, and daughter, Martha, and included the sinking springs. This house, along with a large stone barn, is mentioned in an advertisement published in the local paper in 1837 when the land was offered for sale by Thomas Smith.[27] A 1901 photograph of the farm shows the stone barn near the springs but the location of the stone house is not known. Carolyn Murray-Wooley located the remains of a structure with a stone foundation near the springs in 1974. The remains of this structure was still visible around 1987 but unfortunately, industrial fill now covers this foundation (Figure 16).[28] This structure could have been the stone barn mentioned in the 1837 advertisement and shown in the 1901 photograph.[29] (Figure 17) William McConnell's

Figure 16

probate records do not mention a house on this tract and evidence linking it to the McConnell family is not conclusive. Since William McConnell, Sr. built his stone house elsewhere and his children were all underage when he died, it appears unlikely that he built another stone house before his death. However, the McConnell family seems to have preferred stone masonry construction. Robert McConnell, who was a wheelwright, inherited this tract and sold it to George and Samuel Trotter in 1810[30]; he (Robert) may have been responsible for the house and perhaps the barn being built

here although he did not occupy the land for very long. It is also possible that the stone structure was built in conjunction with the gunpowder factory established on the site by the Trotter brothers.

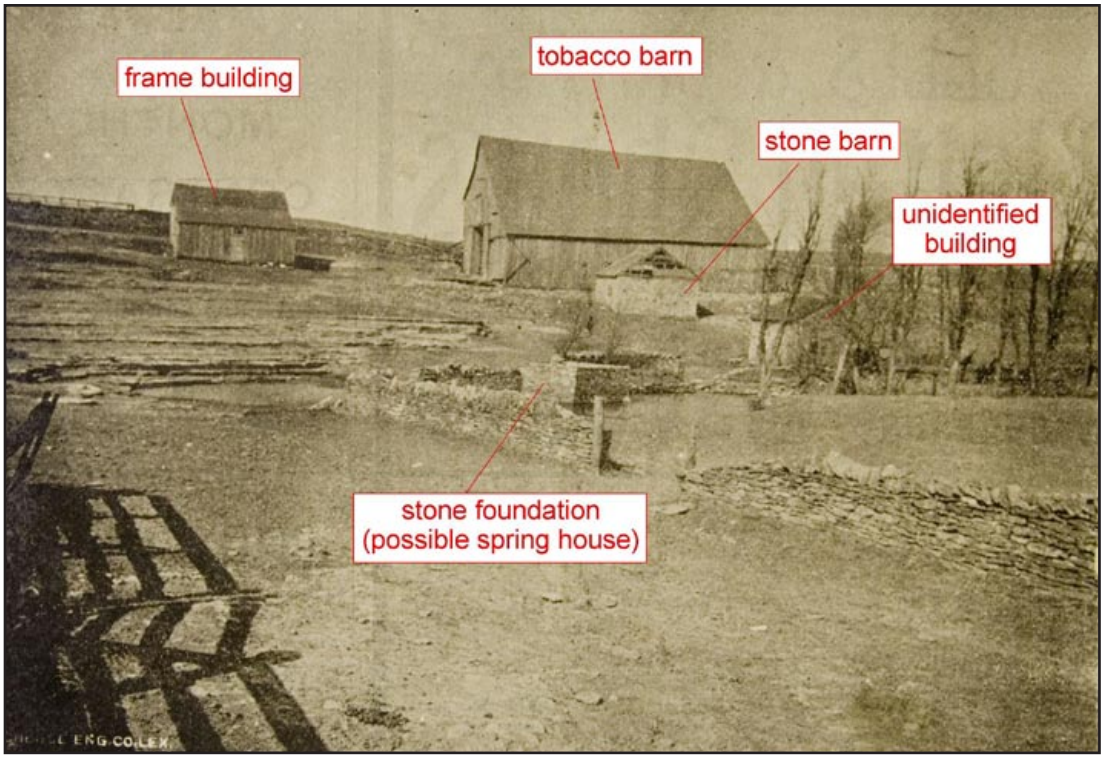


Figure 17

The age of these structures may be possible to determine if their foundations could be exposed and archaeological excavations undertaken at some future date.

The Trotter Gunpowder Mill (1810-1834)

On February 1, 1810, Robert McConnell, Elizabeth McConnell (the widow of William McConnell, Sr.) and James Francis McConnell sold 164+ acres from Robert's allotment to Samuel and George Trotter for $4125.00.[31] The next month, the Trotters purchased 20+ acres from Martha McConnell Robinson and her husband, George, for 200 pounds.[32] This tract was out of Martha's allotment where it extended to the south side of Old Frankfort Pike. The purchase of this small tract may have been motivated by the desire to have continuous frontage on Old Frankfort Pike, but it is also possible that there was a house or other appurtenance on the tract that increased the land's value. The Robinsons lived in a stone house on the Frankfort Pike but it was on the north side of the road and was sold to Benijah Bosworth in 1818.[33] It is no longer standing.

Although the two Trotter purchases were paid for using different monetary nominations (pounds and dollars), a British pound was worth $4.30 in 1810.[34] Using these figures, the price per acre for the land purchased from Robert McConnell was approximately $25.15 compared to $43.00/acre for the Robinson tract. The difference in acreage value suggests that the 20 acre parcel contained

improvements or other features that made it valuable enough to the Trotters that they were willing to pay almost double the amount per acre they paid for the adjoining property. These purchases gave the Trotters access to Old Frankfort Pike and a plentiful water source (Figure 18).[35]

George and Samuel Trotter were brothers, and members of one of the wealthiest families in Lexington.[36] They had come to Kentucky from Augusta County, Virginia as children with their parents, James and Margaret Trotter, in 1784. Settling initially in Bourbon County, the family later relocated in Lexington and established mercantile businesses. Both sons married well, Samuel to Catherine Gatewood and George to Eliza Pope (daughter of prominent Congressman John Pope). George and Eliza had only one son, John Pope Trotter, prior to George's premature death in 1815. Samuel and Catherine (also known as Kitty) had at least eight children before Kitty's death in 1830. These children included James Gabriel, Samuel, Jr., William Leavy, Mary Ann, Sarah L., Cordelia, Margaret G., and Georgetta.[37]

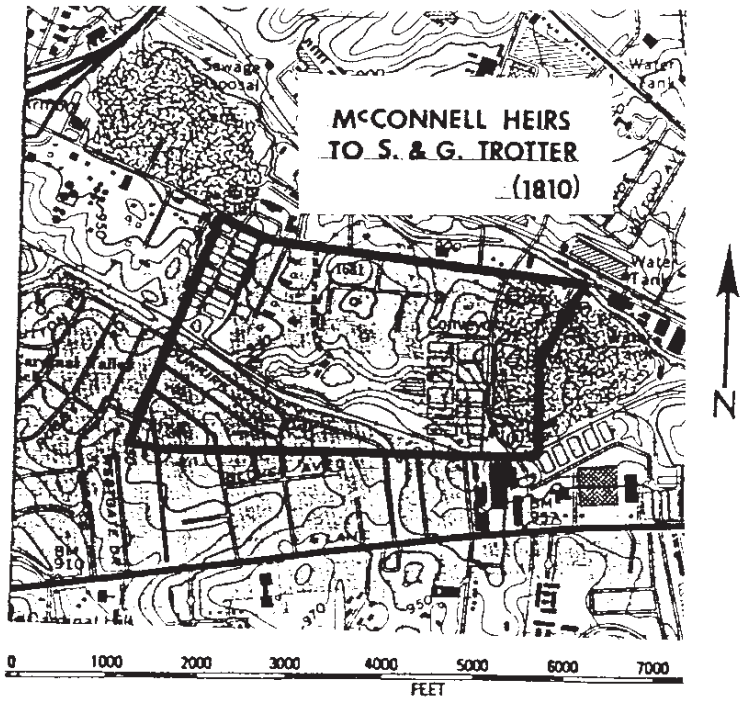


Figure 18

James Trotter became active in politics and turned his business over to sons Samuel and George in 1797. The two brothers established a firm called S. & G. Trotter and Company that operated a general store, ropewalk and white lead manufactory, and owned numerous rental properties. For reasons that remain unclear, the brothers conducted their business separately from December 1, 1810 to November 1, 1811.[38] But 1812 brought a renewed collaboration of their business interests. On August 28, 1812, Samuel and George Trotter executed a complex set of agreements concerning their joint enterprise (see Appendix A).[39] Samuel Trotter agreed to turn over all the profits he made during the time he was conducting business separately from his brother (excepting only profits made on speculating in merino sheep) in return for George Trotter signing over his interest in the McConnell property and 45 shares of Kentucky Bank stock. Samuel was allotted two slaves, a gold watch worth $250 and the lot on which he was then building including the paving that was to be done by Robert Grinstead. The lot and pavement were considered equivalent in value ($4000) to the lot that George Trotter had purchased from the McNair heirs, using the firm's funds. The rope walk on Tates Creek Road became the sole property of George Trotter but Samuel Trotter was equal in all its profits and losses and George's mercantile concerns as well as debts or claims made during the period of separate

business dealings. The two brothers had been drawing on the firm's money for personal expenses and the support of their families and their private accounts were compared and joint property was divided between them to equalize their holdings. Additional agreements were reached concerning their horses and carriages, several slaves, their household furniture and their private expenses. The partnership was to continue in force until January 1, 1817. No mention was made of the gunpowder mill in these articles. It may not have been built yet but it must have been in operation by December of 1812 because the Trotters were seeking a federal contract for gunpowder by then.

An additional memorandum to the articles was written on August 28, 1813 that dealt with the gunpowder mill. This document acknowledged that the mill had been built at the expense of the firm and laid out agreements concerning the division of assets when the partnership expired. An undated set of agreements that must have been written before George Trotter's death on October 13, 1815 laid out the conditions for the consolidation of Robert G. Dudley & Co. with the Trotter firm. Samuel Trotter agreed to rent his farm to the copartnership for an annual rate of one hundred pounds. The gunpowder mill was rented separately to the firm for $500.00 per year. This rent covered all the stock and materials. The factory employed slaves who were rented at a rate of $85.00 per year for adult males, and "a fair price" for boys and women. White employees served as supervisory staff. The firm was to furnish boarding, lodging and clothing for the mill's employees, as well as pay the taxes and indemnify the Trotter brothers against all injuries that the workers sustained in the event of explosions. On September 23, 1815, additional articles of agreement were made between Samuel and George Trotter and Robert G. Dudley in which Dudley was given the option of being involved in the powder mill but he had to make up his mind by July 1, 1816. Samuel and George Trotter retained the right to draw on the firm's financial assets to operate the gunpowder mill.

Gunpowder was a valuable commodity in Kentucky. It was needed for home use and, with the beginning of the War of 1812, for the war effort. Samuel Trotter was in charge of the gunpowder production, making a good profit, while his brother George served as William Henry Harrison's personal aide-de-camp through early 1813. The firm received contracts to supply powder to the U.S. Ordnance Department during the War of 1812. Success in contracting with the federal government was as much a matter of having influential friends as producing high quality powder. The Honorable Henry Clay and John Pope, both members of the U.S. Congress, each wrote letters of recommendation for the Trotters, who submitted powder samples to be tested and proved by government officials.

The Trotters initiated contact with the Ordnance Department in Washington, D.C. through an agent. A letter from Col. Docius Wadsworth, the Commissary General of the Ordnance Department, to Callender Irvine, Commissary General of Purchases, stated that the Trotters' agent offered to furnish "50,000 lbs gunpowder, cannon & musket, deliverable at Pittsburgh or on the Ohio at 55 cents per lb or deliverable at New Orleans at 60 cents."[40] The offer was followed up by a letter from Congressman Richard M. Johnson on January 7, 1813, that contained more details of the quality of the powder to be supplied, and the nature of its packaging (see Appendix B). The Honorable Henry

Clay also threw his support to the Trotters by sending a letter of recommendation to Callender Irvine on March 1, 1813, that said, "In making any contract with those gentlemen you may place confidence in their integrity punctuality and responsibility."[41] Irvine replied favorably to Richard M. Johnson who passed the good news on to the Trotters. The Trotters responded with a letter dated February 18, 1813, acknowledging the intent for a contract and advising Irvine that they sent a gunpowder sample by Daniel Bryan (a Lexington businessman and powdermaker) that was "probably neither the best nor worst that we are in the habit of manufacturing." The Trotters also designated either Robert G. Dudley or Alexander Henry, Jr. & Company to serve as their agents. Two more letters of support were sent to Callender Irvine during the course of contract negotiations. George M. Bibb and Anthony New of Washington, D.C. recommended the Trotters as "merchants of great capital, & undoubted punctuality." Congressman John Pope, who had a house in Lexington when he was not in session in Washington and was George Trotter's father-in-law, also sent a letter of support dated March 1, 1813, assuring Irvine of the Trotters' integrity and abilities. All of these recommendations came from politically powerful men who were accustomed to writing such letters as part of a well established political patronage system. (See Appendix B for transcripts of correspondence.)

The contract was finalized by April of 1813 (to run through April of 1814) and Alexander Henry & Co. of Philadelphia was identified as agent authorized to conduct business on the Trotters' behalf. Gunpowder was delivered in batches. A letter dated July 4, 1813 from the Trotters to Callender Irvine indicated that 3558 lbs of powder were delivered to Pittsburg, and an additional 410 lbs sent to Col. Richard M. Johnson's Mounted Regiment. There was also 1545 lbs of powder stored in the magazine at Newport and 124 casks containing 100 lbs each on its way to Pittsburgh, totaling 17,913 lbs of powder produced and delivered over a period of only a few months. On February 28, 1814, Callender Irvine informed Docius Wadsworth that the Trotters had delivered 25,008 ¼ lbs of powder to Pittsburg and that the remainder of powder (amount unspecified) under the contract was ready to be delivered. Two weeks later, the Trotters' agent, Alexander Henry, wrote a letter to Commissary General Irvine, informing him that all the powder under contract had been delivered and approved, that more was on hand if the government needed it, and that the Trotters were desirous of entering into another contract for the coming year. This letter followed one sent by the Trotters themselves on January 24, 1814, expressing their desire to enter into another contract.

A second contract was signed on April 2, 1814 for the delivery of 60,000 lbs of "good & approved common, Musket & Rifle Powder" (see Appendix C). The contract stipulated that the powder was to "give on proof fifteen degrees, by Rigorous Eprouvette," and that the nitre or saltpeter used in its production was to be perfectly refined. The price was set at 49 cents per pound. Powder was deliverable in amounts of 100 lbs, in "good and substantial barrels," provided at the Trotters' expense. To better safeguard the barrels during transportation, they were to be bailed with cloth, not to exceed 25 cents per yard and paid for by the United States. The final clause of the contract referred to political influence in that it "expressly conditioned that no member of Congress, is or shall be admitted to any share, or part of this contract or agreement or any benefit to arise therefrom." Alexander Henry signed on behalf of the Trotters and Callender Irvine served as signatory for the

federal government. A second contract signed on the same day stipulated that the 60,000 lbs was to be divided into 50 barrels of cannon grade, 150 barrels of musket and 50 barrels of rifle grade, with various amounts being delivered to Pittsburg, Pennsylvania, Newport, Kentucky and New Orleans, Louisiana. The price of the powder sent to Pittsburgh and Newport was set at 55 cents per pound, and the New Orleans powder was priced at 60 cents per pound. This contract appears to have been intended to specify the type and amounts of powder to be produced, the delivery locations, and price variations to cover transportation costs (see Appendix D).

Problems arose during the second contract when the United States government failed to pay the Trotters for powder that had already been delivered. A few days after the second contract was signed, Callender Irvine wrote Docius Wadsworth that he was anxious that the Trotters be paid for the powder delivered to Col. Johnson. By August of 1814, the matter was still not settled. Callender Irvine wrote directly to the Trotter brothers, informing them that he had offered to settle the account with Alexander Henry by paying him $12,000 in treasury notes, an offer that Mr. Henry refused. Irvine asked the Trotters to intervene and direct Mr. Henry to receive at least part of the payment in the notes, and further stated "you will excuse me when I say I should be pleased by your appointing some other person as agent to transact your business with me" (see Appendix B). The difficulty in payment arose because the British had entered Washington, D.C. in the summer of 1814 and burned the Capitol and White House. The government's credit collapsed in the absence of a national bank and the nation's finances were in a state of chaos. Financial gloom continued for the next few years, and the Trotters were still trying to receive final payment from the government in June of 1815. Their letter dated June 1, 1815, referred to a loan they had taken out in Philadelphia that they had planned to repay with the balance of the funds due from the federal government. The delay in receiving the money and the "great scarsity of money" in Kentucky placed them in the embarrassing situation of being unable to meet their debt obligation. No documents were found to determine if the Trotters ever were finally paid for their powder. However, a June 16 reply by Callender Irvine to the Trotters expressed his regret that their claim had not been liquidated and promised that the money would be paid as soon as funds were available.

With the end of the war, the demand for gunpowder dropped dramatically and the Trotters no longer entered into contracts with the United States government. However, the Trotters' powder mill continued to produce powder for local and regional customers. The Trotters also sold saltpeter for a few years after the war but foreign competition killed the local trade and the Trotters were buying refined saltpeter from London markets by 1818.[42] They supplied gunpowder to firms such as Vernon & Skidmore of Louisville for use by hunters, and sold much of their inventory to the Indian trade through an agent in St. Louis. They also sold gunpowder at their own store in Lexington. Unfortunately, George Trotter became severely ill and died unexpectedly on October 13, 1815.[43] The articles of agreements and their amendments between the Trotters and Robert Dudley called for a reevaluation of terms in the event of the death of any of the partners but Samuel Trotter and Robert Dudley seem to have continued to work together, finally filing a copy of their copartnership agreements in 1823 and 1824. George Trotter's interest in the business was settled with his heirs and

they had no further association with the company.

Since Samuel Trotter had been the principal proprietor of the firm all along, the business did not suffer. The gunpowder demand slowly grew over the next few years, and Samuel Trotter took advantage of it by actively seeking distribution contracts and aggressively advertising. His ability to produce large quantities of powder made him a formidable competitor.

In 1820, the Federal Government took a census of manufacturing concerns in each state and Trotter's mill was listed under Fayette County (Appendix F). Trotter filled out or provided answers for a questionnaire that requested information concerning the raw materials employed, number of employees, machinery, expenditures and annual production. Trotter reported an annual production of 125,000 to 140,000 pounds of powder, depending on demand. However, the mill's potential annual capacity was 275,000-300,00 pounds of powder per year. By comparison, the Eagle Powder Mills, operated by Roman Trotter & Co. south of Lexington, produced 45,000 pounds of powder per year, a quantity that was half its capacity. Other gunpowder mills reported in the same census produced far lesser quantities. The number of male workers, most if not all slaves, employed by Samuel Trotter varied from 10 to 15, depending on whether adequate amounts of water were available to run the two water-powered mills, which carried forty heavy pestles or pounders. Two horse-powered mills carrying forty pestles were used when water was inadequate. These mills were used to incorporate or mix the raw ingredients so that each grain contained the proper proportions of ingredients to form viable gunpowder. A horse-powered mill carrying sixteen light pestles was used for "beating up powder dust, [and] pulverizing brimstone and charcoal." Also included at the factory was a refinery for the saltpeter and sulphur (called brimstone), a graining house, a drying house, and other unspecified necessary buildings. Although not mentioned as part of the response to the census questions, Trotter's mill had the capability to produce glazed powder, which involved the use of a glazing barrel. The census return indicated that the maximum production rate of the factory could be 275,000 to 300,000 pounds, if full employment could be obtained; however, the importation of European powder (that then was sold in New Orleans and other parts of the Mississippi Valley) cut significantly into Kentucky's market share for this region.

Although all of the gunpowder-related buildings were not specified in the 1820 census entry for the Trotter mill, reference to other gunpowder mill descriptions and the inventory taken after Samuel Trotter's death make it possible to reconstruct with reasonable accuracy what the Trotter mill complex contained (Appendices E and F). E.I. DuPont, who made gunpowder in Delaware and was one of the Trotters' major competitors, described the layout and buildings he deemed necessary for an up to date gunpowder factory.[44] He stressed the need for a sufficient source of water in a location at some distance from cities (for the better discipline of the workers rather than safety concerns). The location of the Trotter gunpowder mill certainly fulfilled this requirement; it was over a mile from downtown Lexington, sited in the center of the land owned by the company on Old Frankfort Pike, and contained abundant freshwater supplied by two springs. DuPont also recommended separating the steps of the gunpowder production process and distributing the various steps between separate

buildings arranged "at prudent distances from one another" along the water source. The entire complex should be surrounded by a board fence. Archaeological fieldwork identified several building foundations that are thought to represent physical evidence of several components of the gunpowder factory built by George and Samuel Trotter. All of the foundations involved stone masonry construction and all are distributed in a linear pattern in close proximity to the springs.

DuPont described or listed fourteen buildings in his plan for a gunpowder mill establishment. These included:

- the director's house
- workmen's housing located near the director's house
- a saltpeter refinery
- a wheel-mill for pulverizing raw materials
- a composition house for the initial mixing of ingredients
- a water-powered stamping mill, isolated from other buildings
- a water-powered glazing mill, similarly isolated but closer to the stamping mill
- a graining mill
- a dry house
- a dusting and packing house, located near the dry house
- a powder magazine located away from the dwellings
- a cooper's shop
- a furnace and boiler for refining sulphur
- a brick furnace for burning charcoal

These functionally specific buildings represented an ideal plan; available evidence indicates that the Trotters combined some of the manufacturing steps within a single building. The total number of separate buildings attached to the Trotter establishment may be estimated at a minimum of eight to perhaps as many as eleven or twelve. Considering the processes necessary to produce gunpowder, water was required in the pounding or stamping mills, and for the refinement of the saltpeter and sulphur. DuPont also recommended water power for his glazing mill but other power sources could have been used for this step. Other aspects of the process were not dependent on ready access to water. The danger of explosion increased exponentially once the gunpowder ingredients were incorporated into the final product. Thus, extreme care had to be taken in the stamping mill, glazing mill, graining mill, dry house, dusting and packing house, and powder magazine to prevent explosion.

According to DuPont, the director's house was to be placed on the highest point of land in a corner of the enclosure so that the entire plant could be viewed. The Trotters did not live on the mill property but a stone dwelling was specified as being on the tract in 1837 and probably was there much earlier. This house could have been occupied by an overseer. Its location is unknown. Dupont recommended that separate lodgings for the head workman, the cooper and the carpenter, and a dormitory, kitchen and dining-room for the workers be located near the director's house. The Trotters used slave labor in their mill; documentation indicates that a separate cooper's shop was built but the slaves probably were housed in quarters typical of slave residences of Kentucky at the time

(Appendix F). These residences may have been a series of small houses that accommodated groups or a dormitory style building. No archaeological evidence of these quarters have been found on the park property and their location is currently unknown. The 1820 manufacturing census for the Trotter mill mentioned a few women employed to cook and wash, suggesting that they were performing these tasks for all the workers (see Appendix E). The work force included the 10 to 15 men who were directly involved in the production of the gunpowder as well as men and boys for farm labor and cutting wood. The mention of farm labor suggests that slaves were used to produce food for the work force.

The process of making gunpowder is a painstaking one, and increasingly held the threat of explosion with each stage of manufacture. Gunpowder is made from saltpeter (potassium nitrate), sulphur (called brimstone in old records) and charcoal, using a general ratio of 75:12.5:12.5. Each ingredient had to be purified or prepared in a particular way before it was ready to be mixed.

Saltpeter is found in dry cave deposits and was abundant in the cave systems of Kentucky. A rough extraction of the saltpeter (occurring in crystalline form) from the cave soil was carried out when the deposits were dug at the cave site but further refinement was necessary to remove earthy materials and unwanted salts. It was purified by combining it with water in a large kettle and heating the mixture to the boiling point. The liquid was held at boiling temperature for as long as ten or twelve hours. Because of its lower boiling point, the saltpeter liquefied while the other salts solidified and fell to the bottom of the kettle where they could be ladled out. Dirt and other foreign materials rose to the surface and were skimmed off. When all foreign materials and unwanted salts were removed, the liquid saltpeter was decanted into a large vat and stirred until it cooled and crystallized into white granules. The Trotter mill used Kentucky saltpeter in the early years of production, but also bought from the London markets when local sources were scarce.[45] The Kentucky saltpeter industry collapsed after the conclusion of the War of 1812 and foreign sources became the sole means of acquiring saltpeter by 1818. By 1833, when Samuel Trotter's estate inventory was taken after his death, the mill was using saltpeter from India.

DuPont described a typical saltpeter refinery as consisting of three rooms, a small one for storing crude saltpeter, and two larger ones for refining and drying, respectively. The floor was to be of "beaten earth." This facility should include a brick furnace with a copper boiler six or seven feet in diameter, a lead-lined tub for the "mother liquor," twenty to twenty-five copper or brass pans with wooden covers for the crystallization, a brass kettle, a copper dipper and skimmer, several strong wicker baskets, and tubs or buckets to carry the hot saltpeter. According to the 1820 manufacturing census, the Trotter powder mill refined saltpeter and sulphur in the same building. Trotter's estate inventory mentioned a pair of scales and weights in the refining house.

Crudely refined sulphur had to be further purified by a process called sublimation. The sulphur was placed in a closed iron cauldron and heated to a high temperature at which point it vaporized and the resulting gas passed through a lead-off pipe in the cauldron lid to a condensing chamber

where the gas liquefied. The cooled sulphur was decanted into containers where it hardened. Impurities remaining in the iron cauldron were removed and the process was repeated with another batch of crude sulphur. Foreign sources for sulphur included Sicily or southern France but it is not known for certain where the Trotters were procuring their sulphur. Sulphur occurred in mineral water springs in parts of Kentucky but probably not in sufficient concentration to make it profitable to extract the raw mineral. Mineral water was more often bottled for medicinal purposes. During the War of 1812, James Morrison, deputy quartermaster in Lexington for the War Department, was involved in seeking contracts for locally made gunpowder and armaments. In a May 13, 1812 letter to Secretary of War William Eustis, Morrison reported that saltpeter and sulphur were cash articles in the western country, but a few days later, another letter reported that only 2000 lbs of sulphur were available locally. Morrison consequently placed an order with the Gratz firm in Philadelphia for 6000 pounds of sulphur, apparently with the intent of starting his own gunpowder factory.[46] The Trotters also had dealings with firms in Philadelphia and may have procured sulphur from the same sources; however, the blockade of the American coast must have made importation of sulphur difficult.

A stone foundation, built into the slope at an elevation of 909-910 feet was documented on the south bank of the stream running aboveground from the Boils to the final swallet (Figure 19). The location of this foundation is a short distance (approximately 150 feet) upstream from the dam. The stone masonry is drylaid. The highest wall runs east-west and is ten feet in length and 19 inches wide. A level area about 4.5 feet in depth is observable between this wall and the next lower level of the foundation. Vegetation obscured the area and made it difficult to determine if the highest stone wall had connecting side walls that enclosed the lower levels. The lowest section of the foundation is partially enclosed by two parallel walls running north-south, 11 feet in length and 3 feet wide. The entire building may have measured around 13 by 17 feet in dimensions. A metal pipe set vertically in the ground inside upper level was also observed. The pipe appears to be of relatively recent origin, perhaps no earlier than the late 19th or even the 20th century. However, it may not be related to the stone foundation at all or was installed at a later date for another purpose. The function of the building represented by the foundation may have been the refinery which required ready access to water; another building that was often water powered was the glazing mill where the finished gunpowder grains were tumbled to a spherical shape to reduce their potential to clump together in storage.

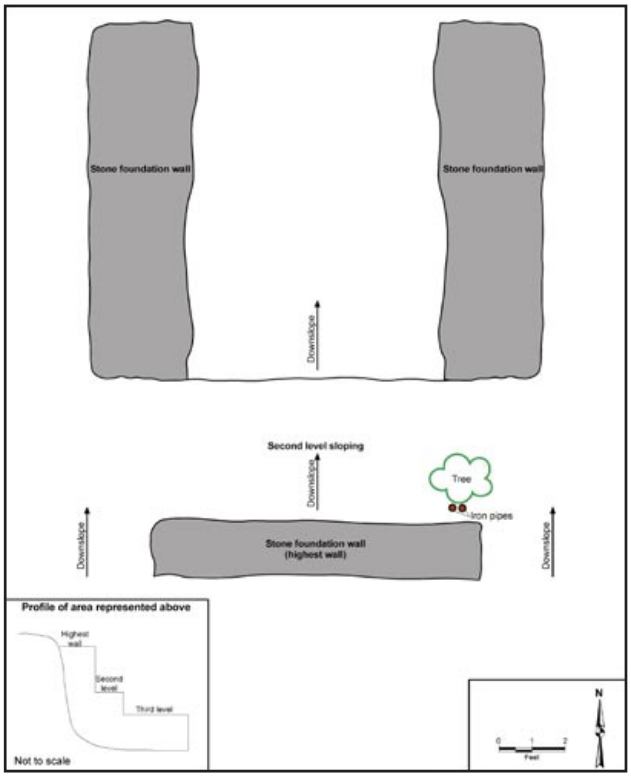


Figure 19

Another ingredient of gunpowder, charcoal, was usually made at the gunpowder factory. Charcoal is made from highly porous light wood such as black or gray willow, poplar, alder or hazel. The land around the springs would have been ideal for willow or other appropriate woods for charcoal production. The best time of year to collect the wood was in April and May when the sap was running and bark could be easily peeled off. Branches measuring 1 to 2 inches thick and 4 to 6 feet long were harvested, air-dried and then charred by one of several methods. The older method was to stack the wood into a large cone-shaped mound with a central flue, cover the mound with dirt and turf, and ignite it, controlling the air supply so that the mound smoldered but did not burst into flame. The mound was allowed to smolder until all the wood was properly charred. Then the mound was dismantled and the charcoal allowed to cool. A variation on this method was to use brick-lined pits to hold the wood, sealing them with turf or a damp cover.

A newer method was adopted by some gunpowder mills in the early nineteenth century that involved packing the wood tightly into vertical metal cylinders, sealing them with clay and lowering them into an oven. Many hours of heating distilled the wood, giving off a gas that was piped back into the furnace as additional fuel. Other by-products included wood acid and tar that were collected and sold to paint-manufacturers and meat-packers who used the wood acid in their products, or, in the case of tar, to patch buildings or make creosote. The inventory of Samuel Trotter's estate included "1 large cylinder for burning charcoal, 10 feet long, 2 ½ ft. diameter," indicating that he was using the more modern technology prior to 1833.[47] No evidence of where the charcoal was produced was found during the archival or archaeological research, but the Trotter facility had plenty of acreage to grow the appropriate trees and process their wood.

DuPont next describes the wheel-mill, a hydraulic machine that was used to pulverize the individual ingredients. While Dupont's wheel-mill was powered by water, the Trotters used a horse-powered mill for this purpose. DuPont described the mechanism as having an interior sprocket wheel, "which by means of two intermediate gear wheels turns two machines, each composed of two marble wheels rolling vertically on another large wheel that serves as base." Four bolters, one each for sulphur and charcoal, and two for saltpeter, were also powered by this machine. The bolters sifted the ingredients to the proper grain size prior to mixing. All the machinery was housed in a frame building large enough to accommodate workers and to serve as a magazine for the separate processed materials. This building might have been the one termed "saltpeter house" in the Trotter inventory. It contained troughs and boxes, according to the inventory.

The charcoal and sulphur were pulverized together before being mixed with the saltpeter. This step took place in the building DuPont called his composition house. DuPont specified that this building should contain a balance (scales) and weights, twenty small wooden tubs, and several hand barrows. A pair of scales and weights were inventoried in the refining house at the Trotter mill after Samuel Trotter's death. Mixing of the sulphur and saltpeter may have taken place there rather than in a separate building. According to DuPont, the two ingredients were placed in a rotating barrel

containing zinc balls or were crushed under heavy iron wheels turning in a large wooden trough.

The pulverized dust was then combined with the saltpeter in the correct proportions for the grade of powder being made. The three ingredients were incorporated in a stamping mill (Figure 20). DuPont recommended that the stamping mill be located at a considerable distance from the other buildings since the risk of explosions was much greater. He recommended that the building be no more than twenty-eight feet six inches long and twenty-five feet wide on the inside, consisting of three very thick stone walls, one wall of thin boards (called a "blow out wall") and a roof of boards laid diagonally on each other. The mixture was placed in mortars, along with a small quantity of water, to reduce the risk of explosion and to improve the mixing. The machinery was powered by a water wheel with a sprocket wheel placed on its shaft; this wheel was attached by two lantern gears to two lifting shafts, each one crossed by ten lever arms moving the same number of stamps or pounders. The pestles were arranged in parallel rows with the gearing system attached to shafts coming off of the water wheel at one end. As the wheel turned, the rows of pounders would rise sequentially, falling into the mortars which were shallow bowls hollowed out of a massive wooden beam anchored to the floor of the mill. The pounders rose and fell with a tremendous concussion for ten to twelve hours until every grain of gunpowder contained the correct proportions of ingredients. The sound of the stamping mills must have been audible for miles around the mill. The process was carefully monitored, adding more water as needed, and checking the state of the mixture periodically. Usually, no one was allowed inside the stamping mill while the pounders were in action because of the increasing danger of explosion as the mixture neared its final state. Before entering the building, the water wheel was stopped and the pounders came to a halt. The amount of time required to produce the powder depended on the grade being made. Coarser grade powder such as blasting powder took one-third of the time required for higher grade sporting powder.[48]

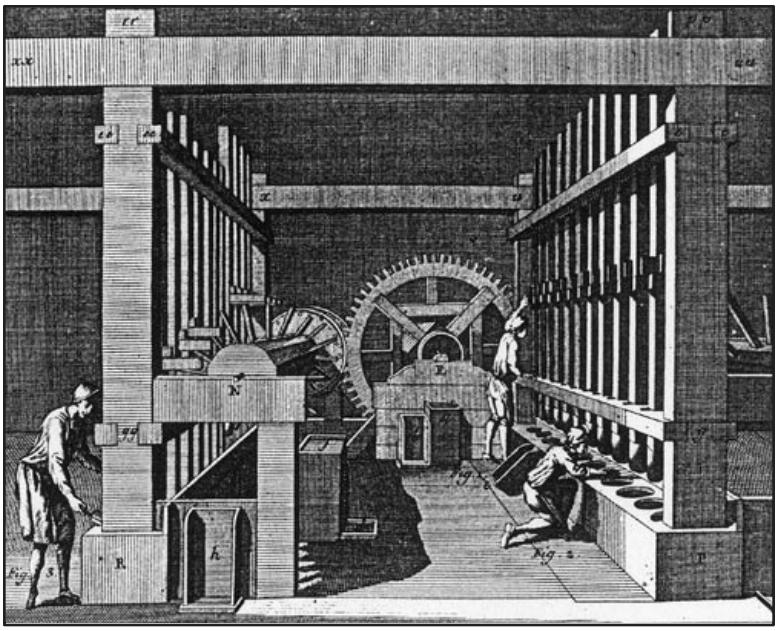


Figure 20

The federal manufacturing census for 1820 specified that the Trotter gunpowder mill consisted of two water-powered pounding mills that carried 40 heavy pestles or pounders (Appendix E). Assuming that the number of pounders represented a total for both mills, each mill, standing as a separate building, housed 20 pounders. Mills that employed pestles or pounders were arranged so that the pounders were installed in two parallel lines. Such an arrangement for the Trotter mills

would result in each line having 10 pounders arranged precisely as recommended by DuPont. Denis Diderot's pictorial encyclopedia of trades and industry includes a section on gunpowder production and mills that illustrates how a pounding mill was organized.[49] Pounding or stamping mills have a long history and their appearance was the subject of several plates in Diderot's Encyclopedia published in several volumes between 1751 and 1765. The Trotter stamping mill was probably similar in appearance to the Diderot example.

Located at the western end of the property, a pair of stone dam abutments flank the narrow stream that emanates from the Boils, and flows westerly to the final swallet where the water descends to an underground channel. This location is the only place where water can be dammed and impounded and the stamping mills must have been located here. The dam abutments are located immediately adjacent to the final swallet and consist of drylaid stone blocks forming a wall that extends into the bank on each side of the channel (Figure 21). The south abutment is visible in the vertical face of the bank but is otherwise buried. A 1 x 2 m unit (Unit 4) was placed so that excavation would intersect the abutment. Excavation identified culturally sterile slope wash sediments that had accumulated on top of the stone abutment at varying depths, as much as 60-75 cm, depending on the slope. Stone rubble was encountered below the slope wash sediments; this stone was composed of blocky and tabular forms that had been displaced from their original context. This rubble zone appears to be the top of the stone wall that forms the abutment on this side, but the excavations would have had to have been considerably enlarged to uncover further evidence of the wall.(Figure 22). Two fragments of a hand wrought nail, very badly preserved, were recovered from this zone. Extensive excavations were not within the current scope of work so were deferred to a later date. Sedimentation on the south side of the swallet is quite deep and the hope is that remnants of the mill building foundation may be preserved beneath and within these sediments. Remnants of stacked stone (possibly dry-laid) were also observed in the vertical face of the bank immediately west of the abutment.

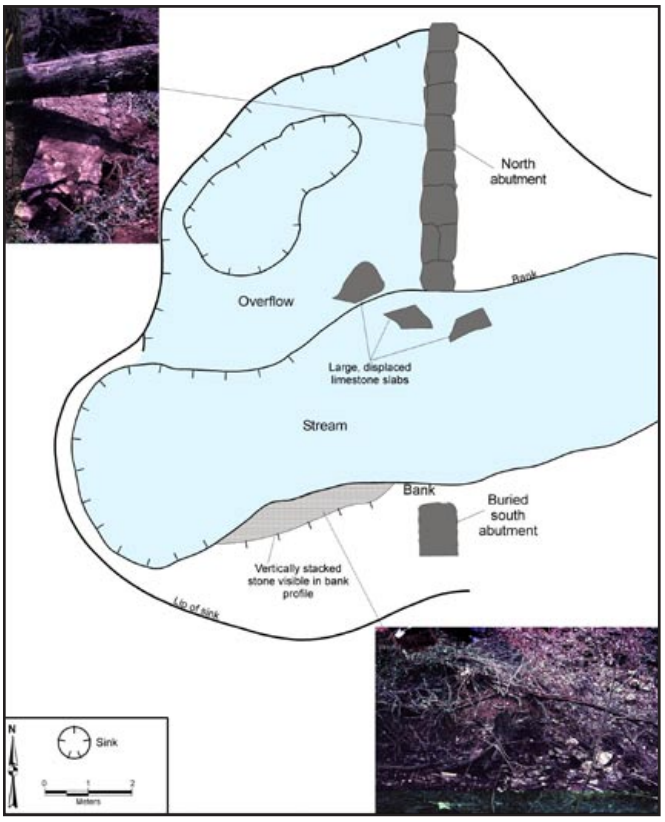


Figure 21

The north abutment wall is visible at the top of the bank for a distance of 20 feet from the vertical face of the abutment running north into the bank. The wall terminates at 20 feet and may

have once turned a corner to the west to form the foundation for the mill building on the north side. However, extensive erosional scouring on both sides of the abutment wall has removed any sediment that may have once preserved architectural evidence on the north side of the channel.

Given the location of the dam abutments relative to the stream, a dam across the stream could have been 5-6 feet in height and approximately 15 feet in width (spanning the stream). The extant dam abutment walls are approximately five feet in height. The mill buildings would have logically been located on the downstream side of the dam. The mill wheel(s) would also have been on the downstream side of the dam and probably operated as overshot or breast wheels. The mill pond was formed by the dam at the final swallet backing up water within the valley to the Boils. The steep topography of the valley forms a natural basin for the water to be impounded.

Once the gunpowder ingredients had been completely and thoroughly combined, the resulting damp paste was then taken to a press mill where it was pressed into slabs in a screw press. The Trotter inventory listed "1 press or screw in frame" that was used for this purpose. Dupont termed this facility a graining mill and specified that the building should be "a single unit…twenty to twenty-five feet long by thirteen to fourteen feet wide…furnished on three of its sides with boxes four feet six inches wide by three feet deep…This room should be provided with about thirty leather sieves pierced for the different kinds of powder and with six or eight sieves of copper netting." The slab or press cake was broken up by forcing it through a grainer or sieve (called a bolting chest) to produce a particular particle size. The 1820 census of the Trotter mill specified a separate graining house. The location of the graining house has not been determined.

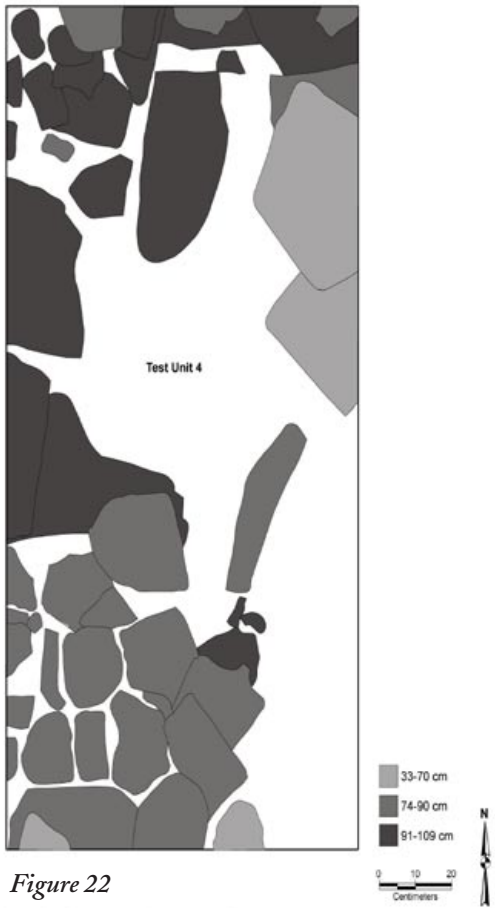


Figure 22

Rough powder such as that used in cannons was sent to be dried; higher quality powder was glazed in a glazing barrel or polisher consisting of "one water wheel, a sprocket wheel and two lantern wheels turning two shafts that serve as axles for four casks a little larger than hogsheads." A glazing barrel containing graphite was used to tumble the particles into round grains that would not become hardpacked after they were packaged. The dust produced during this part of the process was particularly hazardous and was removed by passing the grains through a fine mesh sieve.

The tumbled and sieved grains were next taken to be dried. The powder could be dried in trays or on long tables with canvas covers, in an open sunny location, but the disadvantages of wind and rain, not to mention occasional

bird droppings, led to the invention of the dry house. The earliest dry houses contained an iron gloom stove that was used to heat the building, then the fire was removed and the powder brought in to dry. Gloom stoves were not popular and were replaced by a building with the chimney on the outside that heated the interior from without. The powder was then spread in trays or troughs to dry. The Trotters built a dry house but probably also dried powder outside when feasible since fuel costs to heat a dry house raised the cost of production. The Trotter inventory listed seventy drying troughs. One of the accounts that reported an 1835 explosion described the drying house as having a wooden floor, a shed, a wheel and a bolting chest. The mention of a shed may be the equivalent of the open air facility for drying described by DuPont as being "equipped with sills fixed in the ground and intended to receive the tables on which the powder is spread." DuPont also specified the construction of a nearby building where the powder could be stored in case of rain, and the tables and cloths kept. The mention of a wheel at the Trotter dry house is problematical since the drying process did not require the use of a wheel. The same newspaper account stated that the dry house was being converted to a mill which presumably would require a wheel, but the usual location of dry houses was away from water. In this respect, the newspaper accounts of the 1835 powder explosion are puzzling. The presence of a bolting chest is suggestive of more than one step in the gunpowder production process being done in the building. Bolting chests were used to sieve the powder to a specified grain size. According to DuPont, powder was bolted in the graining mill and again in the dusting and packing house and both buildings should be near the dry house. The bolting chest mentioned in the 1835 newspaper accounts may have been associated with either of these steps.[50]

During the survey of the ridge line on the north side of the project area, a structural feature was located on the east side of a stone fence running south from the ridge top down to the stream. The adjacent stone fence ran downslope and once supported a frame water gap that spanned the stream emanating from the Boils. Selective clearing and limited excavation revealed two parallel lines of stone foundations running north-south (Figure 23). The foundations were very close to one another, separated by only one foot. An area of brick pavement was exposed on the west side of the westernmost foundation. The brick was continuous over an area exceeding 5 by 7 feet, except for a small breach where no brick occurred. This breach could have once held a support post, probably made of yellow poplar. Dark cultural midden was documented above the foundation lines. Shovel probes excavated to the west and east of the foundations indicated that midden extended about 17 feet to the east but no more than about five feet to the west. A lighter soil zone containing some artifacts was encountered at a depth of eight or nine inches in one area next to the western foundation. A similar soil was excavated from the small breach in the brick pavement, in which dark midden extended to about six inches (approximately 15 cm). The lighter zone extended to approximately 12 inches (30 cm) below the surface of the brick. Charred wood and burned clay were noted at the top of the light zone but it was essentially devoid of artifacts. A clay subsoil was encountered at the base of the lighter zone.

Natural topography and rock outcrops served to constrain the former structure to the relatively narrow bench on which it was built. Natural rock outcropped to the north about six feet from the

northernmost exposure of the foundation. The slope increased to the south, providing a topographic constraint in that direction. A deep deposit of charred wood identified as yellow poplar was excavated on the southern end of the westernmost foundation line. Its complete dimensions were not determined but charred wood was encountered to at least 30-40 cm below surface.

Table 1 lists the artifacts recovered from the feature. Architectural artifacts include windowpane glass, nails and brick fragments. In addition, the charred wood samples collected from the feature may also be from framing members of the structure. The brick fragments are probably displaced from the brick paved area associated with the structure. However, there could have been a brick chimney. The presence of some type of chimney or fireplace is suggested by the recovery of an iron pot support and a concentration of charred wood in a pit at the southern end of the structure.

Other artifacts collected from this structural feature were mostly domestic in function. Soil that had accumulated on top of the feature was removed in order to expose the foundations and brick paved floor. This uppermost cultural soil or midden yielded artifacts that were not only larger fragments but also date later in time than artifacts found at greater depth. Among these artifacts were animal bone including a boar tusk, a metal drinking cup, a basal sherd from a gray salt-glazed stoneware crock, a rectangular metal container resembling a sardine tin, an undecorated porcelain plate base, a marked undecorated ironstone plate base, and two flow blue transferprinted sherds, both probably from a shallow bowl. The marked ironstone basal sherd was identified as the product of John Ridgway & Company, a pottery firm that operated between 1830 and 1855 (Godden 1964:533). This particular sherd may have been made between 1830 and 1841 when the firm often included a pattern name in the border of this particular circular mark. Flow blue transferprinted wares began to be produced in the 1840s. The context and date of these artifacts, occurring essentially on the surface

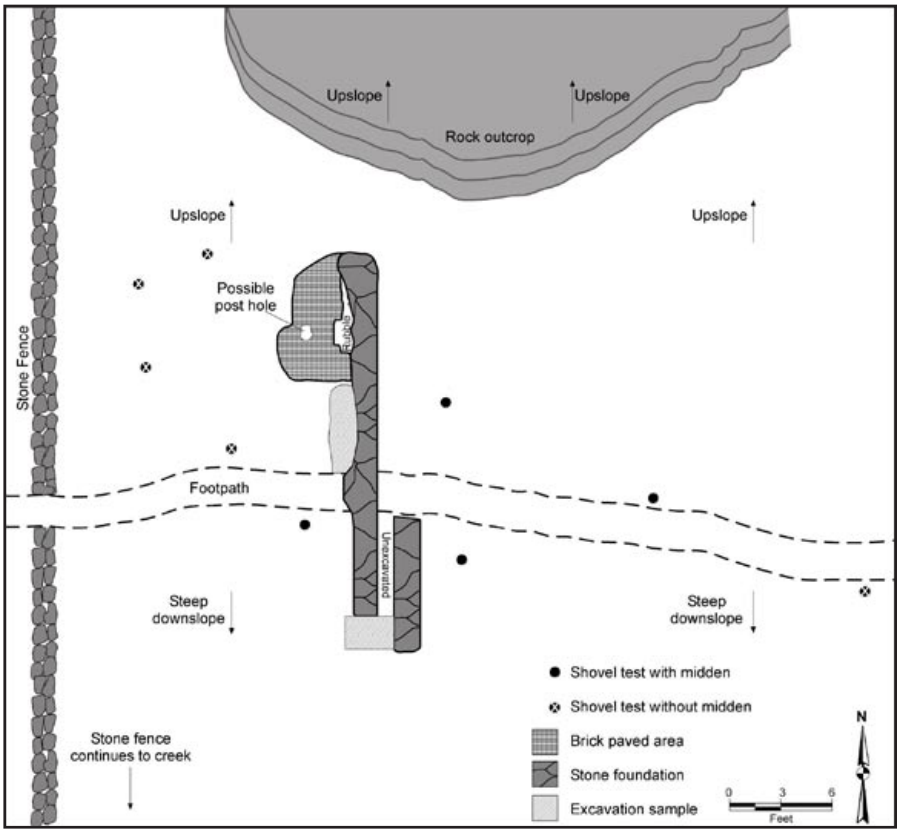


Figure 23

above the more deeply buried feature and dating after 1830, suggests that they might have been deposited here later in time.

Exposure of the foundation on the west side of the feature recovered artifacts that were smaller generally in fragment size and include specimens dating earlier than those previously discussed ***(Table 1)***. Significantly, a larger quantity of nails were recovered that ranged in date from early cut nails that were hand headed to later cut nails that were machine headed. The range of nail types is suggestive of an early nineteenth century construction date, followed by later refurbishing of the structure. The windowpane fragments, although few in frequency, indicate that the building had windows with thin glass panes, reinforcing an early 19th century construction date.[51] A small quantity of domestic artifacts was recovered from this area. The redware (red clay earthenware) appendage probably dates prior to 1840; Lexington potters, the closest source of redware, were in business as early as the 1790s and continued production through the 1820s and 1830s. Redware was eventually supplanted by the more durable stoneware as the preferred material for utilitarian crockery during the mid and late nineteenth century. The pearlware sherds also indicate manufacture prior to 1830 when whiteware became more popular. Identifiable vessel forms include cups and plates or bowls. Other types of domestic artifacts that are common in residential contexts were not recovered. Although the sample from the feature is small, the recovery of sherds from cups and serving dishes and a glass bottle fragment suggests that the users of the building may have occasionally brought something to drink or eat into the building, but may not have actually occupied the building as a residence.

In sum, this structure appears to have been built early in the nineteenth century, probably as part of the gunpowder mill complex. Architectural evidence indicates that its foundations were built of stone; the close proximity of the two lines of stone foundations is intriguing and may indicate two separate buildings or two rooms in the same building separated by a masonry wall. At least one of the buildings or rooms had a brick paved floor. The south end of the westernmost stone foundation terminated at a subterranean feature filled with charred wood where a fireplace may have been located. An iron pot support was also recovered from the general excavation; this type of support was typically installed in a fireplace so that a pot with a bale handle could be suspended over a fire. The presence of charred wood scattered throughout the midden, as well as evidence of burning on other artifacts strongly suggests destruction of all or part of the building(s) by fire.

The function of the building remains a matter of speculation but its characteristics suggest several possible uses. Architectural evidence suggests an early nineteenth century construction date of one building with two rooms built on separate foundations or two buildings built very close together. One of the rooms had a fireplace of some sort. One or both had one or more windows. Although the architectural evidence and the presence of domestic artifacts might prompt an interpretation that the building was residential, the fact that the feature is located on a known gunpowder mill site demands consideration of other interpretations that take into account the many separate buildings that were constructed for various aspects of the gunpowder production process. Central to the argument that the building was constructed for an industrial purpose is the fact that fire played a role in several steps

Table 1. Artifacts Recovered from the Possible Drying/Packing House.

General Cleaning of Dark Midden Soil around the Stone Foundations

ARCHITECTURE GROUP
4 glass windowpane fragments
2 incomplete machine cut nails (late 1830s and later; excellent condition)

DOMESTIC GROUP
4 animal bone fragments including one boar tusk
1 metal handled drinking cup
1 flat rectangular metal container (sardine type)
1 gray salt glazed stoneware base (slight imperfection in molded edge)
3 undecorated whiteware sherds
1 brown banded whiteware sherd
1 undecorated porcelain bisque base
1 undecorated ironstone plate base (marked "Montpelier/Porcelaine" on circular device)
2 flow blue transferprinted ironstone sherds (1 base; 1 bowl rim)

Dark Midden Soil on West Side of Stone Foundation

ARCHITECTURE GROUP
7 glass windowpane fragments
47 cut nails, representing early machine-headed and "modern" machine cut nails, dating from 1790s to late 1830s and later (many corroded by byproducts of burning; 2 9d; 1 8d; 1 6d; 2 5d; 1 2d; remainder unmeasurable)

DOMESTIC GROUP
10 animal bone fragments
1 aquamarine glass bottle/container fragment
1 melted clear glass fragment
3 undecorated whiteware sherds
2 handpainted whiteware cup rims (brown banded; interior and exterior orange/blue/brown floral pattern)
2 burned refined earthenware rims
1 glazed redware appendage (painted lug?)

MISCELLANEOUS GROUP
3 unidentified iron fragments

Dark Midden Soil around Easternmost Stone Foundation

ARCHITECTURE GROUP
6 machine cut nails (4 shafts; 2 early machine-headed nails)

North End of Brick Paved Area

ARCHITECTURE GROUP
5 glass windowpane fragments
13 cut nails, including early machine-headed and "modern" machine cut types (2 9d, 1 8d, 3 6d, 1 2d; 3 are clinched)

DOMESTIC GROUP
2 animal bone fragments

Dark Midden Soil Inside Rectangular Breach in Brick Pavement

ARCHITECTURE GROUP
1 early machine-headed cut nail

MISCELLANEOUS GROUP
1 charred wood sample (yellow poplar)

Lighter Soil Zone Beneath Midden around Stone Foundation

ARCHITECTURE GROUP
21 machine cut nails (heavily encrusted with byproducts of burning)

DOMESTIC GROUP
1 handpainted whiteware sherd (blue/orange, probably floral pattern)

General Feature Provenience

ARCHITECTURE GROUP
5 brick fragments

DOMESTIC GROUP
1 animal bone
1 iron pot support for a fireplace

MISCELLANEOUS GROUP
1 charred wood sample (yellow poplar)

Concentration of Charred Wood at South End of Westernmost Foundation

MISCELLANEOUS GROUP
1 charred wood sample (yellow poplar)

including the purification of saltpeter and sulphur, and the production of charcoal. External fireplaces were also used to heat drying houses. The location of the structure is well removed from the springs, being in an upland location, but still is convenient to the main concentration of buildings distributed linearly along the water course. Its distance from water suggests that its function did not require ready access to water. The sulphur and saltpeter refinery required ready access to water and generally was closer to buildings that were used for the earlier steps of the gunpowder manufacturing process. The production of charcoal at the Trotter mill was achieved by using a metal retort packed with wood billets of the appropriate size and heated in a furnace. None of the characteristics of the building(s) at this location seem consistent with charcoal production.

One possible early function of the building might have been as a drying and/or dusting/packing house. The drying house was generally located in an upland location where the air circulation was good, moisture could be controlled and direct sunlight was available. The presence of a fireplace, particularly one in which the fire was built in a subterranean pit external to the building as seems to be the case in this feature, is consistent with a drying house although great care had to be taken to extinguish the flames and allow only the generated heat to penetrate the building. Moreover, the newspaper accounts of 1835 identified the Trotter Mill drying house as the one that burned, leaving a shed unconsumed. However, the presence of a brick floor does not agree with the newspaper article that mentioned the removal of floor boards during the drying house's renovation in 1935. But the "shed" associated with the building was not destroyed and perhaps had a brick floor. DuPont recommended that a dusting/packing house "consist of two parts about twenty feet long by fifteen feet wide. The dusting room should be furnished with boxes around the walls like the one in the graining mill; it should also have eight or ten horsehair sieves and one or two bolters. The other room, intended for packing, that is to say for placing the powder in barrels after it is weighed, needs nothing but a strong balance with assorted weights."[52] The dusting/packing house had similar requirements of low humidity and, since finished gunpowder was handled here, held similar risks of explosion and fire as the drying house. The gunpowder was then taken to the powder magazine for safe-keeping until it was transported to commercial outlets. The two functions often took place in buildings that were located near one another.

The Trotter inventory indicates that carpenter's tools were found in the cooper's shop (Appendix F). The Trotter mill employed male slaves as coopers to make their powder barrels and casks. Four men are identified as coopers in the Trotter inventory. They included Little Louis Collins, Preston Young, and Little John, all in their 20s, and a 14 year old boy named London Grange. The Trotters supplied the federal government gunpowder in 100 lb kegs during the War of 1812 but smaller kegs termed "quarter" and "lief quarter" are listed in the Trotter inventory. Powder was also packaged in tin canisters. The location of the cooper's shop is unknown.

The packaged powder was stored in a magazine. DuPont described the ideal magazine as one with thick stone walls and a very light roof (allowing explosions to be contained by the stone and the blast directed upwards through the roof. He also recommended that the magazine be surrounded

by a separate enclosure about thirty feet away, built of stone or high boards. The wooden floor of the magazine should be elevated to avoid dampness. The location of the powder magazine was not determined.

Explosions were common at powder mills. The Trotter mill experienced a minor explosion in 1818 and again in 1825 and others in the Lexington area had similar or greater problems. A funeral notice for Joseph Singer, an employee at the Trotter Powder Works, is dated September 26, 1823; the cause of his death was not specified but he may have died in a work-related accident. Unlike the slave laborers employed at the factory, Singer was white, and perhaps held a supervisory position.[53]

Samuel Trotter's enterprise flourished despite production problems, competition from other mills and foreign powder, and the vagaries of the national economy. He found markets for his gunpowder in Kentucky and Ohio and established an agent in St. Louis, Missouri who sold gunpowder to Indians involved in the fur trade.[54] However, by 1827, the price of gunpowder had dropped from its former high of 45 cents per pound to 29 cents. Economics would have probably eventually closed the factory had not the cholera epidemic of 1833 intervened. In the summer of 1833, Samuel Trotter contracted cholera and died, followed some weeks later by his two daughters. His will left everything to his surviving children, including the operation of the powder mill to his sons if they desired to continue it. This they declined to do and the equipment was inventoried to be sold (Appendix F).[55]

The inventory itemized one pair of scales and weights in the refining house, carpenters' tools, a cooper's shop, 3 large iron kettles, tubs, troughs, boxes and other equipment in the saltpeter house, 75 lbs. of India saltpeter, 1000 lbs. of refined saltpeter, a cylinder for burning charcoal, 15 cords of charcoal wood, 1 press or screw in a frame, more than 100 kegs, seventy drying troughs, small scales and weights, a powder wagon, various quantities of gunpowder in quarter and lief quarter kegs, and nine tin powder canisters and two funnels in the powder magazine (see Appendix F). These items represented portable property and probably did not include everything that Samuel had owned.

The inventory also listed his 29 slaves. Besides the four coopers already mentioned, the inventory listed four men with surnames who were adults in their 40s or 50s: Billy Hearn, Bob Straw, Lewis Nelson and Simon Payne. The use of surnames for slaves was uncommon for the time. It is possible that these four men also were skilled in some particular trade, although the value placed on them in the inventory was at least half that of the coopers, and lower than some of the women listed. Their monetary value may have been based more on their age rather than their skills. Some or all of them probably worked in the gunpowder factory. Billy Hearn became the subject of negotiations between heirs of George Trotter and the heirs of Samuel Trotter over the settlement of the two estates. Settlement documents indicated that he was the only slave who was jointly owned by Samuel and George.[56] Bob Straw and Lewis Nelson were purchased by men who were connected to gunpowder manufacturing.[57] The inventory also listed other male slaves with relatively high values assigned to them that were not attributed surnames. These men were young and at their peak labor potential. Clara and Bluff, an older couple, were considered married to one another (although slave

marriages were not recognized in a legal sense, many couples sustained longterm relationships that were the equivalent of a legal marriage). Another aged woman, Rachel, was accorded no monetary value, but the inventory indicated that she lived in Samuel's house. She was probably a slave who had lived with the family for many years and was taken care of even though her ability to work was greatly diminished. Although Samuel's will requested that the slaves not be sold, estate settlement documents indicate that most of them were sold to people outside the family. Out of 24 slaves, only five remained with family members.

Samuel Trotter's death left a family already diminished by premature deaths. Samuel's wife, Catherine, preceded her husband in death by three years. Their son, James A., died in 1822, and two of their daughters, Sarah and Margaret, died of cholera shortly after their father's demise. Remaining were two sons, William Leavy Trotter and Samuel C. Trotter, and three daughters, Mary Ann Leavy, and Cordelia and Georgetta Trotter. Trotter's estate inventory indicated that William and Sarah were still living at home; it is probable that Georgetta was also still at home. Samuel C. Trotter may have had his own household by this time; he became a physician and practiced in Millersburg (Bourbon County, Kentucky) where he died in 1850. The estate's executors were Samuel Trotter's sons-in-law, William Leavy (married to Mary Ann) and Dr. Robert C. Holland (widower of Margaret), and a family friend, Dr. Benjamin W. Dudley.

Westbrook Farm, Tragedy and Resales (1834-1859)

In 1834, Samuel Trotter's executors sold the powder mill tract to Thomas Smith of Fayette County and Matthew Kennedy of Woodford County for $7,177.19.[58] Thomas Smith, a newspaperman, edited the *Kentucky Gazette* from 1809 to 1814 and published and edited the *Kentucky Reporter* in the 1820s and 1830s.[59] The purchase of the powder mill tract deeded a total of 205+ acres, including the McConnell tracts as well as other adjoining land that the Trotters had purchased. The tract description indicates that a post and rail fence enclosed at least part of the property. Matthew Kennedy later signed over his interest in the land, leaving Thomas Smith as sole proprietor. Smith established a stock farm called Westbrook on the land and may have lived there with his wife, Nannette. The name Westbrook derived from the westerly direction of the water course that surfaced between the Boils and the final swallet.

On March 18, 1835, a local newspaper, the *Lexington Observer & Reporter*, reported an explosion that occurred on Saturday, March 14, when two men, Benjamin Bosworth and James Champlin, were cleaning out the gunpowder dust in the drying house with the intention of converting the building into a grist mill.[60] The newspaper report read as follows:

> An unfortunate accident occurred on Saturday last; at Westbrook, the farm of Mr. Thomas Smith near this city, by the explosion of gunpowder, which burnt and maimed very severely two excellent citizens, Mr. Benjamin Bosworth and Mr. James Champlain. They were at work on a mill about to be erected in a house that had been used for drying powder some years ago. Every precaution

> had been used to prevent such an occurrence. The floor had been taken up, all the loose powder swept out, and the powder machinery removed, except a bolting chest. Some dust powder remained on the top of the chest, which those at work had been admonished to remove also, but the warning was unfortunately neglected. The wounded persons it is hoped will recover. The building was consumed except the wheel and shed.

The Tuesday, March 17 issue of the *Lexington Intelligencer* reported the same incident as follows:

> UNFORTUNATE OCCURRENCE.--On Saturday last, two worthy individuals, Mr. Benj. Bosworth and Mr. James Champlain, were dreadfully burnt and wounded by the explosion of gun powder in a house in which they were at work on a mill at Westbrook, the farm of Mr. Thomas Smith, near this city. The building had formerly been used as a powder drying house--the floors of which had been taken up, all the loose powder and machinery removed, and every precaution taken beforehand to prevent accidents, except removing a large bolting chest, on the top of which in full view, lay a quantity of powder. The necessity of removing this, was frequently mentioned to the workmen; only a few minutes before the accident happened it was the subject of remark, and the warning again repeated, but unfortunately they omitted to attend to it.

In 1901, the *Lexington Morning Herald* printed a series of historical anecdotes that included another version of this event, differing in details and date. The story was considerably changed from the original reports:

> In 1839 Mr. Benjamin Bosworth attempted to convert the Trotter powder mill into a grist mill. While rubbing two mill stones together, sparks ignited a stream of powder leading to a storehouse where a ton of powder was stored. A violent explosion occurred, killing Mr. Bosworth and maiming a companion.[61]

These three accounts have enough inconsistencies and contradictions that it is difficult to know exactly what happened on that fateful day. The two contemporary accounts, written a few days after the explosion, both agree that the blast took place in the drying house. However, converting a drying house to a mill is problematical, particularly since two water powered mills already existed that presumably would have been better suited to the installation of a grist mill operation. The intent may have been to install a horse or steam powered mill although a horse powered mill was already present on the property.

The 1901 account errs in the date of the accident and describes a very different scenario that seems to be considerably more dramatic than accurate. Rubbing two millstones together was no small feat; millstones were very heavy and only operated properly when installed in a frame where one was suspended over the other. They never were meant to touch while turning to grind grain. Likewise, the image of a stream of gunpowder leading to a storehouse containing a ton of powder sounds more like an encounter between the Roadrunner and Wile E. Coyote than accurate reporting. The inventory

of Trotter's property included quantities of gunpowder that were probably sold when the estate was settled. It is unlikely that large quantities of gunpowder would have been stored on a stock farm.

Three years after the deadly explosion, Thomas Smith and his wife, Nannette, sold their farm, then containing 194+ acres, to William H. Richardson. Richardson paid a total of $8350.00 for the property.[62] This sale excluded the part of the property that corresponded more or less to the land that the Trotters had purchased from George and Martha Robinson. The advertisement for the land described its improvements in glowing terms.

> Situated immediately in the vicinity of Lexington, half a mile from the City Limits, on the old Frankfort Road, and within a hundred yards of the Rail Road, containing One Hundred and ninety-six acres—about half of it uncleared and tolerably well wooded with Walnut, Hickory, Oak, Cherry and Locust timber. The improvements consist in part of a Stone Dwelling House, Office, Dairy, Smoke House, Ice House, Horse Mill, Large Stone Barn, Stables, Cattle Sheds, Corn Houses, &c. &c. The orchard contains two or three hundred trees of select varieties of fruit. The tract is conveniently divided into fields, and grass lots, and enclosed chiefly with post and railing and stone walls. The whole of it is in blue grass, timothy, clover and orchard grass, except two fields of 12 and 24 acres.
>
> As a fancy stock farm, this is one of the most convenient and valuable in the whole neighbourhood. It is well supplied with water from two springs, one of them large enough for a grist mill, throughout the year. The buildings are near the springs in the center of the tract, in a retired and romantic part of it, susceptible of the highest degree of ornamental improvement. It may be divided, and will be sold if desirable in separate parcels, to suit purchasers who may wish summer residences near the city.
>
> The stock of blood horses and cattle, will also be sold, consisting of brood mares, &c., valuable Cows, two years old and yearling heifers by Oliver, and other Durham Bulls.[63]

There were at least two men living in Fayette County named William H. Richardson around the time of this purchase. The better known was Dr. William H. Richardson, a physician specializing in obstetrics and diseases of women and children, who served as a member of the Transylvania University medical faculty. In an odd coincidence, this Dr. Richardson fought a pistol duel in 1818 with Dr. Benjamin Dudley, one of Samuel Trotter's executors, which resulted in a thigh wound for Richardson. However, Dr. Richardson died in 1844 and so could not have been the man who bought McConnell Springs and resold it in 1851.[64]

Another William H. Richardson, who apparently pursued business interests in industrial properties, died in 1853, leaving a will that was written in Charleston, Illinois, and probated in Lexington. This will indicated that he had formerly lived in Fayette County.[65] He had a fairly

extensive estate that required several settlement entries filed at different times. One of these settlement entries indicated a cash payment made by W. and A. J. Reed against their note for the McConnell Springs property.[66] Richardson's heirs also signed over their interest in the Royal Mills property next door, which their father had apparently acquired. A notice in an 1817 issue of the Kentucky Gazette stated that J. M'Kinley and W. H. Richardson were offering the Georgetown Paper Mills & Carding Machines for rent, and in an issue the following year, the same property was up for sale.[67] These clues suggest that Richardson was a speculator in industrial sites. Unfortunately, he is not listed in the 1850 Federal Census, and may have already left the state by that time. He is listed in the 1840 census next to Benijah Bosworth who lived in the stone house on Old Frankfort Pike formerly owned by from George and Martha Robinson and purchased by Bosworth in 1818. Their spatial proximity in the census suggests that Richardson took up residence on the tract he purchased from Smith. Richardson's census entry indicates that he was involved in agriculture but not manufacturing or industry.

The advertisement for the property listed at least eleven functionally specific buildings. Many of these buildings were probably structures originally built for the gunpowder mill that had been adapted to other uses. Their clustering around the springs reinforces this conclusion since gunpowder mills and their associated buildings were generally arranged linearly along a water course. The mention of a horse mill is interesting, given the account of the explosion at the drying house in 1835. A horse mill is operated by one or more horses that walk a treadmill set up as an inclined plane. The horse stays in one place but the treadmill moves beneath his hoofs as he walks. The treadmill was attached to the gearing system that operated the millstones. The Trotter gunpowder mill used horse mills when the water was insufficient to run the water powered mills. Apparently, Thomas Smith did not convert the water powered stamping mills at the dam to a grist mill although he clearly recognized this potential.

The stone barn is shown in a 1901 photograph of the area around the Blue Hole (see Figure 17).[68] Its condition was deteriorating by this date. This barn may be the stone foundation located by Carolyn Murray-Wooley that is currently beneath fill. The barn is also visible on a 1937 aerial photograph (Figure 24) but could not be detected in a 1954 photograph taken by George T. Taylor, Jr. and may have been gone by then (Figure 25).

Also shown in the 1901 photo is a frame building standing near the stone barn. This building is shown in ruins in a 1954 photograph taken by George Taylor.[69] Its floorplan appears to be rectangular and it has a gabled roof. A door is centered on the longer wall. Although the chimney is difficult to discern in the 1901 photograph, the 1954 Taylor photograph shows the building in ruins with a stone chimney clearly indicated at the west end of the structure. It could have been an office or slave residence and may have once served a purpose for the earlier gunpowder mill as well as the Smith's stock farm. This location is now covered with fill.

Three additional buildings are also visible on the 1901 photograph. Immediately behind the stone

barn is a very large frame tobacco barn that is probably late nineteenth century in date and unrelated to the gunpowder mill or the stock farm. A stone foundation is discernible at the westerly end of the Blue Hole and may actually have been built in the water. This foundation may have been what the Smith advertisement called a dairy which in mid-nineteenth century terms was a springhouse. It is not in the same location as the extant stone foundation and retaining walls which once supported the creamery operated by the Cahill family in the late nineteenth to mid twentieth century. Another

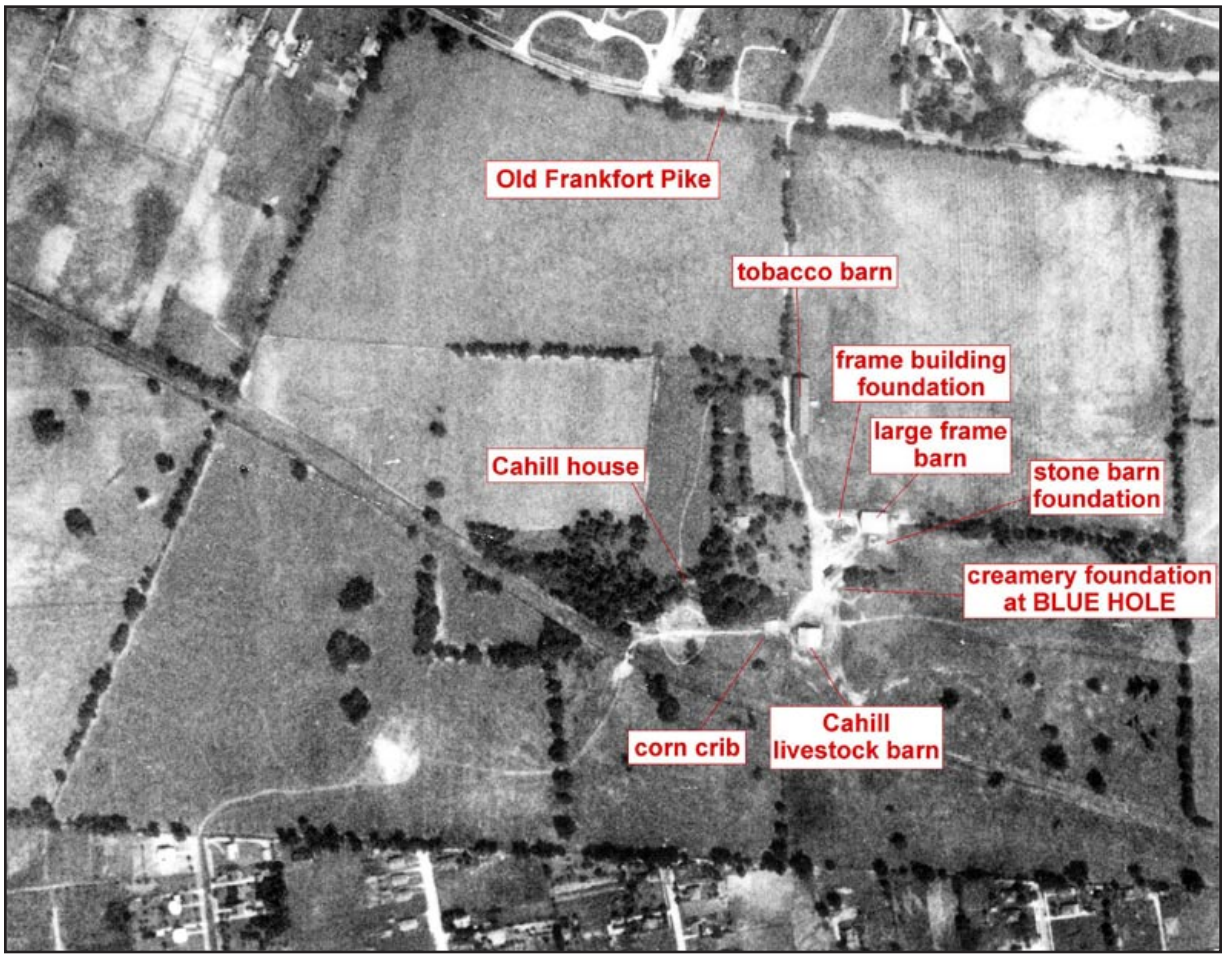


Figure 24

building is also visible near the Blue Hole. It appears to be similar in size to the stone barn located uphill from it but its construction material is uncertain due to the quality of the photograph and the presence of trees that obscure details of its architecture. It has a gabled roof. Its location near the Blue Hole is suggestive of an original function related to the gunpowder mill and subsequent undetermined adaptive reuse by the stock farm owners. The 1954 Taylor photograph shows the large tobacco barn but the two structures at the Blue Hole are no longer standing.

The advertisement also mentioned that the property was divided into fields and grass lots and enclosed with a combination of post-and-rail and stone fences. Remnants of stone fencing and the 1937 aerial photograph of the property indicate that the farm was partitioned into several large lots, mostly in pasture, except for a wooded area in the center of the tract. The 1901 and 1954

photographs indicate that stone fence ran along the west and north sides of the Blue Hole as well.

Richardson sold the property to William A. and Andrew Jackson Reed in 1850 for $68 per acre or approximately $13,192.[70] The two Reeds were probably brothers. William Reed, and his wife,

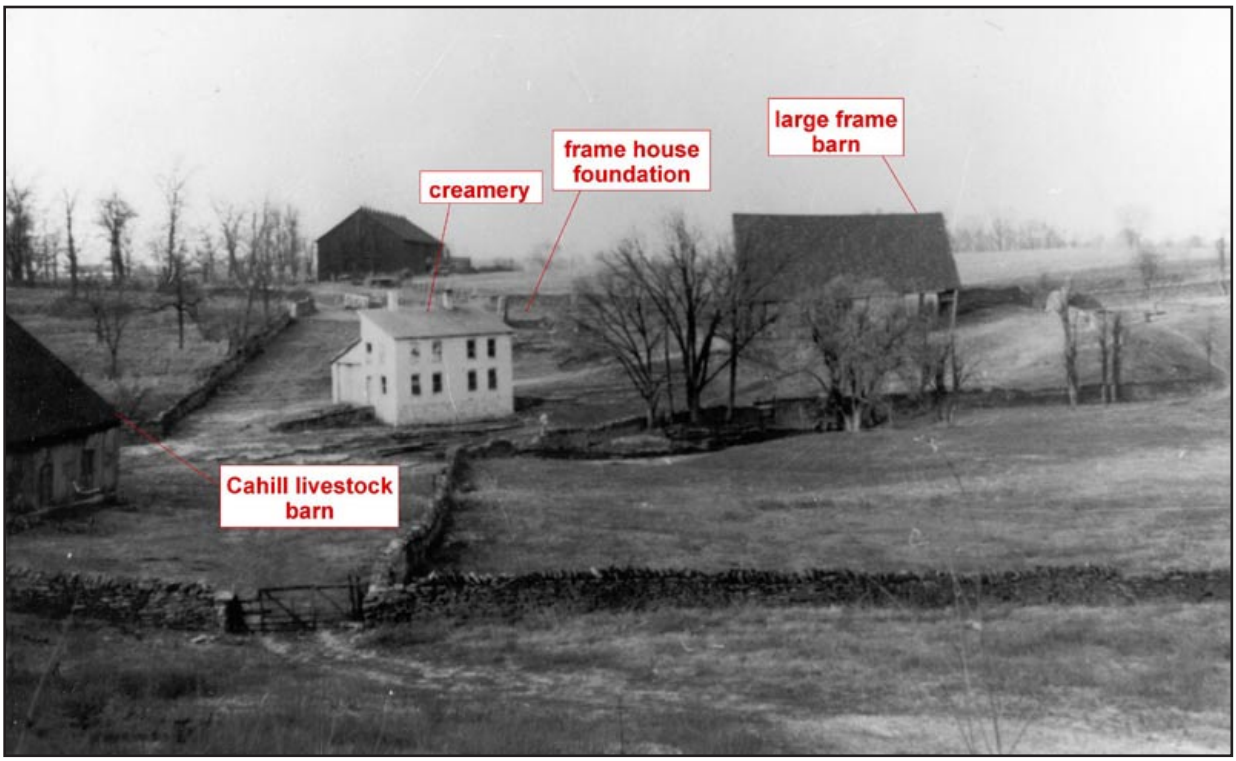


Figure 25

Josephine, signed over their interest in the powder mill tract as well as a smaller adjoining tract once owned by Spencer Cooper, to A. J. Reed the following year.[71] This transaction increased the total acreage to 206+ acres. The description for the total property also changed to reflect the addition of the Cooper tract. Although the greater proportion of road frontage was still on the Old Frankfort Pike, the survey description emphasized the much more limited frontage on Versailles Road which had by that time eclipsed Old Frankfort Pike as a major transportation artery. The Spencer Cooper tract had formerly been the location of another gunpowder manufactory that was a competitor of the Trotter brothers.

Andrew Jackson Reed appears to have been a speculator in land and possibly slaves. In 1850, he is listed (as A.J. Reed) in the federal census as a member of a household headed by S. D. McCullough, a 47-year-old manufacturer of mustard and other condiments. Reed was 33 years old in 1850, but oddly, no occupation is listed for him. Also living in the household was a 30-year-old woman named M. J. Reed, presumably his wife, and four children, Liurtius (age 10), Rebecca (age 5), Elmira (age 3) and Edward (age 2). Two other individuals named Reed were also listed for this household. John J. Reed was a 21-year-old farmer, and Henry S. Reed was twelve years old. A 35-year-old Irish cabinet maker named William Trimble and another 35-year-old man named William Graion (spelling uncertain) also are listed. Listed next to this large and diverse household is W. L. Reed, a 32-year-old tanner, his wife Josephine, and their two small children, Mary and Andrew. The

slave census for the same census year indicates that A. J. Reed owned nineteen slaves, a substantial number for a man who does not seem to have operated a large farm. These slaves were listed as follows:

1 mulatto male, aged 60
1 black male, aged 35
3 black males, aged 21
2 black males, aged 24
1 black male, aged 29
1 black male, aged 15
2 black males, aged 13
1 black male, aged 12
1 black male, aged 4
1 black male, aged 3
1black female, aged 15
1 black female, aged 13
1 black female, aged 10
1 black female, aged 6

What is interesting about the demographics of this list is the lack of evidence for families (i.e., the lack of adult women and the preponderance of young men at the peak of their work potential). It is possible that A. J. Reed made part of his living by renting out slaves or perhaps buying and selling them. His brother, William, also owned slaves but far fewer, and their ages and sexes are more suggestive of a related family.

A. J. Reed only owned the McConnell Springs property for a few years, and his use of it during that time has not been determined. He may have farmed it as he is listed as a farmer in the 1860 census. The buildings would have been ample to house his slaves as well. Reed transferred his land to Wyatt Webster on December 27, 1855, but then it was transferred back to him on January 27, 1858.[72] These transactions probably were occasioned by some kind of financial arrangement such as a mortgage or loan.

The Wilson Family Farm and the Springs' Industrial Use (1859-1886)

On March 1, 1859, A.J. Reed sold the 206+ acres to John N. Wilson for $80.00 per acre (Figure 26).[73] Wilson took up residence on the land with his wife, Laura, and their seven-year-old adopted daughter named Virginia Dillon. By the time the Wilsons bought the land, the built landscape had undergone some changes since the era of the Trotter gunpowder mill. It is probable that the stamping mills were either gone or in ruins. If the newspapers can be relied upon, the drying house was also gone. However, the buildings listed by Thomas Smith in his 1837 advertisement were probably mostly intact and some of them must have dated from the gunpowder factory. The stone house mentioned in the ad may have been where the Wilsons lived.

John N. Wilson was a prosperous farmer who was 34 years old in 1860. His real property was valued at $14,000.00 and his personal property at $4,000.00. He owned seven slaves, including three black male adults, one aged 42 years and two aged 40 years, a mulatto woman aged 20 years, and three black male children, aged twelve, eight and five years.[74] Unlike other slave-owning farmers listed in the same census, Wilson's entry listed no slave houses associated with his farm. This could just have been an omission on the part of the census taker, or the slaves may have had quarters within the family's house. Some of the slaves may have been rented out to other families and so would not have been residing with the Wilsons at the time of the census.

Ten years later, when he was censused again, Wilson's household remained the same except that it included an illiterate 12 year old black laborer named Sidney Minter. With his slaves freed by the Civil War, John Wilson had to make other labor arrangements. Although only one black laborer is listed in his household, he may have hired the labor of three other black families that were listed on either side of his census entry.[75]

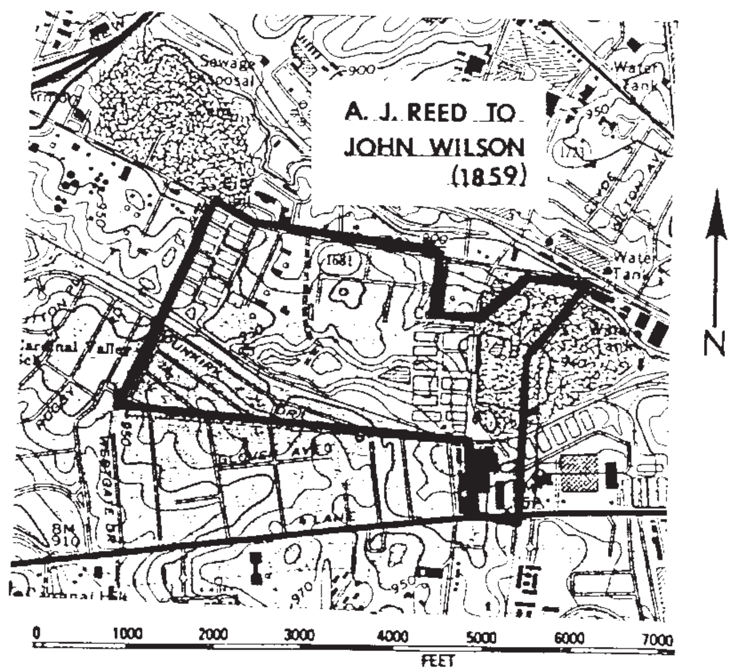


Figure 26

The agricultural census for 1860 indicates that the Wilsons had the following livestock and crop holdings:

21 horses
1 ass/mule
2 milk cows
2 other cows
3000 bushels ear corn
250 lbs butter
$50 orchard produce
40 swine
600 bushels oats
$20 market produce
60 tons hay
100 bushels wheat
2 bushels peas/beans
40 bushels Irish potatoes
200 bushels sweet potatoes

They also owned $100.00 worth of farm machinery and their livestock were valued at $1700.00. Slaughtered animals for that year brought in $200.00.

Wilson's livestock holdings are interesting because they included many horses but few cattle. He may have been raising horses for resale rather than being involved in the burgeoning cattle trade common in the Bluegrass at the time. This emphasis on horses is particularly significant since he eventually sold the farm to a man who raised trotting horses and raced them at the Red Mile trotting track. He may have built a gable end barn for his livestock. A barn foundation currently

present on the McConnell Springs property shows evidence of having been an older structure that was reinforced with a poured concrete foundation and additional post supports in the late nineteenth century. This structure is discussed in more detail in a subsequent section.

In addition to their farming income, John and Laura Wilson derived some compensation from the sale of their spring water. In 1858, not long before the Wilsons purchased the Springs from Reed, Headley and Farra had built a distillery on the site of the old Royal Mills on what had originally been the land grant property of Francis McConnell, William McConnell's brother. They operated this distillery for about 15 years before it burned. Next, Hy Gilbert & Co. erected a pork house on the distillery site in 1875, operating it as the Blue Grass Pork House until 1879. According to O'Dell, the spring supplied water to Headley and Farra's distillery and to the Blue Grass Pork House.[76] In 1879, the *Lexington Daily Transcript* reported that

A few years ago a bridge or platform, erected across the mouth of the spring, and which supported a pump, fell into the cavern, and almost entirely obstructed the passage, so that the water finds exit through the crevices and holes left open around it, and the timbers obstruct the passage of any line introduced in the vein or opening. When Mr. Johnson's line found a resting place, it was not on the bottom of the stream, but on timbers and lumber which are lodged in the cavern.[77]

In 1879, James E. Pepper & Co. purchased the Blue Grass Pork House and built the Henry Clay Distillery on the site of the pork house (Figure 27).[78] This plant produced 50 barrels of bourbon whiskey per day with annual production around 11,000 barrels. The company entered into a water contract with John and Laura Wilson on June 12, 1880, giving the company the right to use the water of "one large spring, on our farm, on which we reside. . .for their distillery, for ten years from date."[79] The company had the right to lay pipes to convey the water from the spring to the distillery but were required to remove them when the contract expired. The water supply was not to be exhausted below what was needed for the Wilson's farm, as well as "a giving to their neighbors as now done". According to Perrin,

> The water is supplied to this distillery from a spring on the farm of Col. Wilson; the basin is seventy-five feet square, from which the water is conveyed to the distillery through a five-inch iron siphon pipe...Two pumps supply this water, with 4-inch and 6-inch pipes, at the rate of 700 gallons per minute.[80]

The pumping engines used to pump the water from the spring probably were of the crank and flywheel type and may have been purchased from the Holley Manufacturing Company of Lockport, New York (Figure 28). This company had been involved in consultations with the city of Lexington about a permanent water supply and had evaluated the spring for this purpose in 1879. A pumping rate of 700 gallons per minute is relatively low when compared to contemporary municipal water works and the engines required would probably have been correspondingly smaller in size than engines whose pumping rates were much higher. Nevertheless, even the smaller sizes of pumping engines were heavy, bulky apparatus that required sturdy foundations. Foundations for pumping

engines had to be able to support the weight of the engine as well as its movement when operating. A common rule of thumb was an allowance of 800 pounds to the square foot upon the bed of the foundation.[81] A relatively small operation like the pumping station at McConnell Springs would have been amply served by a bearing allowance of 800 pounds per square foot.

Wilson's Spring, as it came to be called during J. W. Wilson's long ownership and residence, was investigated at various times by experts to determine its potential for development as a municipal waterworks. In the summer of 1879, discussion of the wisdom of expending public funds on a water system raged in the local newspapers. An engineer employed by Holley Water Works of New York tested the potential of Wilson's Spring and deemed it suitable for a city waterworks. A newspaper article about this analysis glowingly describes the spring:

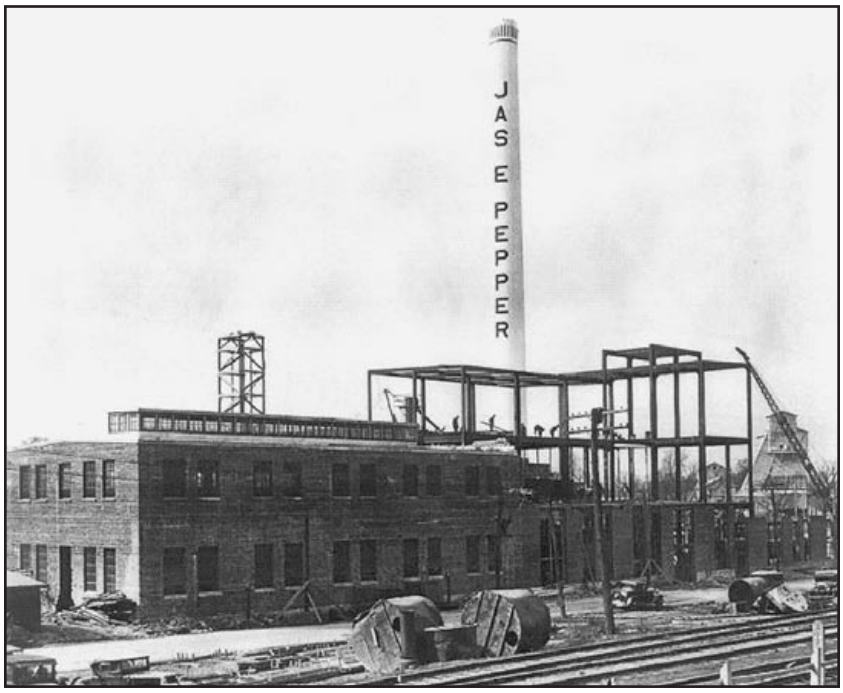


Figure 27

> [The spring] is a basin of water about one hundred feet in depth, and containing a great quantity of water while a continual stream wells up. Sometimes hundreds of large and beautiful fish may be seen in it, and then they disappear again for weeks...The center of the spring has been sounded for hundreds of feet, and no bottom ever reached...[82]

This particular paper supported the construction of a public waterworks and so perhaps indulged in a little hyperbole.

A few days later, the *Kentucky Gazette* expressed a decidedly different opinion, when it reported that two gentleman "of a practical turn of mind" had found the spring to be no more than twelve feet deep, and "scarcely sufficient to cleanse the filth out of the gutters on Broadway".[83] Since the *Gazette* opposed public expenditure for a waterworks, its findings also may have been colored by its opinions. However, the two conflicting reports raise some interesting questions about the former appearance and hydrologic variation of the McConnell Springs system. Today the spring at the Blue Hole averages no more than 15 feet in depth (Figure 29). Shovel probing in the low ground near the Blue Hole indicated that the basin has silted in considerably, reducing the size of the pool. Considering

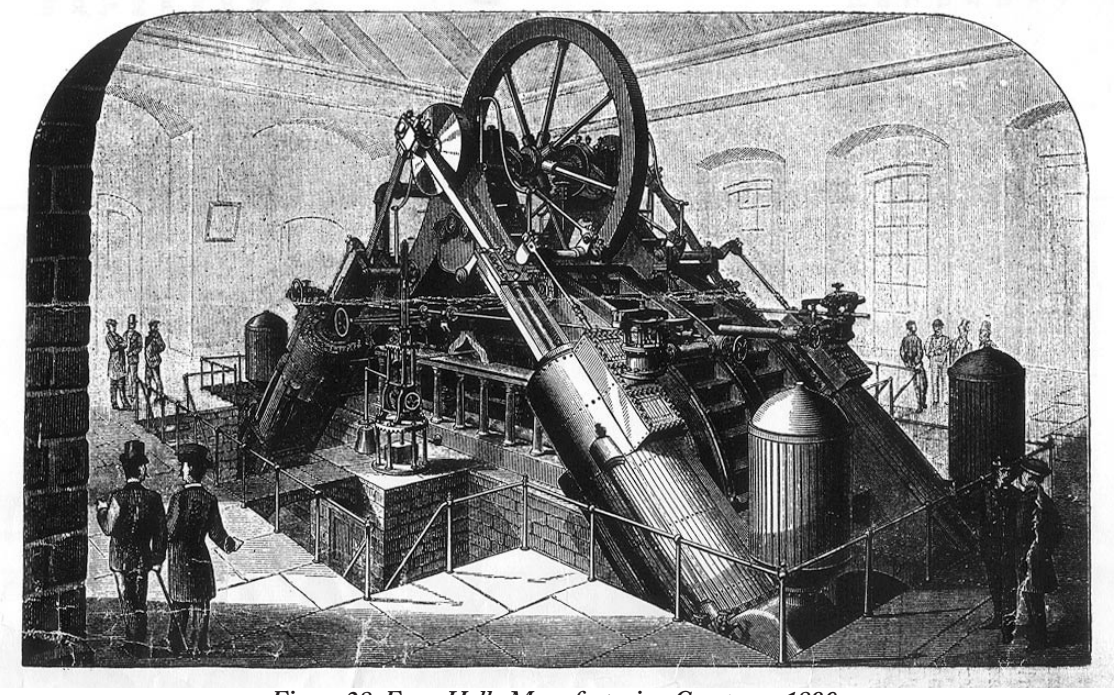


Figure 28. From Holly Manufacturing Company, 1890

the topography of the land in the area of the Blue Hole, the pool could have easily been as large as "seventy-five foot square" as it was described in the late nineteenth century.

The controversy over the potential of the McConnell Springs system as a source of city water indicates that the amount of available water at the springs varied through the year, just as it did when the Trotters were using it as a source for their water powered mills. During the late nineteenth century, Lexington's population was increasing and the inadequacy of natural water sources such as springs became increasingly evident. In an effort to insure reliable water availability, wells were dug to depths varying from as shallow as six to eight feet to as deep as fifty feet. The growing needs of the Lexington area for water, coupled with increasing construction of buildings, roads and sidewalks that sealed the ground and prevented the absorption of rainfall (thus increasing runoff), undoubtedly had an effect on the area's springs, although no detailed study of these phenomena seems to have been done. The water controversy was finally settled in 1884 when Lake Ellersie was built.[84]

The Cahill Family and the Westbrook Stock Farm and Dairy (1886-1958)

The Wilsons owned the McConnell Springs tract until 1886, when they sold the entire tract to David Cahill who took up residence there.[85] David Cahill, who became known in his later years as "Uncle Davy," was born in Limerick County, Ireland on Christmas day, December 25, 1846 and emigrated to the United States in 1869, working in Connecticut for six months before coming to Lexington.[86] (Figure 30) He was living in Fayette County with the family of Alexander G. Morgan, a farmer, when he was censused in September of 1870. The Morgan household included a black woman who was their cook, a young mulatto woman who was a domestic servant, and two black male farm laborers. David Cahill was probably a boarder; he was working as a dairyman but owned

no land of his own. He married Ellen Shivvers in 1873. The Cahills had six children, including an unnamed infant that died in 1875, Mary Elizabeth born in 1876, William James David born in 1877, Lillie born in 1879, John David born in 1880, and Catherine born in 1882. The family were staunch Roman Catholics and attended St. Paul's Catholic Church in Lexington.[87]

Figure 29

David Cahill must have rented property to keep his milk cows and farm until he could afford to buy his own land. His obituary indicated that he once grazed his dairy herd on land that is now Woodland Park in Lexington. In 1880, he was living with his wife and four of his children (one having died as an infant and his youngest not yet born) as well as his niece and nephew, Elly (Ellen) and Richard Shea (incorrectly spelled Shay in the census), and his sister and brother, Margaret and James Cahill. James was consumptive and died that same year, probably of tuberculosis. His niece and nephew were probably the children of Anne Shea, his wife's sister, who died in 1879. The makeup of his household underscores the close family ties that prevailed for many Irish emigrants. David had four older sisters and at least one brother. At least two emigrated to the United States and found a temporary home with David. The cemetery lot containing David and Cahill's grave also contains his wife Ellen, his sister, Margaret, his brother, James, his first child who must have died as an infant, his sister-in-law, Anne Shea, and her mother-in-law, Ellen Shea, and a child named Virtue who died in 1876 and was described as "Henry's child." Henry was not identified but must have been related in some way. None of David's and Ellen's children that survived to adulthood were buried in this lot because all of the available spaces were used for other relatives who died before them. His nephew, Richard Shea, continued to work for his uncle as an adult until he died in 1909. He was buried in Calvary Cemetery in the Kelley family lot. Their connection to the Cahills may have been through John Kelley who trained Charley Herr, David Cahill's most famous trotting horse. The diversity of kinship ties was typical of Irish emigrants who not only kept in contact with their own family members but also developed

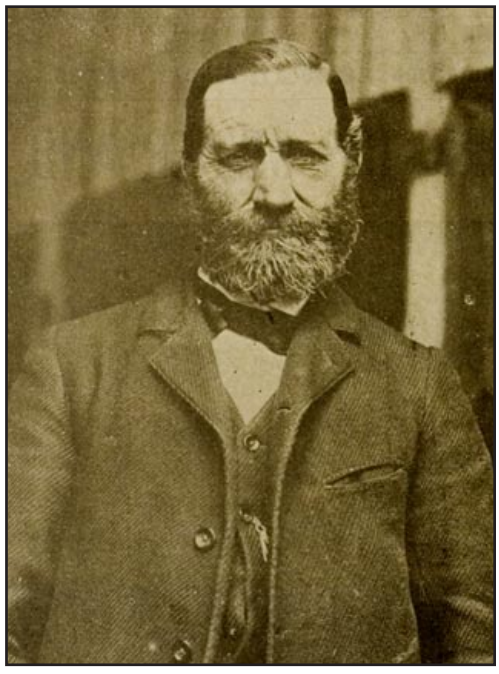


Figure 30. The Morning Herald, May 26, 1901

longterm social and economic relationships with other Irish emigrants.

David Cahill was an enterprising man. In 1901, a local reporter described him as having "eyes steel blue and expressive of much. Nose broad and straight. Mouth full and firm. And a determined jaw which the beard of brown tinged with gray does not altogether hide."[88] David Cahill's purchase of the old Trotter property meant he was now a landowner. He either built a new house or occupied an existing one on the hill overlooking the springs. (Figure 31) Cahill established Westbrook Stock Farm (continuing the use of the farm name originating with Thomas Smith), where he operated his dairy farm, bred trotting horses and farmed until his death in 1933. (Figure 32) He also sold stone from the quarry on the property.[89] He continued the contract with James E. Pepper and Co. for the distillery's use of the spring water, but with the slight variation that the distillery was to have exclusive use of the water. This differed from the Wilsons' arrangement, which specified that their neighbors also could use water from the springs. The contract had a provision for renewal for an additional eight years.[90] Prohibition closed all distilleries in 1917, and the use of the water from McConnell's Springs for whiskey making came to an end by or before that date.

In 1889, Cahill accepted $5000.00 from the Louisville Southern Railroad Company who built a rail line through the center of his farm.[91] The railroad right-of-way was 66 feet in width. The company agreed to construct at least two crossways over or under the railroad. One of these crossways passes under the railroad near the dam abutments at the final swallet. The entire line was also to be fenced with gates installed for crossing. The railroad track, which is still in use, forms the southern boundary of the park.

Figure 31. The Morning Herald, May 26, 1901

Dairy farming was Cahill's earliest economic pursuit in Lexington. He established a small family dairy in the late nineteenth century and operated a single milk wagon. He was employed as a dairyman as early as 1870 even though he owned no land of his own at this time. Dairies were not much regulated until the late nineteenth century when the connection was made between disease and unhygienic practices, not only in dairying but in many other occupations that involved the processing of food and other consumables. Local boards of health were established and various businesses such as commercial dairies were required to register for licenses and undergo inspections. Cahill's dairy career bracketed the period in which dairies were subjected to more stringent rules and regulations designed to eliminate unhealthy conditions and contaminated milk that threatened public health.

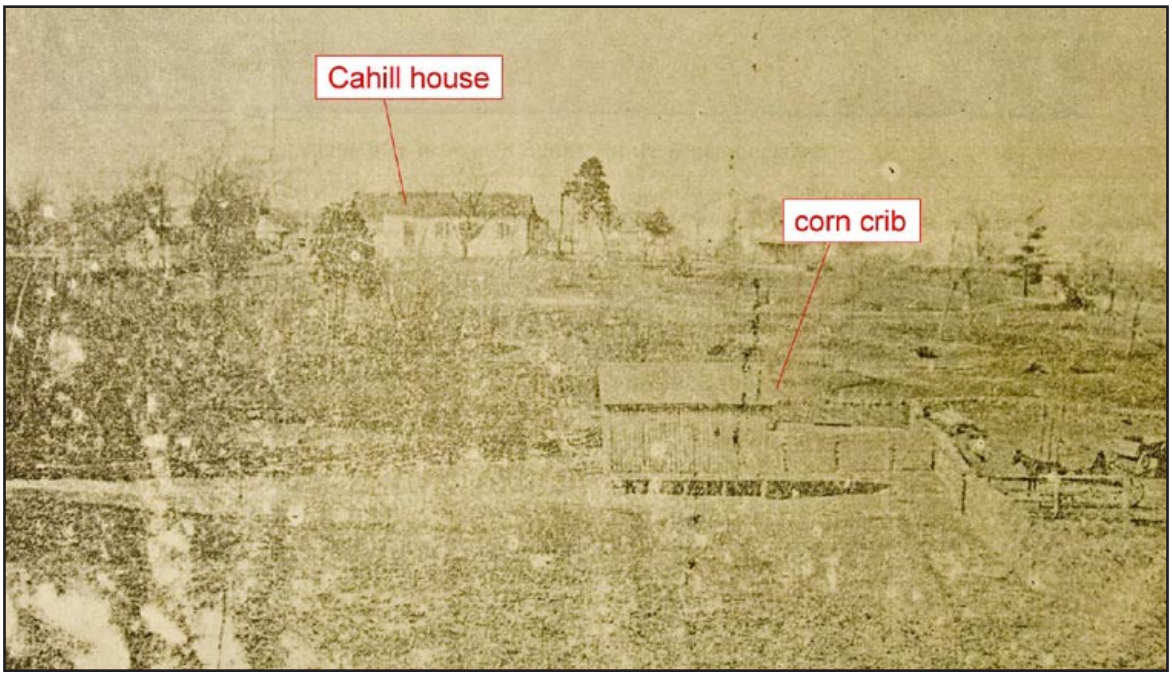


Figure 32. The Morning Herald, May 26, 1901

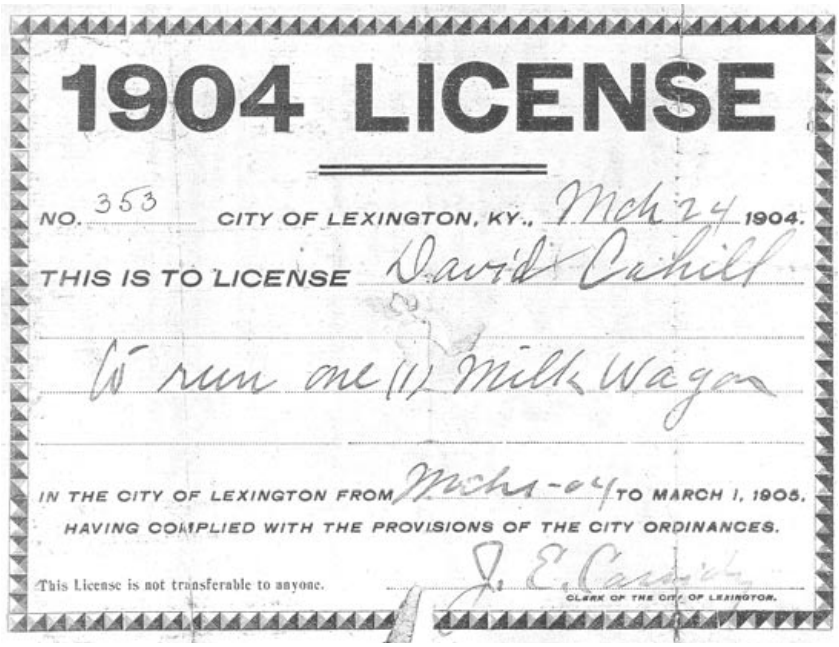
Documents in the family's papers housed in Special Collections at the University of Kentucky chronicle some aspects of his dairying enterprise in the early twentieth century. Among the documents are milk licenses he received for 1904-1907 (Figure 33).[92] He apparently allowed his license to lapse for several years, possibly because his dairy did not meet the necessary standards set by the local board of health. He received a short and rather stern letter from the Lexington Board of Health dated April 21, 1915, informing him that he must discontinue the sale of milk in the city:

> Inspection of your dairy shows that, it is in violation of both the City and State Laws; That you have no permit; That the Health Department has been exceedingly lenient with you and you have refused to comply with its orders.

The crux of the problem seems to have been the level of bacteria in the milk and the lack of sufficient attention in cleaning the reusable milk bottles and cans. An examination of milk taken on October 28, 1915 resulted in a finding of 2,500,000 bacteria per c.c. but no B. Coli or Steptococci. The bacteria count was underlined but no explanation was given. Nonetheless, son William Cahill, who earned an engineering degree from the University of Kentucky, seems to have taken the lead in attempting to modernize the dairy. The family papers indicate that he inquired about small boilers and bought a 2 horsepower economist boiler from the Davis Milk Machinery Company around 1915. He also purchased a 2 ½ horsepower engine, possibly from the William Galloway Company of Waterloo, Iowa.[93] In addition to the boiler and engine, he purchased a 10-gallon Buhl Tiger milk can with a 1-inch sanitary faucet in June of 1915 from the B. Riley Hauk Supply Co. of St. Louis, Missouri. A few months later in October, he bought a bottle washer from the same company.

The family built a creamery which stood on the stone foundation that still can be seen at the

Blue Hole. (Figure 34) The creamery is not present in the 1901 photograph of the area of the Blue Hole and must have been built after that date. The building is present on the 1937 aerial photograph. It may have been built around 1915 when the family was modernizing their dairy operation. One of the 1954 Taylor photographs shows the creamery (Figure 35). The building was rectangular in plan with the longest wall oriented so that it faced the Blue Hole and ran northeast-southwest. It was two stories in height with the main block having eight symmetrically arranged windows on the wall facing the water.


1904 LICENSE

NO. 353 CITY OF LEXINGTON, KY., Mch 24 1904.

THIS IS TO LICENSE David Cahill

to run one (1) Milk Wagon

IN THE CITY OF LEXINGTON FROM Mch 1-04 TO MARCH 1, 1905.

HAVING COMPLIED WITH THE PROVISIONS OF THE CITY ORDINANCES.

This License is not transferable to anyone. J. E. Cassidy

CLERK OF THE CITY OF LEXINGTON.

Figure 33. Image courtesy of University of Kentucky Special Collections

The building was entered by a ramp supported by the southwesterly flanking wall that led to a door in the side of the building. There may have been a door on the opposite side of the building as well. Three additional windows are visible in the southwest side wall. A chimney stack pierced the shed roof in the northeasterly half of the main block. A one story shed addition is visible on the northwest side of the main block; it appears to have a tall stack associated with it that probably was part of a boiler room.

Two flanking walls extend at right angles from the short ends of the foundation (Figure 36), beginning 10 feet 3 inches from the east and south corners (nearest the water). The stone masonry in these walls is also dry laid but the stones are not fitted tightly together. Nor are they tied into the main foundation. One of the walls terminates at a limestone outcrop; the end of the other is currently buried. The 1954 photograph of the building indicates that the flanking walls were not part of the superstructure but extended from the outside walls, and did not support a structure. Two stoneware drainage pipes were laid horizontally within the flanking walls, one on each side of the foundation, 22 inches from the top of the wall. The pipe is of the "bell and spigot" type and was molded from relatively coarse clay. Drainage pipes of this type were first manufactured during the last quarter of the nineteenth century and continued to be produced into the twentieth century. There is no evidence that the pipe was added to the wall after it was already constructed; rather, it was put in place while the wall was being built.

Limited investigations were carried out in 1996 and 2003 at the stone foundation located at the Blue Hole (Figure 37). The foundation was measured and photographed, and the cultural deposits

Figure 34

Figure 35.
Photograph taken by George Taylor, 1954

Figure 36

removed from the floor. The extant part of the stone foundation measures 36 feet 3 inches by 26 feet 9 inches. The longer axis of the building is oriented 50 degrees east of north. Two retaining walls are visible on the northeast and southwest sides of the foundation. Each wall supported a ramp that ran up to a door cut into the side of the building. The foundation is very near the edge of the Blue Hole with a ledge nine feet in width between the base of the wall and the dropoff into the water. The stones are expertly fitted tightly together in the main foundation. The walls of the foundations stand 5 feet 2 inches high and are 16 inches thick.

Excavations on the southwest side of the foundations exposed the stoneware drain pipe that ran from its terminus in the flanking wall, and along the side of the foundation for its full dimension. (Figure 38) The natural slope increased from the flanking wall along the side of the building and the drain pipe followed this slope. It was supported by a stone wall that formed part of the foundation for the ramp that led to the building's entrance. From that point on, it ran 23 feet along the side of the foundation at which point the pipe was purposefully broken so that another drainpipe running from a floor drain in the concrete floor of the creamery interior could drain into it. (Figure 39) The stoneware pipe continued along the side of the building, terminating near the end of the wall. It probably also served to collect and drain water runoff flowing downhill along the rock outcrop that formed the base on which the foundation was built. The system was not elegant; the break in the stoneware pipe to allow water from the floor drain to flow into it was rough and there was probably water loss into the ground around the pipe. But it functioned well enough to take care of the wastewater created by hosing down the creamery floor. The runoff drained into the Blue Hole.

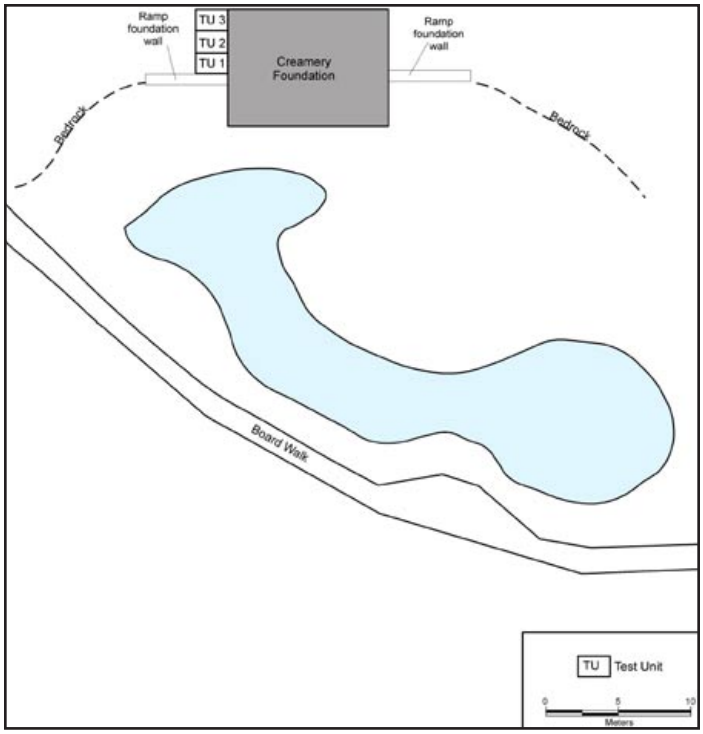


Figure 37

Half of the floor on the southerly side was smooth, unscored concrete (Figure 40). However, the northerly half of the floor exhibited scored channels running parallel to each other and to the easterly and westerly lines of the building. The grooves in the west corner of the floor ran from the northwestern wall of the foundation for a distance of ten feet, terminating at a line of brick that appears to represent an interior wall. The interior wall divided the building into two rooms which is consistent with recommendations that a milk house be divided into separate sections for heating water and cleaning utensils and for cooling and storing the milk. Similar grooves were documented in the north corner except that no brick interior wall was located. Rather, the grooves terminated at a line of drilled holes

Figure 38

11 feet from the northwest wall of the foundation. An iron pipe was also documented in the west corner, running along the northwesterly wall of the foundation and terminating at a stoneware pipe laid vertically into the foundation 10 feet from the west corner. The marks in the floor were probably formed by or created to secure the creamery equipment. (Figure 41).

Table 2 lists the artifacts recovered from creamery. Artifacts such as the milk bottle fragments are consistent with the use of the building as a creamery. Although creameries typically purchased their own supply of milk bottles for use by their customers, the recovery of milk bottles that were originally used by Borden's and National Ice Cream Company of Louisville suggests that the Cahills occasionally used bottles made for other companies. The variety of machine bolts probably originate from the equipment that was used. The process of producing milk for the commercial market became increasingly regulated from the late nineteenth into the twentieth century. The U.S. Department of Agriculture published widely on proper and hygienic procedures for running a market dairy. Manuals stressed the importance of cleaning the cows before they were milked, cooling the milk immediately after milking to a temperature of 50 degrees Fahrenheit or lower, and cleaning all dairy equipment thoroughly.

The Cahills purchased a boiler and washer for steam cleaning bottles and other equipment, and a sanitary milk can for transporting and storing the milk. They would also have needed some way to cool the milk quickly so probably had some type of cooler. A letter dated March 23, 1914 from the Nicollet Creamery Association made reference to a refrigerator erected in their creamery that may have served as a model for the Cahills. An interesting unidentified

Figure 39

Table 2. Artifacts Recovered from Excavations at the Cahill Creamery.

Accumulated Soil Above the Concrete Floor, East Corner

ARCHITECTURE GROUP

1 wire nail

29 window pane fragments

MISCELLANEOUS GROUP

1 flat iron rectangular plate with three holes arranged in triangular pattern (one end is broken)

Accumulated Soil Above the Concrete Floor, South Corner

ARCHITECTURE GROUP

7 window pane fragments

1 mortar sample

DOMESTIC GROUP

1 gray salt glazed stoneware rim

1 undecorated ironstone sherd (probably from a cup)

3 undecorated porcelain saucer fragments

1 machine made amber glass bottle with specialized metal cap (cylindrical body form; marked "W" on base; bottlemaker unidentified)

1 small clear glass machine made pharmaceutical bottle (marked in drams and cubic centimeters; 3 dram/10 cc capacity). Base is marked "U2."

1 clear glass machine made bottle with hand tooled prescription finish (oval form with flat panel for paper label; base marked with an encircled "M", possibly made after 1916 by the Maryland Glass Corporation of Baltimore, Maryland).

1 clear glass machine made canning jar rim with screw closure

1 clear glass canning jar body fragment (marked "Ball" in script; probably dating after 1892)

4 clear glass milk bottle rims

1 clear glass milk bottle body fragment, marked "---M CO./INCORPORATED/LOUISVILLE, KY/PASTEURIZED")

1 clear glass milk bottle body fragment, marked "TO BE W-- AND R—(TO BE WASHED AND RETURNED)

1 clear glass bottle nick (pressed fluted body, possibly for condiments such as catsup)

1 clear glass bottle fragment

1 clear glass machine made bottle base, marked "Duraglas" in script, and made by Owens-Illinois Glass Co. of Toledo, Ohio, after 1940

General Provenience (OnTop of Stone Foundation)

ARCHITECTURE GROUP

2 wire nails

19 window pane fragments

1 mortar joint fragment

DOMESTIC GROUP

1 gray salt glazed stoneware rim (flat extruded lip)

1 blue transferprinted whiteware rim (floral pattern)

1 blue shell-edged whiteware rim

1 undecorated ironstone rim (flat, extruded lip, probably from tureen)

1 brown transferprinted ironstone plate sherd (floral pattern)

8 undecorated porcelain saucer sherds

1 undecorated porcelain lid fragment marked "LEVITON"

1 blue handpainted Oriental porcelain bowl base

1 heavy amber glass bottle base (from very large bottle)

4 emerald green glass machine made bottle fragments (cylindrical form; screw closure; pressed decoration resembling a daisy)

1 clear glass syringe bottle

1 highly fractured clear glass bottle fragment

1 clear glass machine made milk bottle embossed PROPERTY OF BORDEN'S FARM PRODUCTS DIVISION, with an eagle brand trademark, 1 pint capacity; possibly made by Brockway Machine Bottle Company after 1925

1 clear glass machine made milk bottle embossed PROPERTY OF NATL ICE CREAM CO LOUISVILLE KY PASTEURIZED, TMF &

Table 2. Artifacts Recovered from Excavations at the Cahill Creamery.

CO embossed on the base

1 clear glass milk bottle rim

1 clear glass bottle base with faint mark ("TU" or " TV/4")

Unit 1, Zone I (rubble zone overlying stoneware drainage pipe)

ARCHITECTURE GROUP

138 windowpane or other flat glass fragments

14 wire nails

6 cut nails

1 window sash lock part (iron)

14 stoneware drainage pipe fragments

DOMESTIC GROUP

14 animal bones (1 small animal bone, 1 cut bone probably from round steak, 12 ribs, possibly pork)

23 undecorated ironstone from a bowl with a footring (made by Knowles Taylor Knowles, East Liverpool, Ohio, after 1872 and before 1904)

1 solarized (amethyst) glass bottle rim or base

1 clear glass bottle fragment with black painted label

1 clear glass bottle fragment with repainted label (partial label reads –LEXIN—for Lexington)

1 clear glass bottle fragment with embossed label that reads "LIQUID"

2 clear glass milk bottle rims with interior lid ledge

1 machine made clear glass milk bottle rim/neck with circular molded medallion on neck

1 machine made clear glass milk bottle rim/neck with embossed diamonds below lip

1 clear glass milk bottle fragment embossed –ED MILK (probably labeled "PASTEURIZED MILK")

1 undecorated whiteware body sherd with base of handle

1 undecorated ironstone body shert

2 emerald green glass fragments, including a base embossed in script lettering, Shed—/Lady Betty— and a body fragment with embossed daisy motif

1 clear glass circular bottle base marked D12

1 metal lid

3 crossmended undecorated porcelain saucer rim sherds

PERSONAL GROUP

1 2-holed white shell button

1 machine made clear glass pharmaceutical bottle, 25 cc/6 dram capacity

HARDWARE GROUP

3 fence staples

1 iron file fragment

1 washer

1 paintbrush fragment

2 machine bolts

1 machine screw with nut

1 small threaded machine bolt

1 medium threaded machine bolt with nut

2 large threaded machine bolts, one with three washers and a nut

1 possible machine bolt head

14 corroded nails (13 wire, 1 possible cut nail)

1 bundle of wires

ARMS AND AMMUNITION GROUP

1 small caliber centerfire cartridge brass

COMMERCIAL GROUP

1 galvanized iron perforated straining device, possibly from creamery equipment

1 circular iron machine part

1 amber glass base from very large bottle such as a carboy (possibly held cleaning agent for the milk bottles)

Unit 2, Zone I

ARCHITECTURE GROUP

1 scored tile fragment

Table 2. Artifacts Recovered from Excavations at the Cahill Creamery.

DOMESTIC GROUP
1 undecorated ironstone basal sherd
1 undecorated whiteware body sherd
1 molded (diamond hatched) porcelain rim
2 undecorated porcelain body sherds
1 undecorated porcelain rim

HARDWARE GROUP
1 machine bolt with attached nut\

Excavation was abandoned because of high water levels

Unit 3, Zone I

ARCHITECTURE GROUP
6 stoneware pipe fragments
4 cut nails
13 wire nails
4 windowpane or flat glass fragments

DOMESTIC GROUP
3 animal rib fragments
1 clear glass milk bottle fragment embossed BORD--/--M PRODU—
1 solarized (amethyst) glass milk bottle fragment embossed –ORDE--/10 –STS DIV--
1 clear glass bottle fragment embossed 40
1 clear glass bottle fragment embossed –BROS— in a circle

HARDWARE GROUP
2 bolts
1 possible tie rod

AGRICULTURE GROUP
1 horseshoe fragment

Unit 4, Zone I

ARCHITECTURE GROUP
1 commercially made brick fragment with scored lines on one side; reverse marked --BLOCK/--8/--OUTH—
15 corroded wire nails (many wire nails observed but not collected)
1 possible cut nail
19 stoneware drainage pipe fragments
3 windowpane or flat glass fragments

PERSONAL GROUP
1 modern pen knife blade (stainless steel)
1 4-holed corroded metal button

DOMESTIC GROUP
5 animal ribs (butcher sawn)
1 undecorated ironstone body sherd

HARDWARE GROUP
2 bolts, one with nut attached
2 machine bolts
14 corroded nails (1 possible cut nail; 13 wire)
1 bundle of wires

Unit 4, Zone II (dark yellowish brown silt loam)

HARDWARE GROUP
1 bolt with attached nut
1 nail fragment

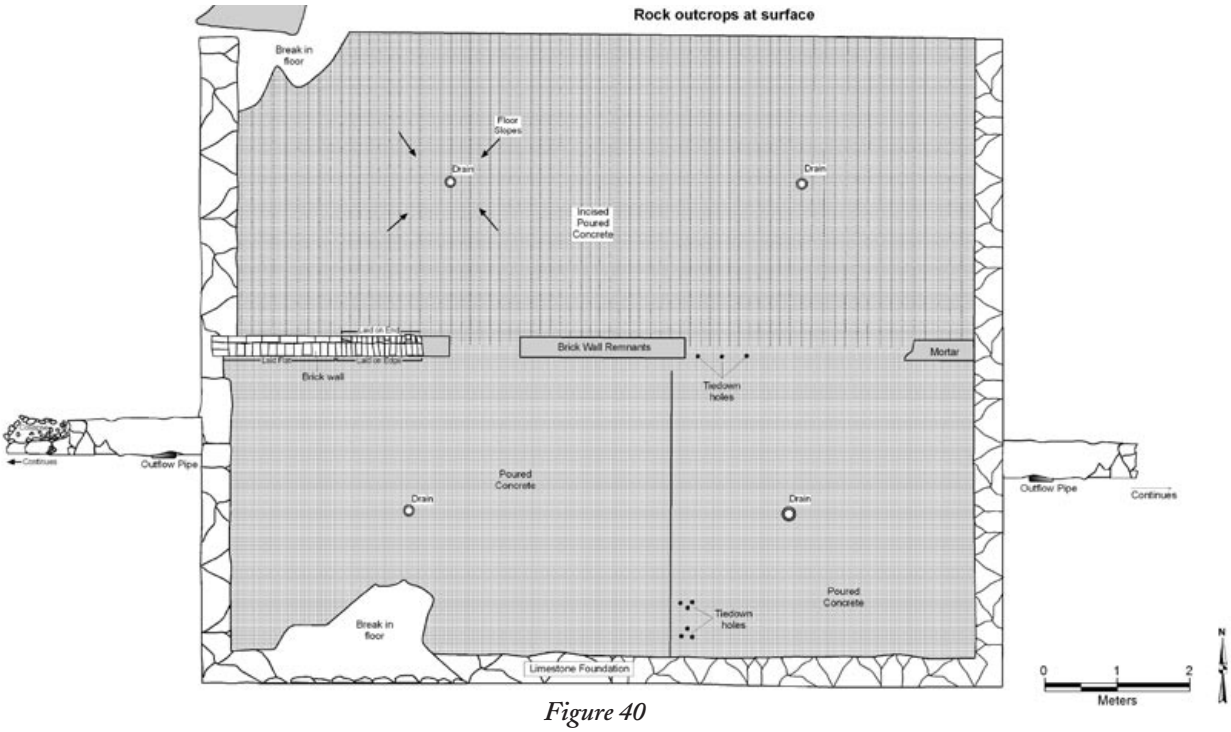
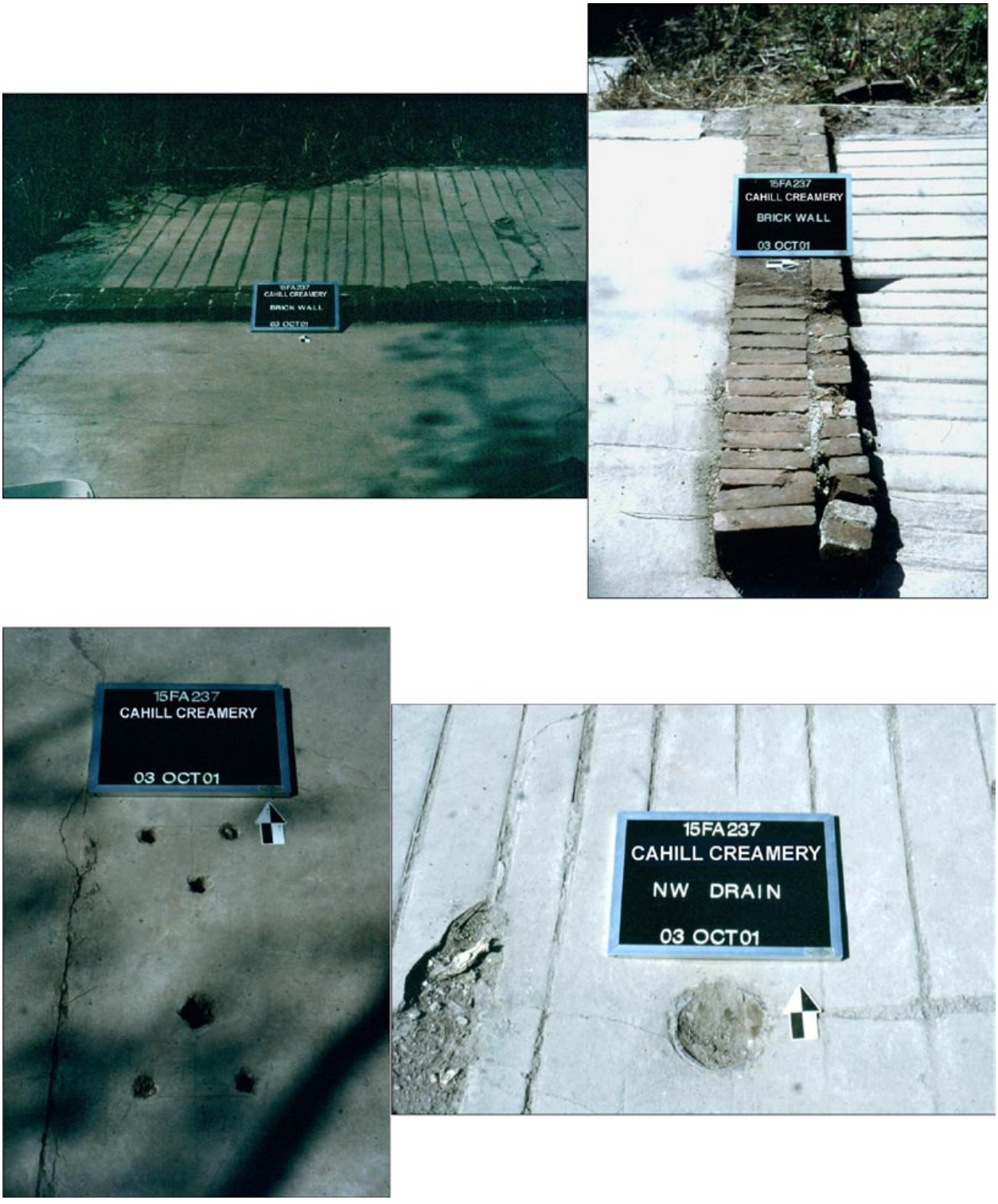


Figure 40

metal artifact was found that appears to be some type of strainer. Letters in the Cahill family papers from the Ohio Creamery & Dairy Supply Company in Cincinnati and the B. Riley Hauk Supply Company of St. Louis, Missouri included costs for Excelsior and Dr. Clark milk strainers. A amber glass basal fragment may have come from a very large bottle such as a carboy that could have held a cleaning product such as Bacili-Kil, an antibacterial compound produced by B. Riley Hauk Supply Company of St. Louis, Missouri. An advertisement for this product was found among the Cahill family papers. They probably also had a separator for retrieving the cream from the whole milk. A letter dated September 27, 1910 from the American Separator Company of Bainbridge, New York, and another dated May 4, 1911 from the Empire Cream Separtor Company of Chicago, Illinois responded to requests for information from William Cahill regarding their separators. He also inquired about the cost of milk and cream caps in 1916 so it is likely that the dairy was producing cream as well as milk for sale. If they made butter, they would have used a churn, most likely a barrel churn. A table with a roller apparatus was often used to work the butter to incorporate salt and bring it to its finished texture and form prior to packaging. All of this equipment would have been stored in the creamery or milk house.

Items such as the porcelain saucer sherds, the ironstone cup fragment, the decorated ceramics, the stoneware sherds, the animal bones and some of the bottle glass probably were also brought to the building by the Cahills. It seems likely that the Cahills might have occasionally brought a cup of coffee or tea to drink while they worked, or even eaten a meal. There may have been some use of the building for storing bottled products such as pharmaceutical concoctions as well. Some of the bottle fragments are attributable to modern picnickers, and the syringe bottle suggests injectable drug use, again a modern (illegal) activity.


15FA237
CAHILL CREAMERY
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CAHILL CREAMERY
BRICK WALL
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CAHILL CREAMERY
NW DRAIN
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Figure 41

The Cahills also built a gambrel roofed dairy barn as part of their compliance with recommended dairy farm practices that were published in various reports and books during the early twentieth century. Gambrel roofed barns were recommended for dairies because they contained ample space for the milk stalls as well as hay storage. A gambrel roofed barn is shown in a photograph taken in 1954 and stood above the artesion head (the Boils) and near the creamery at the Blue Hole (Figure 42). Survey of this general area was performed in conjunction with the investigation of the proposed alignment of the primary trail. Currently, the stone fence near the artesian head (the Boils) has been realigned to follow the paved trail. Originally, the artesian head was partially enclosed by a section of stone fence that ran along the easterly edge of the water. It attached to a fence section that ran east-west for a short distance and then made a right angle turn and ran north to form part of the dairy barn lot. The structure could have been within this corner, or, alternatively, on the west side of the fence. The area on the west side of the fence was investigated by excavating a few shovel probes. The soil was very deflated in this area indicating that topsoil was absent. There is also some stacked stone in this area that could be part of the foundation. Another unusual feature noted in this area was a patch of English ivy which is not native to Kentucky that can be become invasive.

Cahill may have run afoul of the law again in 1926, when the local health office wrote a letter detailing the procedures for thoroughly cleaning his milk vessels. Dr. C.H. Voorhies, health officer for the Board of Health in Lexington, began his letter, "The reason for clean milk vessels is obvious." He went on to outline the process by which milk vessels should be cleaned. The procedure involved the following steps:

- Rinse with cold water.
- Immerse in an hot alkaline solution using washing soda. The solution contained a quantity of lye that formed soap with the fat in the milk residue. Ordinary washing soda was not strong enough and several companies offered washing soda made expressly for the use of dairies.
- Scrub the vessels to remove the milk residue.
- Rinse thoroughly to remove all traces of the alkali.
- Sterilize the vessel in a steam cabinet or boiler. Alternatively, the equipment could be immersed in boiling water.
- Store the vessels so that they are not re-contaminated. Inverting buckets and cans on fence posts or shed roofs was not recommended.
- Use vessels that have handles so that they could be transported without contaminating the cleaned interior.

Despite these problems, Cahill was still running his dairy when he died intestate in 1933, his wife having died in 1916. His five children all survived him and his son John D., and daughters Catherine and Lily continued to run the dairy.

The dairy was not the only agricultural pursuit of the family. Like many farmers of his time, David Cahill grew field corn to feed his livestock, and had a large vegetable garden. Preserved among his family papers are notes on what was planted in the vegetable garden in 1901. The vegetable

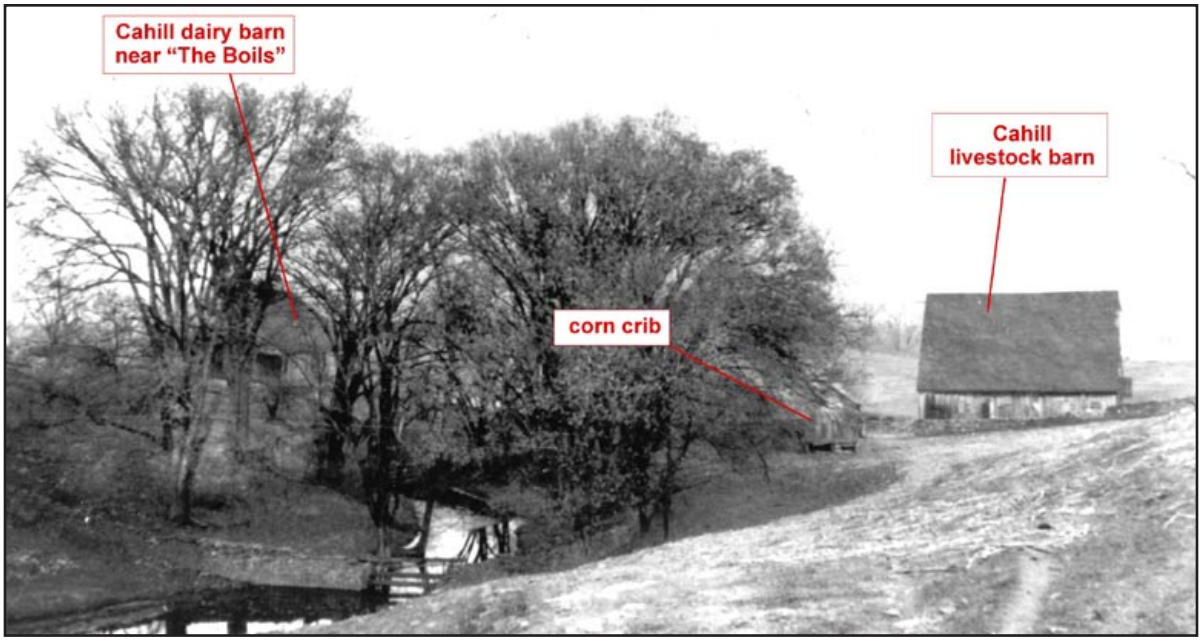

Figure 42. Photograph taken by George Taylor, 1954

garden was located near the grape arbor on either side of the fence separating the east and west pastures. Most of the seed he planted was purchased from the H. N. Hammond Seed Company, identified by the use of the initial "H" in the gardening notes. Detailed notes were kept from April 1 to November 18, 1901 by someone in the household other than David Cahill, Sr.[94]

The gardening season began with the planting of early Jersey Wakefield cabbage seed, H. Earliest tomato seed and cauliflower seed in boxes on April 1 and April 3. Early six weeks and early Michigan potatoes had apparently already been planted at an earlier date and it was time to "cut" (perhaps meaning that they were hoed for weeds) them in the first week of April. The next week ground was harrowed and dragged and onions were set. More six weeks potatoes were set out that week as well for a total of seven rows and five hills. The potato crop must have been prodigious; in addition to the varieties already mentioned, the rows were finished out with H's Wonderful variety.

On April 17 (St. Patrick's Day and a traditional end date for planting peas), H. Earliest & Best, Morning Star and Telephone peas were planted in a long row, each variety taking up one-third of the row. In late April, a variety of sweet corn called H's 1 Stowell was planted, followed by Snowball radishes, Edmund's Extra-Early turnip beets, Scarlet Horn carrots, Grand Rapids lettuce, Bloomsdale spinach, and Guernsey parsnips. By this time, the peas were coming up.

On Mayday, beans were planted, anticipating the beginning of the frostfree season by more than a week. A variety of everbearing peas went in the next day next to the sweet corn in the sweet potato row, along with H's Golden Bounty tomato seed and H's Extra Early Express cabbage. Warm weather crops were planted in mid-May after the last frostfree date had passed. These included H's Great Tall Tree tomatoes, 22 hills of Sweet Heart and Pickin Ninny's Delight watermelons, 50 hills of Mammoth Giant, Rock Ford, Grand Rapids and Paul Rose musk melons, and 6 hills of Japanese

West Egg gourds. The sweet corn had to be replanted.

On May 18, 110 Jersey Wakefield cabbage seedlings were ready to set out as were 100 H's Surehead cauliflower plants and 47 H's Earliest tomato plants. A grand total of five strawberries were picked from H's Earliest strawberry plants. More cauliflower plants, 157 Southern Queen sweet potato sets and Extra Early Express cabbage plants were planted in the latter part of May. At this point, most of the initial planting was complete and the notes begin to refer to necessary plowing for weed control and the need to replant varieties that did not thrive. The Early Michigan potatoes did poorly and were replaced by potato sets grown from Cahill's own seed. One of the problems with the potatoes was that they rotted because too much manure had been added. Other vegetables that had to be replanted included sweet corn, Morning Star and Telephone peas, and the watermelons and musk melons.

Extra care was taken with the potato crop. In early June, the dirt was plowed away from them, then a double shovel plow was used to throw the loosened soil back over them. The reason for this cultivation was not mentioned but it might have been done to aerate the soil around the potatoes so that they would grow larger. Covering the maturing tubers was also necessary to prevent the concentration of a natural toxin, solanine, in the skins by limiting exposure to sunlight. More cabbage, cauliflower, sweet potato, musk melons, and watermelons were replaced through June, and Golden Beauty tomato plants and H's Thorough White Dent corn were planted. The dent corn was interplanted with the potatoes. By this time the earliest strawberries had finished bearing and it was time to stake the peas. All along, weeds were kept at bay by plowing until the plants grew too tall; then it was necessary to hoe out the weeds by hand. But the first mess of beans were picked around June 21, and early six weeks potatoes were dug on June 30.

Over the remainder of the summer, the notes chronicled more replacement of plants that had died, weed eradication and the planting of crops like cabbage and cauliflower in anticipation of a fall harvest. H's Danish Beechead, All-Head Early and H's Premium Prize Flat Dutch cabbage were mentioned in the notes. By late July, the sweet corn was ready for harvest along with a second mess of beets and the first of the early tomatoes. Predictably during this part of the summer, the weather had been dry. Although several attempts were made to successfully grow watermelon and musk melon, harvests were slow in coming. A few musk melons were picked on August 1 and 3.

Onions were harvested for storage in early August, but the family had been eating onions, beans and other crops as needed all summer. Beans were also harvested for winter storage once they had dried on the vine. More fall crops were planted with some new varieties such as the Long Island rutabaga turnips that may have been chosen because they grew better later in the season. The latter part of the summer focused on harvesting crops for winter storage. September 19 brought the first frost. By late October, it was time to dig the potatoes. The garden season ended on November 18 when the last of the beets, cabbage and cauliflower were picked.

Field corn was a major crop on the Cahill farm. An unidentified household member drew a

schematic plan of the corn field to determine how to compensate the hired farm hands. Workers included Andy Chenault and Joe Terry, who were black, and Will Hamilton and his son, Tipton, who were white. They were paid by the number of shocks of corn they each put up at a rate of eight cents per shock. In 1898, a total of 32 rows, varying in total length, were planted for an approximate yield of 349 7/18 shocks. This crop provided feed corn and fodder for Cahill's livestock. Notes for 1910 chronicled the planting, replanting, cultivation and plowing of the corn crop. Laborers during this year included George French, Frank Warn, Ed Saunders, Ben Hicks, Henry Washington, George Washington, Sam Straus, Noah Hensle, George Willard and his brother, a Chenault (probably Andy) and R. Modesty. These were all black laborers.

David Cahill was well known locally for his involvement in the trotting horse industry. He began buying mares in 1874 but remained a small-scale breeder for many years. His earliest purchase was an old mare named Belle Clay, sired by Star Davis, who was thought to be barren. He succeeded in getting one foal sired by Albert Dudley whom he named Lilly Cahill. This mare produced several more foals that showed great speed but most of them were fillies and so were usually used as breeding stock rather than for racing. His stable consisted primarily of mares that he bred to local stallions. The early years of his involvement in the horse industry are not well known. The Red Mile trotting track was built in 1875 and he may have directed his breeding efforts to producing horses suitable for harness racing. Certainly, he was focusing on trotters by the 1890s when he acquired his most famous horse, Charley Herr. The dispersal sale of Dr. Levi Herr, a famous breeder and veterinarian, was the turning point. David Cahill purchased Bessie Huntington, foaled in 1882 by Happy Traveler, her foal, and the foal she was carrying at the time; both were sired by Alfred G. The older foal was named Bert Herr and his younger brother was named Charley Herr in honor of Dr. Herr's sons.

His papers include details on his trotters beginning in 1895 when he nominated his mare, Jessie Cahill, sired by William L. out of Lizzie Cahill, for the Stakes of the Louisville Driving and Fair Association. In 1898, he attended the New England Trotting Horse Breeders' Association in Readville, Massachusets, with his colt, Alfred Star, and Charley Herr (further distinguished with a time of 2:07 minutes for a one-mile race).[95] Alfred Star was also sired by Alfred G. but his dam was Becky who was sired by Mambrino King, one of the great trotters whose genes were part of the foundation stock of the industry. Charley Herr won only 11 of his 41 races, but placed in 25 others, winning 41 of 142 heats and finishing 13 heats in 2:10 or better. When Cahill refused an offer of $20,000 (a tidy sum for the time), he said, "Many a man has $20,000, but only one man has Charley Herr."[96] So popular was the trotter that a cigar was named after him.[97] (Figure 43) Charley Herr sired many offspring that also did well at the track, including Charley Herr, Jr. Mares were sent to be serviced from considerable distances, attesting to Charley Herr's valuable blood lines. In 1900, David Cahill filed certificates of eligibility for six foals with the Kentucky Stock Farm, a national trotting horse journal. Charley Herr sired four of them out of Blue Bells, Jessie Cahill, Minnie W. and Miss Pryor. His full sister, Sister Colette, was also owned by David Cahill.

The other foals for 1900 were sired by Naboth 2:19 ¼ out of Bessie G., and Gregory the

Great out of Bessie Huntington (Charley Herr's dam). The year 1901 was a major year for David Cahill. Charley Herr was running particularly well that year and was one of the top horses among trotters. Cahill entered foals sired by Charley Herr, Gregory the Great, and Levi Herr out of Miss Pryor, Shathleen, Miss Bannermark, Crocus and Cressy in the Hartford Futurity; these foals were nominated in the year of their birth to be raced as three-year-olds. Some of the same foals were entered in the Terre Haute Trotting and Fair Association in the same year.

More foals were entered in the Hartford Futurity for foals born in 1902. Charley Herr sired three out of Jessie P., Bessie G. and Miss Pryor. Another stallion named Bert Herr (Charley Herr's brother) sired a foal out of Crocus and Echo. The foals of 1902 were nominated for the Kentucky Stock Farm Purse, with a guaranteed value of $7,500.00; these included foals sired by Charley Herr out of Miss Pryor and Jessie P., a foal sired by Burt Herr out of Jessie Cahill, and one sired by Direction Boy out of Annie Herr. No other papers relating to trotting horses were found for later years but David Cahill continued in the business with the help of his son, William.

Although David Cahill began breeding horses as early as 1874 and was racing them as trotters by the 1890s, his reputation as a breeder and reinsman was largely local. He was not a well educated man nor was he wealthy. In these respects, he was separated by social class and economic standing from men like Dr. Levi Herr, R.A. Alexander, John Madden, John Gaines and other men of wealth and status who were instrumental in establishing great trotting horse pedigrees.[98] He managed to build a very respectable stable of as many as twenty mares during his years in the business but harness racing magazines such as The Western Horseman rarely mentioned him and his contribution to the harness racing industry are largely unknown today. His most famous horse, Charley Herr, earned steady but not spectacular winnings for him and was perhaps most profitable as a stud (Figure 43). During the peak of his racing career, Charley Herr was heralded as "one of the gamest horses that ever took the road" and was known not so much for achieving first place in his races as forcing the other horses to run their best to beat him.[99] Born in 1895, Charley Herr was a comparatively small horse, just under sixteen hands, and something of an underachiever until he was five years old. His racing success in 1900 regularly made the news and he was known for his stamina

Figure 43. The Morning Herald, May 26, 1901

and indomitable behavior on the track.

Cahill's horses may have been housed in the gable end barn that can still be seen as a concrete foundation on the McConnell Springs property. Two photographs dating to 1953 show this barn when it was still standing. Figure 42 shows the south elevation of the barn. It had a steep gabled roof and several openings that appear to be a paned window on the southeast corner, stall windows that are closed and possibly a door. Figure 25 shows the northwest corner of the barn in the extreme left side of the photograph. A possible door and window is visible in this view. Slotted concrete piers along the sides of the barn were probably foundations for a total of eighteen stalls (at least one was probably used as a tack room).This barn has some intriguing characteristics that suggest it was an earlier structure, originally a post and beam construction, possibly built by John Wilson. It was a large structure, measuring 66 ft north-south by 54 ft east-west, and had a wide central drive-through aisle with stalls on either side. At some point, the post supports must have deteriorated because a concrete foundation was poured around the original posts and additional wooden supports were added. The wooden posts and supports are now gone but their impressions are discernible in the concrete as is the wooden form that was built when the concrete was poured. A 4 ft wide concrete aisle ran inside and adjacent to the east and west walls and was probably added when the foundation was reinforced. Another building stood near the barn that was probably a corn crib. Its archaeological presence was detected only as a sparse scatter of cut and wire nails. The building was probably built by the Wilsons or an earlier landowner and used over a long period of time, well into the twentieth century. It is visible in Figure 42.

David Cahill trained his own horses and drove them until he was sidelined by injuries sustained in a fall when he was 86 years old. Fittingly for a son of the Emerald Isle, his racing color was green. At 85, he was still driving in the matinee races at Gentlemen's Driving Club meet at the Red Mile Trotting Track. The Gentlemen's Driving Club was a sort of social club and it is likely that Cahill had retired from professional racing by this time. However, his racing career once took him all over the country, particularly to New England where he regularly raced at Hartford, Connecticut, Readville, Massachusetts, Providence, Rhode Island, and New York. "Uncle Davy" Cahill died early in the morning of Thursday, September 14, 1933, at the age of 88. Called the "dean of the Kentucky trotting horse owners," his passing merited an extensive obituary on the front page of the Lexington Leader. He was extolled as "being honorable and fair in all his business dealings," and prompt in meeting his obligations. He was "witty and quick at repartee," and was known for many clever sayings, delivered, no doubt, in his native Irish brogue. His wife, Ellen, died in 1916 at age 60, but all his children survived him. His oldest son, William John David Cahill, continued the family interest in trotting horses but died on September 3, 1934, a few days after the first year anniversary of his father's death. David Cahill's daughter, Mary, joined the Sisters of Charity, took her orders in Bardstown and became Sister Mary de Neri, later moving to Bellaire, Ohio. Son John D., and daughters Lilly and Catherine remained on the farm on Old Frankfort Pike and continued the dairy business for awhile, but age, infirmities and a changing economic climate unconducive to the continuation of local dairies led to the demise of the business and the siblings eventually moved off

the farm. John Cahill died on August 8, 1959 at age 79. Catherine Cahill died on February 26, 1975 at age 93. Lillie Cahill's death date is unknown.[100]

The Central Rock Company Tenure (1958-1983)

In 1958, the Cahill heirs sold 67.8645 acres to Central Rock Co., Inc., for mining gravel.[101] By this time, the oldest son, William, had died, and sister Mary had taken religious orders and was living in a convent in Bardstown, leaving John, Catherine and Lillie still living on the farm. None of the Cahill children ever married. Both David Cahill and his heirs had been slowly selling off their land on the Old Frankfort Pike, and Central Rock Co. had made a previous small purchase.[102] With

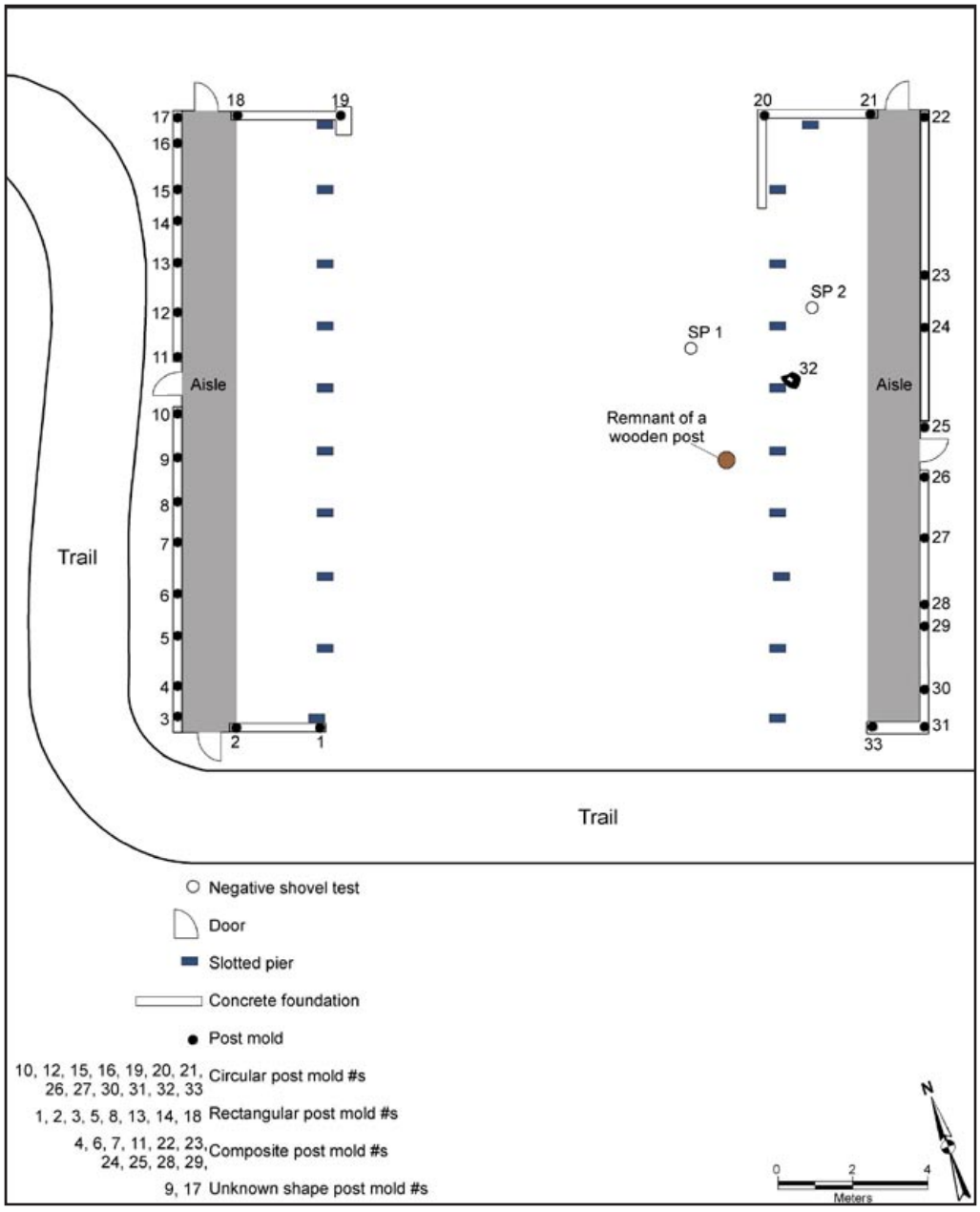

Figure 44

this larger purchase, however, the gravel company was able to extend its operations considerably. The Cahills retained the right to live in their house but eventually moved out as age and physical infirmities advanced.

Although Central Rock Co., Inc. leased out the property for agricultural use for some years, the company stopped this practice and razed the buildings sometime in the 1970s. According to George Brown, who worked for Central Rock Co. and eventually acquired the property, the buildings had become dilapidated.[103] The land was allowed to revert to secondary growth in the 1970s. People began to dump garbage and other unwanted items in the area, and a hobo camp was established for a time as well.

Late 20th Century Developmental Attempts (1983-1994)

The significance of the springs for their historical associations and environmental qualities were recognized as early as 1974 when James R. Rebmann, a planner for the Lexington-Fayette Urban County Government and an accomplished cave explorer, first visited the springs and began promoting their acquisition for a city park.[104] Rebmann was unsuccessful in persuading the urban county government to move forward on his proposal and the property continued as undeveloped land until 1983 when Central Rock Co., Inc. conveyed the tract of 67+ acres to George G. Brown, Jean McNew Isaacs, John Hopkins, and Ann Elinor Isaacs Wright.[105] In October of 1985, the Lexington Sinkhole Ordinance was adopted by the Lexington-Fayette Urban County Government. Jim Rebmann was one of the major architects of this ordinance which required developers to identify and take into account the karst aspects of a proposed development before approval was given by the local governing authorities. In November of 1985, the new owners (except for John Hopkins who had left the partnership) entered into an agreement with the Dallas Development Corporation to develop the property as an industrial park. The corporation offered five acres containing the springs to the city as a donation with the stipulation that the city would buy an additional fifteen acres for $50,000 to $75,000 per acre. The asking price was considered exorbitant by many and local government declined. The matter remained unresolved, despite support for the acquisition of the property from numerous local preservation and environmental groups.[106]

In the meantime, the Dallas Development Corporation continued their development plans. Tons and tons of fill were brought in and dumped on the tract, starting at Old Frankfort Pike and extending to the edge of the northerly slope overlooking the springs system. By late 1990, city officials took action to prevent a local contractor from dumping any additional fill close to the springs because of clear indications that the springs would soon be filled in if filling continued. The contractor claimed that the property owners had directed him to dump the fill and furthermore, eight to ten acres around the springs had been stripped of trees, many of them very old mature specimens that once had been part of woodland pasture dating back to the nineteenth century. A stop-work order was issued, using the Sinkhole Ordinance and the Erosion Control Ordinance, and the contractor was required to install erosion control fences and grade the fill away from the springs.[107]

Despite these restorative measures, fill already covered numerous structural features associated with the nineteenth century occupations of the property. These features remain inaccessible to archaeological research today.[108]

In order for the development to move forward, Brown and his partners had obtained a mortgage executed from Dallas Development Corporation to First Security National Bank & Trust Company in 1985. The corporation retained a vendor's lien on the tract that was inferior to the mortgage.[109] With the cessation of further development, income from the sale of lots in the remainder of the tract was insufficient to meet the obligations of the mortgage and Dallas Development Corporation was forced to declare bankruptcy, leaving George Brown and his partners as unsecured lien holders. The title to the property reverted to First Security National Bank & Trust Company (which had been bought by Bank One) in 1992.[110] Heavy publicity and active promotion for the acquisition of the springs intensified in spite of reservations by then Mayor Scotty Baesler as to the feasibility of establishing a city park at the springs. Concerns over potential environmental hazards and other factors continued to delay a final decision. Finally, a change in the mayor's office, offers of financial and other support by numerous groups, and a favorable environmental assessment brought the debate to a crucial point, made even more compelling by the news that a developer had offered to purchase some of the industrial land next to the springs, including a 3.5 acre tract that was needed for a parking lot and nature center. After many negotiations, Bank One (the purchaser of First Security Bank) donated 21.5 acres of land including and surrounding the springs with the agreement that the city would purchase the additional 3.5 acres for $130,000 by the close of 1993. The Friends of McConnell Springs was formed out of an organization called Lexington Directions to raise money for the purchase. Isabel Yates, a board member of Lexington Directions and a city council member, volunteered to coordinate the fund-raising effort. Under her leadership, and with the support and hard work of many citizens and Urban County government officials, McConnell Springs was acquired and the way was clear for a city park to be established here.

While the fill did not extend to the springs themselves, its impact was considerable. Several buildings were covered by the fill, including the stone foundation visible in 1937 and 1953 aerial photographs and foundations visited by Wooley in the 1970s and O'Malley around 1986. A large building that probably was the stone barn mentioned in the 1837 advertisement of the farm when it was offered for sale by Thomas Smith, was demolished; its location is now covered with fill. Most of the old mature trees that dotted the once pristine pasture lots and the stone fences that outlined them were bulldozed. A deep ditch was excavated in an attempt to drain the site. The attempt was not successful but did serve to draw off water overflows during periods of heavy rain. The topographic character of the area closest to Old Frankfort Pike was changed drastically and now appears as a high plateau north of the springs. Nevertheless, the concerted efforts of many concerned citizens and local government saved McConnell Springs virtually at the eleventh hour and much was preserved that would have otherwise been lost.

Saving the Springs and the Development of an Educational Facility (1994-present)

The most recent chapter in McConnell Springs history is the story of the Lexington community's involvement in the restoration and preservation of the Springs. The Friends of McConnell Springs is a non-profit corporation whose mission is to restore and preserve McConnell Springs as an educational resource, an historical site, an environmental resource, and a passive recreational area.

The fledgling organization was successful in raising the money from hundreds of citizens, local corporations and a major anonymous donor. In 1994, the organization presented the 3.5 acres to the City of Lexington. Also that year, the Friends held a public forum and design charette attended by community leaders, private citizens, civil servants, and professionals from many disciplines (landscape architecture, architecture, environmental planning, environmental sciences, and history). The purpose was to determine the public's aspirations for McConnell Springs and to create a conceptual master plan to guide site development. From the discussions of this three-day meeting, the participants decided that the primary emphasis of the McConnell Springs Site should be education, with a secondary emphasis on passive recreation. In 1999, the Kentucky-American Water Company Education Center was dedicated at McConnell Springs.[111]

Today, McConnell Springs is owned by the Lexington-Fayette Urban County Government and is managed by its Division of Parks and Recreation. In addition to the Education Center, an amphitheater and two miles of trails have been built. Weekend interpretive tours are held year-round that focus on the botany, geology, history, and urban wildlife of the site. The Friends of McConnell Springs sponsors Founders' Day, an annual celebration of Lexington's settlement, during which site tours, demonstrations and activities are held. Research efforts directed at learning more about McConnell Springs' environmental and cultural resources are on-going. The Friends continue to support McConnell Springs through their educational activities, research, fundraising, site improvement projects, and events.

Appendix A. Fayette Deed Book X, p. 70

Articles of agreement made entered into and concluded upon this 28th day of August in the Year 1812 Between Samuel Trotter on the one part, and George Trotter, Jr. on the other part. Witnesseth, that the said Samuel Trotter on his part doth covenant to surrender and release to the firm of Samuel and George Trotter, all the profits he made in trade from the 1st day of December [1810] to the first day of November in the Year 1811, being the period of time in which the parts hereto were trading separately. Except the profits which he made in his speculation in merino Sheep, which amount to the sum of Fourteen hundred dollars the original cost of said sheep Eleven hundred dollars, being already charged to the private account of said Samuel Trotter on the Books of the firm of Samuel and George Trotter. And the said George Trotter Jr. on his part in consideration of the above doth hereby covenant to convey to the said Samuel Trotter when required by deed of release or otherwise his right and interest in the farm purchased by Sam and George Trotter, of McConnell including twenty acres deeded by Robinson likewise his interest in forty five shares of Kentucky Bank stock, the property of said firm. It is likewise understood that Samuel Trotter is to have the two Negro men which he purchased during their separation named James Dimity and Kitt, together with the gold watch he purchased at two hundred and twenty dollars. It is agreed by both the parties that Samuel Trotter shall have the lot of ground on the hill, upon which he is building together with a claim which the Firm have upon Robert Grinstead, for paving around said Lot and that he is to allow for the same Four thousand dollars the above lot and pavement are considered by the parties as equal in value to the land purchased by George Trotter from the heirs of McNair, adjoining the Town lots for which he gave four thousand dollars out of the funds of the Firm. It is understood that the Rope walk on Tates creek road is the separate property of George Trotter Jr. But that Samuel is to be equal in all the profits and losses which attend the manufacture of Rope and the mercantile concerns of George Trotter Jr. during the interval in which the parties were separately engaged in business all debts due to either of the parties during their separation to be considered joint property and all demands against either during the same Period to be paid by the firm upon an inspection of George Trotter's Private account with the

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Firm, including the sum drew by him to pay for his Rope Walk there appears to be due from him the sum of nine hundred and ninety pounds 8/8 ¼ upon a view of Samuel Trotter's private account with the firm he appears to be indebted this day the sum of two hundred and fifty three pounds 9/4. It is agreed by the parties to make the following division in part of their joint property; to wit Saml Trotter is to have the lot on which the store stands together with the appurtenances and the Brick and stone stable on Water street for which he is to allow seventeen thousand dollars—George Trotter is to have the stone house and Brick rear house attached to it on Main Street now in occupancy of George Adams Lessee of John C. Bartlet at Eight thousand dollars the house in which Lockwood lives and the house in which Mitchell lives at three thousand six hundred dollars making together the sum of eleven thousand six hundred dollars the difference in the value of the above houses and lots being five thousand four hundred dollars the firm of Saml and George Trotter are to pay to George Trotter in twelve months from their dissolution of partnership. It is understood that deeds are to be mutually executed by the parties for the above houses and lots as soon as a dissolution of partnership takes place until which time they are to be considered as in the occupancy of the firm all rents arising therefrom to belong to the firm of S. & G. Trotter and all risks as to fires etc. etc. to be equal between the

parties.

It is agreed that the carriage which Samuel Trotter has bot [bought] is to stand against George Trotter's carriage and that the Gig of Saml. Trotter is to be joint property. It is further agreed that Saml. Trotter is to have a pair of horses at the expence of the firm equal in value to George Trotter's match. The parties have likewise agreed and do hereby make the following division of their Negroes, To wit, Saml. Trotter to have Bluff at $410 Clara at $225 Beverly at $290 Frank at $450 Lewis at $350 Sauney at $390 making two thousand one hundred and fifteen dollars. George Trotter to have Daniel at $440 Isaac at $450 Jesse at $350 Stephen at $320 and Willis at $266.66 2/3 making the sum of two thousand one hundred and forty six dollars 66/100 2/3 the difference in the price of the Negroes being thirty one dollars 66/100 2/3 is credited to Samuel Trotter on the Books of the firm. It is lastly covenanted by the parties for themselves their heirs etc.

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that they will continue partners and joint traders in merchandize upon a joint and equal account between them for profit and loss until the first day of January eighteen hundred and seventeen upon the joint capital which they now have in trade, and it is agreed that all charges and losses and all profit arising by & on account of the said joint trade shall be equally paid received and born by and between the said parties share and share alike. And at the end of the said term etc. The parties their heirs etc. shall and will make up a full and just account between them of and concerning the said joint trade and Stock Goods etc. and make an equal distribution between them. It is understood by the parties that all household furniture used or held by either of the parties is the property of the firm, and that each of the parties shall support their own families. All money drawn by either for private use to be charged anaccount [sic] thereof kept and balanced [sic] annually and he who has drawn most to pay the firm interest on the excess so drawn.

Teste — Saml. Trotter
James Morrison — Geo. Trotter Jr.
Abr. S. VandeGraaff

State of Kentucky Fayette County ?ct 24th October 1823

This foregoing article of agreement between Samuel and George Trotter Jr. was on this day produced to me the clerk of the court for the county aforesaid in my office, and acknowledged by said Samuel Trotter to be his act and deed for the purposes therein mentioned and Robert Scott this day came before me and made oath that James Morrison's name as a Witness to said agreement was to the best of his knowledge and belief the proper handwriting of said Morrison, and also Augustus F. Hawkins came before me the clerk as aforesaid on the day aforesaid and made oath that Abr. L. VandeGraaff's name as a witness to said agreement was (to the best of his knowledge and belief) the proper handwriting of said Abr. L. VandeGraaff and they the said Scott and Hawkins also stated on oath that they believe the signature of the aforesaid George Trotter Jr. was in his proper handwriting and the same is thereupon truly recorded in my office.

Att. J.C. Rodes clk

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Whereas Samuel Trotter and George Trotter, Jr. trading under the firm of S. & G. Trotter, and Samuel Trotter and George Trotter, Jr. and Robert G. Dudley trading under the firm of Robert G. Dudley & Co. having mutually agreed to consolidate their two firms under the name

[illegible] and address of S. [&] G. Trotter & Co. and to connect in the whole sale business all the trading capital belonging to the two firms. Therefore for the purpose of more fully effecting this object they have entered into the following covenants, explanations and stipulations and agreements. To wit. Samuel and George Trotter reserving to themselves a sum equal to the finishing of their two dwelling houses and appurtenances and a right to withdraw from the firm of S. & G. Trotter & Co. such sums as may be necessary for their family expences hereby covenant to vest the whole residue of their trading capital in the firm of S. & G. Trotter & Co.

Whereas Robert G. Dudley for his services and attention to the conducting of the business of the firm of Robert G. Dudley & Co. was by their articles of copartnership upon a final adjustment of the accounts of said firm entitled to receive one fourth part of all the profits arising therefrom S. & G. Trotter have furnished the whole original capital stock, now the said Robert G. Dudley, covenants and agrees to vest the amount of his said share of profits in the firm of S. & G. Trotter & Co. it being the whole amount of his trading capital, reserving a right to withdraw therefrom a sum equal to his necessary expences, and It is covenanted and agreed and it is the understanding of the parties hereunto that in consideration of the faithful application and undivided attention of he Robert G. Dudley to the business of the firm of S. & G. Trotter & Co. and the exercise of his best skill Judgement and management in promoting the interest of the same and the above mentioned capital arising from his profits that at the expiration of this copartnership he Robert G. Dudley shall be entitled upon a dividend being made of its profits if any to draw therefrom one seventh part, Samuel Trotter, three seventh parts and George Trotter Jr. three seventh parts after the original capital shall be refunded in the proportion vested. The firm of S. & G. Trotter are to pay all interest money that may accrue up to the 1st January 1816 on money borrowed for their use, and the firm of Robert G. Dudley & Co. are to pay all the interest that may arise upon money borrowed by that firm until the 1st January 1816 and to pay interest on their debt to S. & G. Trotter until that time.

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Samuel Trotter agrees to rent to the firm of S. & G. Trotter & Co. his farm for the Sum of one hundred pounds current money per year during the continuance of that copartnership and Samuel and George Trotter agrees to rent to said firm during its continuance the Powder mill establishment for the annual sum of five hundred dollars and to sell to said firm at prime cost all the stock and materials belonging thereto and to hire the Negro men employed on said farm and in the Powder mill establishment at Eighty five dollars each per Year and the boys and women at a fair price. The firm of S. & G. Trotter & Co. are to furnish Boarding, Lodging and Cloathing and to pay the Taxes and the said firm of S. & G. Trotter & Co. are to indemnify the said Samuel and George Trotter against all injuries that may be sustained by the Negroes or works by the explosion of Powder or Saltpeter—all the stock of horses, Cattle, Hoggs, farming utensils, Hay, Fodder and Grain on the farm are to be valued and charged as so much capital stock to the Firm of S. & G. Trotter & Co. but it is the understanding of the parties hereunto that at the expiration of this copartnership stock may [be] returned of same value. It is the agreement of the parties hereunto that all the Goods wares and merchandize on hand belonging to either concern shall be invoiced at cost, viz. S. & G. Trotter's purchase of James Prentiss at cost to them and all other goods at first cost and Robert G. Dudley & Co. at first cost, no carriage on either side—and put into the concern of S. & G. Trotter & Co. S. & G. Trotter agrees to rent to the firm of S. & G. Trotter & Co. their ware house during the existence of said concern at the rate of one thousand dollars per Year. It is the agreement of the

parties hereunto that Samuel Trotter should be supplied with firewood at his house for the use of his family from the farm and that the ware house shall also be supplied with firewood in like manner. It is hereby expressly understood that the corner store hitherto under rent to Robert G. Dudley & Co. returns to S. & G. Trotter. It is hereby covenanted and agreed between the parties hereunto that this copartnership under the firm of S. & g. Trotter & Co. shall be and continue until the 1st of January 1820 unless sooner dissolved by the death of either party and if that event should occur to continue until a Sufficient

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time should be allowed to finally close and adjust the business of the concern.

Sam Trotter [seal]
R. G. Dudley [seal]

State of Kentucky Fayette Count Sct 24th October 1823

This foregoing article of agreement between S. & G. Trotter and Robert G. Dudley was this day produced to me the clerk of the court for the County aforesaid in my office and acknowledged by Samuel Trotter party thereto to be his act and deed for the purposes therein mentioned and John C. Richardson Jr. this day came before me clerk of aforesaid in my office and made oath that he believed the signature of Robert G. Dudley as signed to said agreement was in his proper hand writing and the same is thereupon truly recorded in my office.
Att. A.G. Rodes, clk

Lexington 23rd Sept. 1815. Additional articles of agreement Between S. & G. Trotter and Robert G. Dudley. It is left to the choice of Robert G. Dudley until 1st July 1816 or sooner as he may choose whether to be concerned in the powder mill at S. Trotter farm or not but in case he does not by said first day of July 1816 make his choice then to be considered on acct. of S. & G. Trotter they the said S. & G. Trotter reserves to themselves the right of drawing from said firm of S. G. Trotter & C. funds sufficient to carry on said Works, say materials of all Kinds Viz. Peter, Brimstone, charcoal, wood etc. also Hirelings' expences etc. generally attending the same of whatever kind and description for all which expences etc. the said firm of S. & G. Trotter & Co. are to be charged to S. & G. Trotter they the said S. G. Trotter to allow a commission of 8 per cent for sales and garrentee of proceeds of sales to said S. G. Trotter & Co. but no interest account or further charge to be opened on either side. S. & G. Trotter & Co to keep a fair account of all expenditures and rects. Which accts. etc. to be adjusted if possible quarterly or as nearly so as practicable—for the value of hire of farm $333 1/3 of Powder works $500 of Negro men at $85 per Year, & cloathing, boarding and Taxes as also women and boys and managers etc. and expences as to works and farm; said Trotters are to draw as wanted but all clear profits to remain free of Int[erest] until expiration

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of the copartnership. Witness our hands and seals
Sam Trotter [seal]
Robert G. Dudley [seal]

State of Kentucky Fayette County Sct 24th October 1823

This foregoing article of agreement between S. & G. Trotter and Robert G. Dudley was this day produced to me the clerk of the court for the County aforesaid in my office and acknowledged by Samuel Trotter party thereto to be his act and deed for the purposes therein mentioned and John C. Richardson Jr. this day personally appeared before me clerk as aforesaid

and made oath that he believed the signature of Robert G. Dudley (as signed to said agreement) to be in his proper hand writing and the same is thereupon truly Recorded in my office.
Att. A. G. Rodes, clk

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Lexington 28 Augt 1813

Memo. That the present powder works on Saml. Trotter's farm have been built at the expence of the firm, and and all buildings, houses etc. attached to said powder works are to be considered as the property of the said firm of S. & G. Trotter until expiration of this present partnership as per articles of agreement between them. At said time of expiration of the partnership, the said improvements—say powder mill works, to be valued taking into view the state of the market as to the then profits and sales of powder, and said Saml Trotter is to repay to said George Trotter his one half of said valuation if the above named improvements and houses in the manufacturing of No. 16 Rag powder at $10 per 100, or other numbers, or glazed in a fair proportion, said G.T. furnishing materials for the amount afsaid [aforesaid] S. Trotter's farm and houses—the firm of S. & G. Trotter to pay to S. T. three hundred dollars per year, out of which sum, fifty dollars per years is to be deducted for the cutting and halling [hauling] of fire wood to [illegible] in town—all wood used by the powder works or rather for refinery [Salt]Peter and Brimstone, the firm is to pay a fair price for so long as S. T. thinks he can spare it, but does not bind himself to furnish such wood longer than he may deem proper. In respect to the new addition of the ware house Long and Grinstead are to be paid $2000—also there will be some extra expences, all of which as far as to G's half of the cost are to be refunded to him @ 12 Mo. [month] after dissolution of the present partnership by said Saml Trotter, or if Geo Trotter chooses he may receive property of the firm to equal value of the ware house at the end of the partnership—Saml Trotter holds himself equally bound in the title for the land sold to Richd Watters.

S. Trotter
Geo. Trotter Jr.
The rent of farm to commenced 1st Jany 1813
S. Trotter
Geo. Trotter Jr.
Agreement Examined and delivered to S. Trotter 15th April 1824

Appendix B. Documents Checked in National Archives

Documents are in chronological order.

Record Group 92, Entry 2117
Philadelphia Supply Agencies
Letters Sent, Box 4
Accounts with Purchasing Agents, Box 5
Letters Sent Subentry 35

Consolidated Correspondence of Office of the Quartermaster General
Box 840 "Powder"
Box 1155 "Trotter"
Box 798 "Alex. Henry"

Record Group 156, Entry 3, Office of the Chief of Ordnance
Letters, Endorsements & Circulars Sent *("Misc. Letters")*
1812-1833, Vol. 1-21
Book 2 letter to Alex Henry & Co. by John Morton, Deputy Commissioner
(written in Callender Irvine's absence)

Record Group 92, Box 840

Letter from Docius Wadsworth to Callender Irvine, 10 December 1812

Ordance Department
Washington

Callender Irvine Esq.
Sir

> An offer has been made by an Agent of Mr. Trotter Living in Kentucky to furnish 50,000 lbs gunpowder, cannon & musket, deliverable at Pittsburgh or on the Ohio at 55 cents per lb or deliverable at New Orleans at 60 cents to be inspected in Kentucky in convenient Parcels.
>
> I believe the public Service will require a quantity of Powder at Pittsburgh and likewise at New Orleans, and I would recommend that a Contract should be made for the Purpose.

Respectfully I am, Sir, your very obedt servt
Docius Wadsworth

Marginal notes in different handwriting: [Along left margin—by a person approved by Col. Docius Wadsworth Commry Genl. Of Ordnance for that purpose] [below text of letter—To give 15 degrees with Regnier's Eprovette the quantity to be delivered at Pittsburg and Orleans to be stated by Col. Wadsworth person to whom it is to be delivered at both places to be named by him.]

Record Group 92, Box 840

Letter from Richard M. Johnson, Member of Congress, to Callender Irvine, Esq., Commissary General of Purchases, Philadelphia, January 7, 1813

Sir

> I am requested to lay before you the proposal of Samuel Trotter Esq. with respect to furnishing to you a quantity of Powder. He will deliver 60,000 lbs in one year commencing the 1st of March at the following prices—viz. For 11 degrees 50 cents and one & a half cents in addition for every degree above 11. one fourth part to be delivered every 3 months. If more than one fourth is delivered the government to receive it to be deducted out of the next quarter. The Government to receive the powder as fast as 2500 lbs should be delivered. The powder to be delivered at Frankfort or Lexington--The powder not to be grained in a finer sieve than No. 16 nor coarser than 12 or 14--$10,000 to be advance if usual or convenient—water Proof casks to contain 100 lbs at one dollar. If this proposal requires any variation or addition, I am authorized to make it—If it cannot be rec'd 1[received?] please to state the cause & say what terms will be acceptable. It is important that an answer should be given as soon as you can find it convenient—as Kentucky abounds in the materials for this valuable article I shall be much gratified if you can give encouragement to its manufacture which I know may be relyed on to Supply the whole western country & indeed the south likewise.

With sentiments of the greatest respect I am your ob. Svt.
Rh: M. Johnson

Record 92, Box 840.

Letter dated 18 February 1813 from Samuel & George Trotter to Callender Irvine.

Lexington 18 February 1813

Callender Irvine Esqr

> We lately received a letter from the Honbl Richd M. Johnson enclosing yr Letter to him of 12th Jany, wherein you name that you are disposed to enter into a contract with us for 60000 lbs Gun Powder for the use of Government—We have sent to you a small sample of powder by Mr. Danl Bryan, it is probably neither the best nor worst than we are in the habit of manufacturing- you will please to try its strength, either by a proof Mr. Bryan has with him, or such other as you may think proper to make a standard. We have this day authorized Mr. Robt G. Dudley or in his absence Messrs. Alexander Henry Jr. & Co. to contract with you & sign such articles on our behalf as may be agreed on.

Mr. Bryan also goes to yr city for the purpose of making proposals to you for a supply of the same article.
We are Sir with much
Respt Yr Obt Servt
S. & G. Trotter

National Archives, Record Group 92, entry 225, "Powder" [1813]

Letter dated February 28 (1813) from George M. Bibb and Anthony New to Callender Irvine

Washington city
Feby 28th

Sir,

> Messrs. Saml & George Trotter merchants of great capital, & undoubted punctuality, are desirous of contracting with you for some supplies to Govt. Any engagement which they make you may be assured, they have, not only the ability, but the disposition to comply with.
>
> Mr. Daniel Bryan, also may be relied on,-- and Mr. Wm. Romains.

With great respect,
yours
Geo. M. Bibb
Anthony New

Mr. C. Irvine
Commry Genl.

Record Group 92, Box 840

Letter from John Pope to Callender Irvine, March 1, 1813

Sir

> I am advised that Saml. & Geo. Trotter of Lexington Kentucky are about to make proposals to you to furnish powder to government—I take the liberty to assure you that in the ability & integrity of these men you may repose the most entire confidence. Mr. Daniel Bryan of the same neighborhood is about to make a similar application—he is well worthy your confidence—I have the honor to be very respectfully yours etc.

John Pope
Wash[ington] March 1st 1813

Record Group 92, Box 840

Letter from Henry Clay to Callender Irvine, Esq., March 1, 1813

Washington, 1st Mar 1813

Sir

> I understand that Messrs. Sam. & Geo. Trotter of Lexington, and Mr. Daniel Bryan of the neighbourhood of that place, intend to propose a contract to you for the supply of Gunpowder for the use of the Government. In making any contract with those gentlemen you may place entire confidence in their integrity punctuality and responsibility.

Yrs
H Clay

P.S. Mr. Hardin, at whose instance, I wrote you on the subject of salt petre declines making the proposed contract.
H.C.

Record Group 92, Box 840

Letter from Col. Docius Wadsworth forwarding letter from Lewis Sanders, to Callender Irvine, April 20, 1813

Lexington, Kentucky
31 March 1813

Sir:

> When in Washington City last Winter I was referred to you as the proper office of the Government to make Purchases or contracts for Powder and Ball at that time the Secretary of the War Department declined making a contract with me, believing it probable that some alterations may have occurred requiring a greater quantity of Powder now than was then contemplated. I take the liberty of addressing you upon the Subject.
>
> I will engage to deliver you any quantity of Powder not exceeding one hundred thousand pounds, at any point or place on the Ohio River from Pittsburgh to its Mouth not more than ten thousand pounds to be delivered in any one Month, the Price to be fifty Cents per Pound, the quality agreeable to any Sample you may send me of Powder used by the Armies of the United States.
>
> If the powder is wanted and you approve of making Contracts here, I would recommend your sending out by Post in a small tin Tube the Sample of the Powder authorizing some Person to contact with me, say the Navy Agent, Col. Wickliffe, Col. Thos. Dye Owings or some other Person if this Method is approved?

Your obedt. Serv.
(signed) Lewis Sanders

Col. Wadsworth
Washington City

Callender Irvine, Esq.
Ordnance Department
Washington
April 20, 1813

Sir:

> On the other side is a copy of a Letter received from Lewis Sanders of Kentucky with a Proposal for furnishing Powder for the use of Government, which I beg leave to refer to you. Permit me to observe that the contract already concluded with Mr. Trotter will probably furnish as large a quantity as will be needed in the Western Waters at presence.

I am Sir very respectfully
Your obedient servant
Docius Wadsworth

National Archives, Record Group 92, entry 225, "Trotter, S. & G., 1814"

Letter dated January 24, 1814 from Samuel and George Trotter to Callender Irvine

Lexington Jany 24. 1814

Calender Irvine Esq.
Commissary Genl.

Dr. Sir

> We have lately wrote to Capt. Wooley of Pittsburg that we should have the 20,000 lbs Powder for the use of the United States deliverable at New Orleans agreeble to our contract ready for inspection by the first of the ensuing month wishing to ship it as soon as the river will permit, requesting him to appoint a proper officer to be here by that time to examine the samme. We shall also have ready early in February the proportion that we are bound to deliver at New Port the whole of which we trust will be found in quality to meet our engagements. We can assure you that we have taken uncommon pains to make the quality such as to induce the Government to add to their contracts with us.
>
> We should be happy to make a further contract with you for any quantity under 150,000 lb deliverable at Pittsburg, Newport, Louisville or New Orleans within one year from the 5th Apl the present year for which purpose have this day appointed Messsrs. Alex Henry jr. & Co. of your city to act as our agents in making any contract with you for this article, you may deem necessary.

We are Sir with much respect
Yr. Obt. Servants

Sam & Geo. Trotter

Record Group 92, Records of the Office of the Quartermaster General, Philadelphia Supply Agencies, 1795-1858, Entry 2117, Subentry 35, Letters Sent, Book 4 of 18, pp. 151-152.

Letter dated February 8, 1814 from Callender Irvine to Samuel and George Trotter

Commry G Office
Phila Feb 8, 1814

Gentlemen

> I am desirous of entering into contracts for powder to be delivered a [sic] Pittsburg, Natchez, New Orleans, or other place below Kentucky or the Ohio River, and will receive such proposals as you may be willing to furnish, for supplying Powder as above, Two thirds of the whole quantity to be musket & rifle & the residue for cannon. An early reply will be agreeable within six months from date of your letter deliverable at any point in the Mississippi River.
>
> Respectfully yours,
> Callender Irvine
> Commry Genl

Samuel & G. Trotter
Lexington, Ky.

Index indicates another letter to the Trotters on p. 370 but no letter was found on that page.

Record Group 92, Records of the Office of the Quartermaster General, Philadelphia Supply Agencies, 1795-1858, Entry 2117, Subentry 35, Letters Sent, Book 4 of 18, pp. 273.

Letter dated April 7, 1814 from Callender Irvine to Col. Docius Wordsworth

Commry Gen Office
Phila April 7, 1814

> I am anxious that Messr. Trotter should be paid for the powder delivered Col. Johnson. I wish you would inquire of Mr. Simmons as to the kind of certificate that would authorize him to pass the amount, with such certificate I would cheerfully pay Messrs. Trotters.
>
> Respectfully,
> Callender Irvine

Col. Docius Wadsworth
Commry Genl of Ordance

Record Group 92, Box 798, Entry 225, NM-81, Records of the Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915.

Letter dated March 14, 1814 from Alexander Henry to Callender Irvine

Philadelphia March 14, 1814
Callender Irvine Esqr.
Commissary Genl.

Dear Sir

> In consequence of the conversation I had with you a few days since I have now to inform you that I have this day received a letter from Messr. Sam. & Geo. Trotter of Lexington, stating that they had your favour of the 7th Feby, and that they had delivered all the powder for their contract, which ends in April next, and that the whole was highly approved. They also state that they had some of equal quantity now on hand. They again request that a contract may be made with you for next year, I am now therefore ready to engage on their behalf when you may be pleased to appoint the time or manner very respectfully,

Your most [illegible]
Alexander Henry

Record Group 92, Box 840. Letter dated 11 April 1813 from S. & G. Trotter to Callender Irvine, Commissary General, Philadelphia.

Letter dated April 11, 1813 from Samuel and George Trotter to Callender Irvine

Lexington
11 April 1813

Callender Irvine Esq.

Dear Sir

> We rec'd a letter from our young man, Robt. G. Dudley, by last mail informing us that yourself & him for us would sign the Powder Contract in 5 or 6 days, if you did not hear from us on yr. Proposals. Having rec'd them Some time after Mr. Bryan had left here, concluded, it would be then too late to write to you our objections to a pt. [part] of the contract. I had concluded Mr. Bryan & Mr. Dudley would of course conclude one on such terms as it would be in our power to fulfill, therefore have left it entirely to Mr. Dudley or in his absence Messrs. A. Henry & Co.
>
> We can assure you that nothing shall be wanting on our part, to give you powder of such proof as we hope will be to your satisfaction & that with punctuality---

We are yours very
Respectfully,
Your obedient servts.
S. & G. Trotter

Record Group 92, Box 840. Office of Quartermaster General Consolidated Correspondence File. Letter dated July 4, 1813 from Samuel and George Trotter, Lexington, Ky. to Callender Irvine, Philadelphia, Pa.

Letter dated July 4, 1813 from Samuel and George Trotter to Callender Irvine

Lexington 4 July 1813

Callender Irvine Esq.
Commissary Genl.
Philadl.

Dr Sir

> We have sent by Mr. Robert G. Dudley, Capt. Abm R. Wasley (depy comy of ordnance) rect [receipt] for 3558 /4 pounds delivered by us at Pittsbg. as part of our Contract with the United States, also Capt. Thos. Masters rect. for 410 lbs Powder which was afterwards deliv by him to Col. Richd. M. Johnson's Mounted Regiment in the service of the [hard to read—abbreviation for United States?]. The value of which you will please to pay to Mr. R. G. Newley who is authorized by us to sign such rect. as you may deem necessary—there is in the Magazine at New Port 1545 lbs? powder, which you can either pay Mr. Dudley for or let lay over until we deliver an additional quantity of it that Post—There are now on the way to Pittsbgh 124 casks Powder contg 100 [lbs?] each is 12600 [lbs?] the receipts for which will be forwd either to Mr. Dudley or Alex Henry & Co. both or either of them are authorized by us to receive paymt & pass receipts for the same.

Dear Sir with
Much respt
Yr obt. Servts
Sam & Geo. Trotter

[Note: The Trotter letters are notable for the prevalence of abbreviation that is used. Common words such as receipt, your obedient servants, respect, forward, and other words are often abbreviated. The handwriting is difficult to read as well.]

Record Group 92, Records of the Office of the Quartermaster General, Philadelphia Supply Agencies, 1795-1858, Entry 2117, Subentry 35, Letters Sent, Book 5 of 18, pp. 203.

Letter dated February 28, 1814 from Callender Irvine to Col. Docius Wadsworth

Feb 28, 1814

Dear Sir

Yours of the 22 & 25 are recd. Trotters have delivered 25,008 ¼ lbs of Powder at Pittsburg for which they have been paid. It is probable the rest is ready & waiting for your directions as to its destination.

I will forward to Albany [illegible—Seigl] Swords & Sabres for Dragoons as advised in your letter of the 25th.

Very respectfully, I am Sir

Your most obedient servant

C. Irvine

Record Group 156, Entry 3, Book 2

Letter from Deputy Commissioner John Morton to Alex. Henry & Co., Philadelphia, 25 May 1814

Ordance Dept.
Washington

Gentlemen:

In the absence of the Commissary General of our Department, I have to acknowledge the receipt of your letters of the 20. Current and to inform you that on his return (daily looked for) the Messrs. Trotter will be advised from this Department direct of the proportions of the different kinds of powder to be manufactured by them, and of the places intended for its inspection in which latter Circumstance any mutual accommodation will be extended.

Record Group 92, Records of the Office of the Quartermaster General, Philadelphia Supply Agencies, 1795-1858, Entry 2117, Subentry 35, Letters Sent, Book 5 of 18, pp. 49.

Letter dated August 15, 1814 from Callender Irvine to Samuel and George Trotter

August 15, 1814

Sir

I have offered to settle your acct with Mr. Henry, by paying him the amt of $12,000 dollrs in Treasury Notes, which he, thro' the person who comes to the office, refuses to accept neither will he take a part of the amount in those notes. Not doubting that if you was present the account would have been settled as above, I am deemed it my duty to request you to instruct Mr. Henry to receive notes at least in part payment; and you will excuse me when I say I should be pleased by your appointing some other person as agent to transact your business with me.

National Archives, Record Group 92, entry 225, "Trotter, Sam & George June 1st 1815"

Letter dated June 1, 1815 from Samuel and George Trotter to Callender Irvine

Lexington June 1, 1815

Sir:

> Having obtained in your city a loan of some money we had calculated on receiving & appropriating the small ballance due us from the United States for Powder (4217) toward the payment of that debt- We had hoped it would have been convenient for you to pay it- having calculated on your being in funds we had not made other arrangements to meet our engagements, and indeed from the great scarsity of money in this Country, together with the many dificulties arising from the embarressed situation of this place last winter & which continues-it will be a great inconvenience to us to be delayed longer in receiving it.
>
> We have lately been advised by our agents Messrs. Alex Henry Jr. & Co. that they had not yet received the money, but were in expectation of doing so- If not done prior to the receipt of this- if you can possibly do so imediately we shall really esteem it a favor done that will be properly estimated by us- Should it be more agreeable to you on application of Messrs. A. Henry & Co. you can pay Messrs. Scott, Trotter & Tilford the amt- We are very respectfully,

Your most obedient Servants
Saml & Geo. Trotter

Calender Irvine Esq.
Commissary Genl.
Philad.

Record Group 92, Records of the Office of the Quartermaster General, Philadelphia Supply Agencies, 1795-1858, Entry 2117, Subentry 35, Letters Sent, Book 5 of 18, pp. 398.

Letter dated June 16, 1815 from Callender Irvine to S. & G. Trotter

June 16, 1815

Gentlemen

> I have received your letter of the 1 instant & have to remark in reply to it, that, it has been to me a source of regret that I could not long since have liquidated your claim against the U.S.—the moment I am put in funds you may rest assured that the amount of your Claims against this office shall be paid to your agents.

Appendix C. Contracts for Ordnance and Supplies, 1813-1828. Record Group 156, Entry 78, Volume 1, 5 April 1814, page 2

Contract

Messrs. S. & G. Trotter
Lexington, Kentucky

Know all men by these presents. That it is mutually agreed by and between the United States by the agency of Callender Irvine, Comy. General of purchasing & S. & G. Trotter of Lexington Kentucky that the said S. & G. Trotter shall & will manufacture and deliver within twelve months from the date thereof Sixty thousand pounds of good & approved Cannon, musket & Rifle powder which powder is to give an average proof of from twelve to fifteen degrees by Regnier Eprouvette now in the possession of Colonel Wadsworth. The proportion of each kind of powder to be manufactured and delivered shall be as follows: Fifty barrels of Cannon, one hundred & fifty barrels of musket and fifty barrels of rifle powder and to be delivered at Pittsburgh Pa. twenty Barrells of Musket powder, and eighty barrells of Rifle powder are to be delivered at Newport Kentucky and one hundred & fifty barrells of Cannon Powder forty barrells of musket & ten barrels of Rifle Powder are to be delivered at new Orleans. No nitre is to be used in manufacture of said powder, that has not been refined and is perfectly pure. It is further agreed that the price of said powder delivered at Pittsburgh Pa. and at Newport Kentucky is and shall be fifty five cents per pound and that delivered at New Orleans sixty cents per pound money of the U. States payable to the amount of each and every parcel delivered on demand, after strict inspection by a person or persons to be appointed for that purpose at each of the above named places, except at New Orleans it being mutually agreed that the powder to be delivered at New Orleans shall be inspected at Lexington Kentucky by Colonel Docius Wadsworth Comy. Genl. Of Ordnance and after such Inspection shall certify that the said powder so by him inspected and passed, is agreeably to contract. It is expressly conditioned that no member of congress is or shall be admitted to any share or part of this contract or agreement or any benefits to shall be admitted to have any share or part of this contract or agreement, or benefit to arise therefrom. In witness whereof we the said parties interchangeably sett our hands & affixed our seals at Philadelphia second day of April A.D. 1814.

(Signed) James Morrison
Geor. G. Taylor [& Co.?]
D. Maccoun agt.
Callender Irvine
Comy. Genl. Of purchasing

Witness
Timothy Banger

Appendix D. Contract for Gunpowder. National Archives, Record Group 92, Entry 225: QM Consolidated Corresp. File, "Trotter, Samuel & G. 1814 Contract Rel. to Powder"

Know all men by these presents, that it is mutually agreed by and between the United States by the agency of Callender Irvine Commissary General of Purchases, and Samuel & George Trotter of Lexington, Kentucky, that the said Samuel and George Trotter, shall and will manufacture & deliver, within six months from the date hereof, Sixty thousand pounds of good & approved common, Musket & Rifle Powder the proportions of each kind are to be designated by the commissary General of Ordnance. Said Powder is to give on proof fifteen degrees, by Rigorous Eprouette, now in the possession of Colonel Wadsworth, and is to be proved by the Commissary General of Ordnance, or by an officer of the Department, to be appointed by him for that purpose.

It is further agreed that the said Powder shall be delivered at Pittsburg, or at New Orleans, or at any intermediate Post or Place on the Oho, or on the Mississippi Rivers, agreeably to directions to be given by Col. Docius Wadsworth Commissary General of Ordance.

It is also understood that no nitre shall be used in the manufacture of the said Powder, that has not been purified, and is not perfectly refined.

It is further agreed that the price of the said Powder (wherever delivered) is and shall be-fortynine cents, for each and every poiunt, payable to the amount of each parcel delivered, on demand; after strict inspection, by a person or persons to be appointed for that purpose, as before agreed, and after such Inspection shall have certified, that the said Powder, so by him inspected and passed, is in all respects such as this contract requires.

The Powder shall be delivered in good and substantial Barrels, containing one hundred pounds of Powder in each barrel; the barrels to be furnished at the expence of Samuel & George Trotter, but if in order to secure the safe transportation of the said Powder, the Commsy Genl. Of Ordnance should direct them to be bailed, the cloth necessarily used, shall be at the expence of the United States, at a price not exceeding twenty five cents per yard.

It is expressly conditioned that no member of Congress, is or shall be admitted to any share, or part of this contract or agreement or any benefit to arise therefrom In witness whereof we the said parties have interchangeably set our hands and affixed our Seals at Phila. This second day of April- A.D. 1814

For Samuel & Geo. Trotter
Alexander Henry [SEAL]

Witness
Timothy Banger

Callender Irvine
Commsy Genl. [SEAL]

Appendix E. 1820 Federal Manufacturing Census Information for the Trotter Gunpowder Mill

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Questions to be addressed to the Persons concerned in Manufacturing Establishments by the Marshals and their Assistants in taking the account of Manufactures.

Name of the County, Parish, Township, Town, or City, Where the Manufacture exists	
Raw materials employed	1. The kind 2. The quantity annually consumed 3. The cost of the annual consumption
Number of persons Employed	4. Men 5. Women 6. Boys and girls
Machinery	7. Whole quantity and kind of machinery 8. Quantity of Machinery in operation
Expenditures	9. Amounts of capital invested 10. Amount paid annually for wages 11. Amount of Contingent Expenses of manufacture
Production	12. The nature & names of Articles Manufactured 13. General Remarks concerning the Establishment as to its actual and past condition, the demand for and sale of its Manufacture

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Trotter's Powder Works, Fayette County, 1 ½ miles west of Lexington, Ky.

No. 1 Saltpetre Brimstone & Charcoal

2nd The quantity of gunpowder annually made and sold at this factory has been from 125,000 to 140,000 lbs.

3rd The cost of saltpeter varies from 14 to 18 cts
Brimstone from 8 to 9 cts
Charcoal about 1 ½ cts

4 The number of men employed in the works varies from 10 to 15 to which depends considerably on the water works being in operation at which times a greater quantity of powder is usually manufactured than by the horse mills, the latter of which generally stop when the water is up.

5th There are several Negro men & boys employed as farm hands woodcutters etc. women only as necessary for cooking, washing, etc.

7th & 8th 2 Powder mills by water power carrying 40 heavy pestles or pounders

2 Do by Horse power carrying 16 light pestles used for beating up powder dust, the same power also carries machinery for pulverizing brimstone & charcoal

There is also attached to the establishment a refinery for saltpeter & brimstone, & a graining house & machinery, a drying house and necessary buildings.

9th No Particular account has been kept of cost of buildings & machinery, but suppose the amt. together with the lands attached to the establishment; usually out on credit and stock on hand may be estimated at $60,000 to $75,000

10th Wages about $2500 dollars per Annum

11th On an order about $2500 dollars exclusive of raw materials

13th The price of gunpowder has for some years past remained at 45 cts per lb. But for prompt payment in a sound currency could be afforded much lower.

14th This establishment, if full employment could be obtained, is capable of manufacturing from 275 to 300,000 lbs powder per annum. The sales of gunpowder at New Orleans and on other parts of the Mississippi were, prior to the peace with England, considerable, but the quantity of European gunpowder brot in since and sold no doubt at considerable sacrifices has in a great measure forbid shipments to the lower country, though some few still continue to be made.

Saml Trotter
26th Nov'er 1820

Appendix F. Samuel Trotter's Will and Inventory

Fayette County Will Book L: 4-5 (original spelling and grammar transcribed as written)

I Samuel Trotter of Lexington Kentucky do make this my last will and testament, I devise the whole of my estate, real, personal and mixed to my Executors hereinafter named in trust for the benefit of my creditors and children, desiring in the first place that all my Just debts be paid. I desire that my farm in Fayette County shall be held by my Executors for the use and enjoyment of my children and descendants as a home or asylum for those whose situation or pleasure may require a resort to it for such purpose necessary. This I desire may continue so long as my Executors may consider it necessary for the interest of my descendants or any of them beleaveing myself that it would be well thus to preserve the said farm for the period of twenty years after my death. I would prefer the surplus of my estate (after the payment of my debts) should continue in real estate and in Slaves rather than in money, stock, etc. for the use and benefit of my said descendants preferring the certainty of Revinue derivable therefrom to the chances of an increase by a resort to other means or pursuits. I desire that my Slaves be not sold unless their bad conduct should render it necessary, or the interest of my estate should require exchanges of Slaves which I authorize to be done. My farm, Slaves, household and kitchen furniture in town and country I wish to be preserved for the benefit of my children so long as those unmarried compose one family, and that they be last of my property finally disposed of. It is my polacy to render my children equal Justice in the enjoyment of my estate. I should desire that one or both of my Sons in law should take charge of my unmarried children, constitute with them one family, supplied from the produce of my farm and hire of Slaves with sustenance and enjoying my household and kitchen furniture and having that which may be injured or destroyed supplied out of my estate. My younger daughters now unmarried thus to be supplied with subsistence, tuition, cloathing, and medical services until they become twenty one years of age or marry exempt from my separate charge being made against them on account thereof. My Executors may at any time allot to my children now married such portions of my estate as in their discretion their wants and the interest of estate would authorize. To my daughters that may hereafter get married, allotment of portions of my estate will be made to them and that they may enjoy the benefits thereof, I desire that my Executors in such allotment of real estate or slaves will convey the same in trust for the benefit of such daughter and her issue, and in all cases, and under all circumstances excluding the husbands from right thereto or the power of disposeing thereof and upon the marriage of my sons, like allotments may be made to them and my executors may in their discretion vest them with a title or convey the same in trust for their benefit during their lives and to their children in remainder. If any one or more of my children should die without issue (living at the time of such death) and before the distribution of my estate they shall not be considered as having had any interest in said estate. So remaining for distribution the portions of said children as do not get married will be preserved by my Executors and the proceeds thereof from time to time be allotted to them. My [missing word] are credited with authority to compound with my debtors or any of them upon such terms as they may considder beneficial to my estate to continue my powder manufacturing business if they choose and to this end as well as the general purposes of the trust confided to them to buy sell and exchange personal property of every description, hire hands, servants, stewarts, workmen, managers etc. My household and kitchen furniture except my pianoforte which I give to my daughter ~~Caroline~~ Cordelia, I intend for my five daughters if they live together they

will mutually so long enjoy it if they be separated by marriage or otherwise a portion thereof or the value of such portion may be allotted to those separating as an equivalent. I desire my sons be allowed one hundred and fifty dollars each in their account with my estate. Enteries in my hand writing in my books relative to advances made to my children will be evidence of the fact. My executors will have ample power to contract in relation to my estate generally by conveying in fee, in trust or otherwise, renting, hireing, leaseing, etc. The powers hereby conferred upon them are delegated to such as may qualify and to the survivor and survivors thereof and the rights appertaining to the estate as likewise vested. I do not desire that they should be required to give Security by the County Court for the execution of the trust conferred upon them. I do hereby nominate, constitute, ordain and appoint my friends, James Harper, Doct. Benjamin M. Dudley, William A. Leavy, Robert C. Holland and Abram Bowman, Executors of this my last will and testament.

In witness thereof I have hereunto set my hand and seal this 18th April 1831.

Samuel Trotter [seal]

Witness

A. Garrett

Frs. [Francis] McLear

Sampson Oats

Fayette County to wit July Court, 1833

This last will and testament of Samuel Trotter deceased produced in open Court, and prooved by the oath of Ashton Garrett and Sampson Oats, two witnesses thereto and ordered to be recorded whereupon the same is truly recorded in my office.

Fayette County Will Book L, pp. 115-116
Inventory of the Personal Estate of Samuel Trotter, dec. made by the Appraisers on Friday & Saturday, Augt. 9 , 1833.

Bluff, a Negro man aged about 60		1 Wheelbarrow	
Billy Heran, no age given		1 Cart & harness	
Bob Straw, aged 53		1 Log chain	
Lewis Nelson, aged 45		Carrd. Over	
Simon Payne, aged 43		1 pr. Scales & Weights at refining house	
Big John, aged 38		3 large iron kettles @25.00	
Frederick, aged 25		all the tubs, 8 of them good	
Little Louis (Collins), cooper, aged 26		Troughs, boxes & rest in Saltpetre house	
Preston Young, cooper, aged 23		75 lbs India Saltpetre @9 cts./lb.	
Little John, cooper, aged 21		1000 lbs Ref. Saltpetre	
London Grange, cooper, aged 14		1 large cylinder for burning charcoal, 10 feet long, 2 ½ ft. diameter	
Booker, aged 60			
Daniel, aged 9		15 cords charcoal wood	
Alfred, aged 5		1 press or screw in frame	
Beverly, aged 30			
Little George, aged 8		70 drying troughs for powder	
Clara, Bluff's wife, aged 65		Small scales & Weights	
Betty & child Lucinda, aged 30		25 Quarter Kegs Powder	
Molly, aged 35		1 Small lot Carpenters Tools in Shop	
Lucinda, aged 6		Kegs in same 1.50; desk .75	
Viney, aged 13			
Frances, aged 9		10 cows and calves to same	
Jane, aged 17		1 Heifer	
Martha & child, aged 19		1 Truck Waggon for hauling logs	5.00

Rachael, aged 65	nothing	1 ox cart	20.00
Jenny, aged 50	100.00	1 four wheeled Waggon (made 1818)	25.00
Maria, aged 12	225.00	8 plows, 1 harrow & 1 sled	40.00
1 doz. chairs	6.00	1 good four wheel Waggon & Gear	60.00
1 bed, bedstead, bedding	10.00	1 Sorrel Mare calld. Rose abt. 6 yrs.	40.00
1 dinner table	8.00	1 Sorrel Mare & Colt, 12 yrs.	35.00
Crockery ware, looking glass, andirons	5.00	1 Sorrel Horse 1 eye out, aged 6 yrs.	20.00
Jug Abaiter	none	1 Sorrel Horse Dble Head, aged 3 Yrs.	35.00
1 10 plate stove, crank and kitchen furniture	20.00	1 Sorrel Mare & colt Pigion with foal by Copper bottom	60.00
Table & Bureau	5.00	1 Stud Whip Colt, aged 2 yrs.	40.00
1 pr. Andirons & shovel	.75	1 old Sorrel Mare Kate	5.00
6 hoes, 3 shovels, 3 spades, 2 mattocks	5.00	1 Black filley, with foal Copper bottom, 4 or 10?	25.00
Milk pans & iron kettle	4.00	1 Sorrel Ball face Work horse, aged 8 yrs.	40.00
1 6 plate stove	6.00	1 do. Colt, aged 4 yrs.	30.00
2 large iron kettles	7.00	1 Small Sorrel horse, Button, aged 4 yrs.	40.00
1 Black filley, aged 4 yrs.	35.00	1 Soup ladle, 2 cream spoons 1 Silver Sugar bowl & tongs 1 Silver Cream pot	60.00
1 Yellow Mare ball face, aged 10 yrs.	35.00		
5 Blind Horses @$7 ea.	35.00		
1 pair Carriage horses, 10 yrs. old	100.00	1 ½ dozn. Gilt Coffee cups & saucers 1 ½ dozn. Do. Tea do. & plates of Same Ware	12.00
1 Bay horse Snow Storm	30.00		
1 Sorrel horse John Work horse 7 yrs.	40.00		
1 4 wheel carriage used by family & harness	250.00	Dinner china, & plates	15.00 9601.75
1 Do. Phaeton & Harness	175.00	1 Set Ivory Knives & forks & case	8.00
1 Powder Waggon & harness	30.00	4 old waiters	2.00
1 Blacksmith's Bellows, anvil & tools	50.00	1 Small old carpet & Bedstead	5.00

Forward	8704.25	1 low bedstead & Bedding	5.00
100 Sheep	75.00	1 Carpet Rug, Andirons, Shovel & tongs	9.00
10 Bulls, 8 yearling & 2 2 yearling @3	30.00	Bureau, 6 chairs, 1 Settee & 2 tables	18.00
3 pair Steers (one Two twins) @30	90.00	10 Blankets 15.00 3 Counterpanes 6.00	21.00
3 heifers yearling @3	9.00	5 cotton Tablecovers	10.00
Tools in Coopers Shop for shoes? & Grindstone	50.00	1 Writing desk @1, Shotgun & apparatus @5	6.00
Empty Kegs in Shop	25.00	1 Bathing Tub 1.00, 1 Safe cover linen 1.50	3.00
Materials in Shop Tops etc.	20.00	1 Stove & pipe in Rachel's Room	3.00
Turning lathe	15.00	1 Cooking Stove, pots, kettles & kitchen furniture	20.00
Cedar buckets & timber on joists	5.00	6 brass Candlesticks & Snuffers	5.00
6 Wood axes	6.00	1 passage carpet 6/ 1 Stair carpet & pads? 15	21.00
1 Vise included in Cooper's tools not separate		Munsells Map of Kentucky	3.00
30.00 Lynn Staves @ 2 heading 1.00 pd for ¼ kegs & other timber stuff in yd [yard]	125.00	2 Beds, bedsteads & bedding in Wm's room	25.00
		1 Rag carpet	3.00
1 dozn. Mahogany & 2 arm chairs	70.00	1 Table, Wash Stand & chairs	5.00
1 Brussells Carpet & Rug in parlor	75.00	1 Library of books per list	100.00
1 pair Andirons & Shovel & tongs same	10.00	3 Demijohns & Green Screen	5.00
3 tables (1 Sett dining)	15.00	1 Settee, 1 bureau, 2 tables, 2 looking glasses in Wm L's room	20.00
1 pr. Bellows, 1 red waiter & 1 pr. Pier Glasses	20.00		
1 picture of Genl. Washington	5.00	2 beds & mattras sunning	20.00
2 Settees & 1 doz. chairs	20.00	1 bedstead & bedding, 3 chairs, 1 Rag carpet, andirons & looking glass	16.00
1 Carpet on dining Room & Rug	25.00	Tinners Shears & other loose matters over Kitchen	5.00
1 pr. Andirons 5/ 4 waiters 4/	9.00	2 beds & bedding, 2 bureaus, carpet, looking glass, picture, 4 chairs in room occupied by Sarah T.	65.00
1 Plated Epergne	15.00		
1 pr. Cut glass pitchers, injured & 1 pr. plated coasters	4.00		

5 Silver Tumblers 20/ & plated castor 4/	24.00	1 Easy chair	5.00
1 pair knife cases 5/ 11 Wine & 4 jelly glasses 2/	8.00	2 Kettles of copper & other furniture of Wash house, Churn & grindstone	18.00
1 pair White pitchers	1.00		
1 Side board	20.00	2 Cows & calves	20.00
1 Mantle clock	20.00	2 axes, hoes, rakes, shovel & spade for all work	3.00
2 pair fluted Candlesticks & 2 pr. Snuffers	4.50	1 Demijohn in cupboard	1.00
2 Salvers, 3 decanters, 5 cut dishes	5.00	40 Empty Barrels & paints stone & oil demijohn in cellar	7.00
1 dozn. Silver Table spoons		2 Water casks	1.00
½ dozn. Silver Dessert spoons		1 Cart & Harness	20.00
17 dozn. Silver Tea Spoons		31 quarter kegs powder @ 3/	100?.00
1 Butter Knife		24 Lief quarter kegs powder @1 1/2/	42.00
9 Small Tea Spoons		9 Tin powder canisters & 2 funnels in Mag.	3.00
2 Wheel barrows	2.00	7 Barrels vinegar @4/	28.00
2 Desks & bookcase in Counting Room	10.00	1 ½ doz. Cut Glass Jellies @4/	6.00
1 Desk and Table up Stairs in Counting Room	5.00	1 cross cut saw in hands of William Montgomery	4.00
Carried forward	10,244.25		10,288.75
Iron bound chest	5.00		
1 old table Tray's Room injured	1.50		

Agreable to an order of the Fayette County Court made at their July term 1833. We the undersigned appraisers therein named, did on the 10th day of August 1833 being duly Sworn proceeded to appraise the Personal estate of said decedant which amounts to the Sum of Ten Thousand Two hundred and Eighty Eight Dollars 75/100ths now herewith respectfully related. Sworn under our hands this 10th day of August 1833.

David A. Sayre
Thos. E. Boswell
M. Kennedy

Wm. A. Leavy Executors

Robt. C. Holland

Fayette County Ct.
This day David A. Sayre, Matthew Kennedy & Thos. E. Boswell, and took the oath prescribed by law, as appraisers the estate of Samuel Trotter, decd.
Given under hand this 9th day of August 1833.
Danl. Bradford, J.P.

Fayette County To Wit. August Ct. 1833
This Inventory and appraisement of the estate of Samuel Trotter deceased was returned to Court, examined, approved and ordered to be recorded which is truly done in my office.
Att. J G. Rodes cer.

[1] A swallet is an opening through which a stream descends underground.

[2] Lewis, R. Barry, editor (1996) *Kentucky Archaeology*. The University Press of Kentucky, Lexington.

[3] Tankersley, Kenneth B. (1996) Ice Age Hunter and Gatherers. In Lewis, *Kentucky Archaeology*, pp. 21-38.

[4] Jefferies, Richard W. (1996) Hunters and Gatherers After the Ice Age. In Lewis, *Kentucky Archaeology,* pp. 39-78.

[5] Delcourt, Paul A., Hazel R. Delcourt, Cecil R. Ison, William E. Sharp, and A. Gwynn Henderson (1999) *Forests, Forest Fires & Their Makers: The Story of Cliff Palace Pond*. Education Series No. 4, Kentucky Archaeological Survey, Lexington.

[6] Railey, Jimmy A. (1996) Woodland Cultivators. In Lewis, *Kentucky Archaeology*, pp. 79-126.

[7] Sharp, William E. (1996) Fort Ancient Farmers. In Lewis, *Kentucky Archaeology*, pp. 161-182.

[8] Henderson, A. Gwynn (1999) The Lower Shawnee Town on Ohio: Sustaining Native Autonomy in an Indian "Republic", In *The Buzzel About Kentuck: Settling the Promised Land*, edited by Craig Thompson Friend, pp. 24-55. The University Press of Kentucky, Lexington.

[9] O'Malley, Nancy (1999) Frontier Defenses and Pioneer Strategies in the Historic Settlement Era. In Friend, *Buzzel about Kentuck*, pp. 24-55.

[10] Henderson, A. Gwynn (1992) Dispelling the Myth: Seventeenth- and Eighteenth-Century Indian Life in Kentucky. *The Register of the Kentucky Historical Society*, 90(1): 1-25.

[11] Detailed genealogical research conducted by Charlotte Duvall, Marge Harding, and Hattie Scott provided the family information on the branch of the McConnell family who owned McConnell Springs. Mrs. Harding and Mrs. Scott are deceased; Mrs. Duvall shared her extensive files on the McConnell family with the author. Carolyn Murray Wooley conducted detailed research on the surveying activities of the McConnell family for her book, *The Founding of Lexington* (1975).

[12] Wooley, Carolyn Murray (1975) *The Framing of Lexington*, Lexington-Fayette County Historic Commission, Lexington, Kentucky.

[13] Draper mss. 11CC146.

[14] A stockaded station was erected at the Royal Spring in 1776 by John McClelland, Simon Kenton, Robert Patterson, John Todd. The McConnells were not apparently part of the construction party, being busy on improvements of their own on their land claims near Lexington. On December 29, 1776, McClelland's Station was attacked by a party of Indians under the command of Chief Pluggy. John McClelland and Charles White were killed as was Chief Pluggy. A month later, the station was abandoned and the inhabitants moved to Harrodsburg. Bevins, Ann Bolton (1970) *The Royal Spring of Georgetown, Kentucky*, Scott County Historical Society, Georgetown.

[15] Interview with Jane Stevenson, Draper mss. 13CC135-144.

[16] Staples, Charles R. (1996 reprint) *The History of Pioneer Lexington*, p. 9. The University Press of Kentucky, Lexington; originally published by author in Lexington, Kentucky (1939).

[17] Perrin, William H. (1979 reprint) *History of Fayette County*. Southern Historical Press, Easley, South Carolina; originally published by O.L. Baskin & Co., Chicago (1882).

[18] O'Malley, Nancy (1987) *Stockading Up*. Archaeological Report 127, Department of Anthropology, University of

Kentucky, Lexington.

[19] Interview with Josiah Collins, Draper mss. 12CC64-78.

[20] Interview with Wymore (son of John Wymore), Draper mss. 11CC128-132.

[21] Staples, pp. 18-21.

[22] John Coburn vs. Heirs of James McConnell and Christopher Greenup, Fayette Circuit Court, Box 1, Drawer 54.

[23]In an interview with James McConnell (son of James McConnell who was a brother to William McConnell), the Reverend John Dabney Shane recorded that William McConnell was nicknamed "Buck Elk" because "he could get any office he wanted. Only needed to run for anything in order to get it" (Draper mss. 11CC146). William A. Leavy stated that William "Buck Elk" McConnell served as a trustee of the town of Lexington. Leavy, William A. (1942) A Memoir of Lexington and its Vicinity. *The Register of the Kentucky Historical Society* 40 (131-133): 113. His death date is estimated from his tax records; he paid tax in 1792 under his own name, but the 1793 tax was paid by his wife, Elizabeth, indicating that she was a widow by that date. William McConnell's age at death is unknown but he must have been a relatively young man since his children were still minors. Fayette County Tax Records 1792-1793, microfilm on file, Kentucky Historical Society, Frankfort.

[24]William McConnell's will was filed in the Fayette County Clerk's office in 1793, sometime after his death. It later was among the records that suffered from a fire in the county clerk's office in 1803. The remnants of the document along with other salvaged documents were collected and notice was published that advised affected citizens of the losses and requested that they help the county clerk reconstruct the records by bringing in their documents for copying. William's will directed that his debts were to be paid and that his older children, James and Martha, were to be educated using interest earned from his investments (probably promissory notes issued as loans). His wife Elizabeth, son James and daughter Martha all were to receive land as was his sister Mary Stevenson. Another sister, Elizabeth McConnell, was willed a slave named Peter and his wife also was given several slaves. His executors were directed to sell land as necessary to educate his remaining children. Birth dates for William McConnell's children are not known except for James Francis who was born on October 7, 1784, according to a deposition by his mother. All of the children were conceived and/or born before their father's death around 1793. As indicated in the will, Martha and James were the oldest children. Daughter Martha married George Robinson on August 21, 1804. Her marriage record listed her brother, James, who put up the marriage bond, her brother William as a witness and her mother, Elizabeth. She may have been underage at the time of her marriage. George Robinson is listed in the Woodford County population census in 1810 with a white female between 15 and 25 years of age. If this woman is Martha, this age range indicates an estimated birth year no earlier than 1785, suggesting she was born after James. William Lindsay (who died around 1826) and Robert attended school with William Leavy, Jr. (who was born around 1797 and later married one of Samuel Trotter's daughters) and were probably close in age. Daughter Mary Rankin did not marry until 1813 and may have been the youngest child. A Mary Robinson living in Woodford County in 1850 was listed in the U.S. population census as 57 years old. If this is the correct Mary, her birth was about 1793, suggesting that her mother was pregnant or newly delivered when William died. Given the various clues from census and other records, the birth order may have been: James born 7 October 1784, Martha born c. 1785-86, Robert and William Lindsay, born 1787-1792, and Mary Rankin born c. 1793. Fayette County Burnt Records, p. 300; Fayette County Circuit Court, Complete Record Book C, p. 488, 18 June 1812; Mrs. John (Charlotte) Duvall, personal communication, 2004; U.S. Census Bureau, population census, 1810, 1850, Woodford County, Kentucky.

[25] Elizabeth McConnell was living in Woodford County in 1814 when she relinquished her right of dower as the widow of William McConnell to allow her daughter Mary to claim the tract of land she inherited from her father. She was still living in Lexington in 1805 when she filed a deed to her kinsman, Fulton Thompson, for land she inherited from her father so she must have moved to Woodford County between 1805 and 1814. Fayette County

Deed Book I, p. 244; Fayette County Circuit Court Deed Book C, p. 65

[26]The determination of placement of McConnell's land on the modern landscape was achieved by reconstructing a "chain of title", beginning with modern deeds relating to McConnell Springs and tracing the history of ownership through deed records. The property description of each deed transaction was in "metes and bounds", a system of survey that involved beginning at an arbitrary point and using a survey instrument and measuring chains to establish each corner of the property. Corners were often marked by trees, or stakes or stones were placed as markers. Reconstruction of the plats is a relatively simple task that only requires a basic knowledge of geometry and ability to use a protractor and a ruler scale. The computer program *Deedmapper* also can be used to reconstruct land tracts in graphic form. The property description in each deed transaction was drawn to the scale of a U.S.G.S. topographic quadrangle map and placed according to existing modern landmarks. Working from the present to the past, it is often possible to determine quite precisely where old land boundaries lie.

[27] Lexington Intelligencer, March 17, 1837, p. 1, col. 4.

[28] The stone foundation was mentioned in Wooley's 1975 book, *The Founding of Lexington*, and the photograph reproduced here was taken by Wooley.

[29] The Morning Herald, May 20, 1901, magazine supplement, Lexington, Kentucky.

[30] Kentucky Gazette, no. 38, Vol. V, Friday, 17 September 1819; Fayette County Deed Book D, p. 379.

[31] Fayette County Deed Book D, p. 379.

[32] Fayette Deed Book D, p. 381.

[33] Fayette County Deed Book T, p. 172, October 20, 1818; Book I, p. 155, May, 1814.

[34] http://www.ex.ac.uk/~RDavies/arian/current/howmuch.html

[35] The use of legal tender such as English pounds in addition to American-minted dollars was common in the early decades of the American Republic. During the American Revolutionary War, the various states continued to issue their own currency as they had done as colonies. The Continental Congress also issued paper money; all state currencies were "established at a fixed, unvarying ratio to the new, national dollar." In theory, one paper dollar was to be equivalent to one hard, silver dollar which then was the Spanish piece of eight. Wartime conditions devalued paper money and many Americans ceased to trust it. This distrust of paper money lasted for many years and use of coinage from other countries continued to be common. McCusker, John J. (1992) *How Much is That in Real Money?* American Antiquarian Society, p. 351.

[36] O'Dell, Gary A. (1990) The Trotter Family, Gunpowder, and Early Kentucky Entrepreneurship, 1784-1833. *The Register of the Kentucky Historical Society* 88(3): 394-430.

[37] Although Samuel and Kitty Trotter had a large family, their survival rate was not particularly good. Eight children are known to have survived to adulthood; there may have been a number of children who died as juveniles. James A. Trotter, the eldest son, died June 23, 1822 at age 21. William Leavy Trotter (named after a prominent Lexington businessman whose son later married one of Samuel Trotter's daughters) also died relatively young, on February 13, 1835 at age 27. Sarah and Margaret G. Trotter both died in the same cholera epidemic that took their father's life in 1833. Margaret's husband, Dr. Robert C. Holland, served as one of Samuel Trotter's executors. Georgetta and Cordelia never married and lived with their older sister, Mary Ann, and her husband, William A. Leavy. The family was censused in Lexington in 1850. Cordelia, listed as 40 years old, was described as "insane." Georgetta was listed as 30 years old. By 1860, the family had moved to Woodford County. This census entry listed Georgetta as a 40 year old housekeeper with $2000.00 in personal property value. Cordelia (Cordie in the entry) was listed as

43 years old with $600.00 in real estate and $3700.00 in personal property value. Her mental state continued to be listed as "insane." Although William Leavy was listed as a farmer in the 1860 census, he was not listed with any real or personal property value. Rather, his wife Mary Ann was listed with $28,800.00 in real estate and $6,000.00 in personal estate, probably an error on the part of the census taker since comparable values were listed under William in 1870. The 1870 census placed the family in the Midway precinct. Georgetta (listed as Georget) was reported as 50 years old without an occupation. Her sister Cordelia was reported to be 55 years, also without occupation but her mental state was not indicated. William Leavy's wealth status was substantially better in this census; he was listed with $35,000.00 worth of real estate and $4200.00 in personal estate, and the household included two black farmhands, a black "day woman," a black female cook with her three children, and another black male without occupation.William Leavy died in 1878. Cordelia died in 1880 and Georgetta in 1882. Mary Ann Leavy died in 1888. All of them, along with William's and Mary's daughter Mary were interred in adjoining lots in the Lexington cemetery. Fayette County Will Book L: 4-5; Kentucky gazette, July 6, 1833; Clift, G. Glenn, *Kentucky Obituaries, 1787-1854.* (1979) Genealogical Publishing, Baltimore; U.S. Census Bureau, 1850 population census, Fayette County, Kentucky; 1860 and 1870 population census, Woodford County, Kentucky; Lexington Cemetery burial records, Lexington, Kentucky.

[38] O'Dell (1990); Appendix A.

[39] Fayette County Deed Book X:70-76.

[40] Record Group 92, Box 840, Letter from Docius Wadsworth to Callender Irvine, 10 December 1812, National Archives, Washington, D.C.

[41] Record Group 92, Box 840, Letter from Henry Clay to Callender Irvine, 1 March 1813, National Archives, Washington, D.C.

[42] J. Dudley to Samuel Trotter, September 18, 1818, Trotter Papers, Cincinnati Historical Society, MSS QT858.

[43] Clift, 1979.

[44] DuPont, B. G. (1924) *Life of Eleuthiere Irenee du Pont from Contemporary Correspondence 1799-1802*. Vol. 5, University of Delaware Press, Newark.

[45] O'Dell, 1990.

[46] Knopf, R.C., editor (1959) *Letters to the Secretary of War, 1812*. The Ohio Historical Society, Columbus; James Morrison papers, Transylvania University, Lexington, Kentucky.

[47] Fayette County Will Book L, pp. 115-116.

[48] Wilkinson, Norman B. (1966) *Explosives in History: The Story of Black Powder*, Rand McNally & Company, Chicago; Howard, Robert A. (19??) The Evolution of the Process of Powder Making from an American Perspective. Pp. 3-23. In Buchanan, Brenda (editor), *Gunpowder: The History of an International Technology*, University of Bath, Bath, United Kingdom.

[49] Diderot, Denis (1959) *A Diderot Pictorial Encyclopedia of Trades and Industry; Manufacturing and the Technical Arts in Plates, Selected from L'Encyclopedie; Ou, Dictionnaire Raisonne des Sciences, des Arts et des Metieres*. Dover Publications, New York.

[50] Lexington Observer & Reporter, March 18, 1835; Lexington Intelligencer, Tuesday, March 17, 1835.

[51] Windowpane glass was made in the early to mid-nineteenth century by a process that produced quite thin panes. Changes in the way flat glass was made in the late nineteenth and twentieth centuries produced thicker panes.

Thickness measurements are used to estimate construction date.

[52] DuPont. pp. 206-214.

[53] O'Dell (1990); Kentucky Gazette, April 21, 1818 issue; Ashley, Linda Ramsey and Elizabeth Tapp Wills (1980) *Funeral Notices: Lexington, 1806-1887*. Typescript, Special Collections, M.I. King Library, University of Kentucky, Lexington.

[54] Trotter family papers, 1805-1819. Cincinnati Historical Society.

[55] Fayette County Will Book L, pp. 4-5 (will) and pp. 115-116 (inventory).

[56] Fayette County Deed Book 1, p. 37.

[57] Fayette County Will Book M, p. 61.

[58] Fayette County Deed Book 10, p.189.

[59] Lexington Public History Index, various abstracts (Lexington Public Library website).

[60]Lexington Observer & Reporter, March 18, 1835. An original copy of this newspaper account has not been found. A transcript of its contents was found among the papers of Frank Dunn, now curated by the Kentucky Historical Society. Dunn conducted historic research on Lexington in the early twentieth century. His transcript of the newspaper account of the explosion contains some unexplained contradictions. A drying house was a building used to dry the powder prior to packaging. This building was usually located in a sunny, open site away from water and often had an exterior heating source to introduce heated air into the building if necessary. While a drying house would certainly have had gunpowder scattered among the floor boards and may also have been where the sieving of the powder took place (using the bolting chest), it would have been an unsuitable building for conversion to a grist mill. Since the factory already had two water powered mills on the property, it seems unusual that the drying house would have been converted for the purpose of grinding grain. The contradictions in the account are important because they cast doubt on the accuracy of the reporting, and render ambiguous any extrapolation regarding archaeological features made from the account. Dunn may have transcribed the account inaccurately or the newspaper reporter may have misunderstood the location of the explosion. The mention of a wheel (presumably a water wheel), suggests that the explosion took place at one of the water powered mills used to incorporate the powder ingredients, not the drying house. The sieving process took place after the ingredients were mixed, and generally was carried out in another building. However, this process may have taken place in the mill or in an attached room, accounting for the presence of a bolting chest. While newspaper accounts can be valuable sources of evidence in historical research, they must be able to stand independent tests of accuracy.

[61] The 1901 account further confuses the picture, concerning this explosion. The date differs by four years from the 1835 report. The conditions under which the explosion took place are also quite different. Only the name of the casualty, Benjamin Bosworth, is the same. The newspaper article did not cite a source for the story. That a disastrous explosion occurred in the 1830s seems a reasonable surmise, but the conditions of the explosion remain ambiguous.

[62] Fayette County Deed Book 18:152.

[63] Lexington Intelligencer, March 17, 1837, p. 1, col. 4.

[64] McCormack, J. N. (1917) pp. 69-70, *Some of the Medical Pioneers of Kentucky*. Kentucky State Medical Association, Bowling Green.

[65] Fayette County Will Book U:64.

[66] Fayette County Will Book U: 401-402.

[67] Green, Karen Mauer (1985) *The Kentucky Gazette 1801-1820*. pp. 243,265. Gateway Press, Inc., Baltimore.

[68] The Morning Herald, May 16, 1901, Lexington, Kentucky.

[69] This photograph was one of two that Carolyn Murray-Wooley located during her research for her book, *The Founding of Lexington*.

[70] Fayette County Deed Book 28: 423.

[71] Fayette County Deed Book 27:308.

[72] Fayette County Deed Book 32:193; 34:1.

[73] Fayette County Deed Book 35:454.

[74] U.S. Census Bureau, 1860 population census, p. 297, Fayette County, Kentucky.

[75] U.S. Census Bureau, 1870 population census, Fayette County, Kentucky. Census entries often reflect spatial proximity between the families listed. The entry preceding John Wilson's entry listed the household of Maurice Payne, a black farm laborer, his wife, Maria, a domestic servant, their four young children, and another black farm laborer, Hubbard Banks. Listed after John Wilson were two households, both headed by black farm laborers (Charles Riley and Isaac Young). None of these men owned property and their laborer status indicates that they were working for other people, most likely white farmers like John Wilson.

[76] O'Dell, Gary A. (1993) Water Supply and the Early Development of Lexington, Kentucky. *The Filson Club History Quarterly* 67: 4, pp. 394-431.

[77] Lexington Daily Transcript July 19, 1879 issue.

[78] Perrin, pp. 206-207.

[79] Fayette Deed Book 61:211.

[80] Perrin, p. 207.

[81] Holly Manufacturing Company (1890) *Official Reports of Various Duty Trials of the Gaskill Pumping Engines*. The Courier Company, Buffalo, New York.

[82] Lexington Daily Transcript, July 15, 1879 issue.

[83] Kentucky Gazette, July 19, 1879 issue.

[84] O'Dell (1993).

[85] Fayette County Deed Book 74:366.

[86] The Morning Herald, May 26, 1901.

[87] U.S. Census Bureau, 1870-1930 population census for Fayette County, Kentucky; Fayette County Marriage Records, David Cahill to Ellen Shinners, July 13, 1873; Calvary Cemetery records, Lexington, Kentucky; The Lexington Leader, September 14, 1933.

[88] The Morning Herald, May 26, 1901.

[89] Lexington Transcript, August 25, 1889, p. 1, col. 2; Dick Delancey was badly injured by dynamite while extracting

rock at Cahill's quarry.

[90] Fayette County Miscellaneous Book 2:101. Cahill Family Papers, Special Collections, M.I. King Library, University of Kentucky, Lexington.

[91] Fayette County Deed Book 259, p. 481.

[92] Cahill Family Papers. David Cahill's obituary indicated that he began a dairy operation soon after arriving in Lexington; his application for a license may have been prompted by new regulations for the operation of dairies. Dairy regulations in the city of Lexington have yet to be researched.

[93] In a letter dated October 19, 1915, a representative of the William Galloway Company, in reply to a letter from William Cahill, wrote of the danger of placing the gas-powered engine close to the boiler.

[94] Cahill family papers; Adler, Betsy, "How Did His Garden Grow?", Friends of McConnell Springs Newsletter, Fall, 2004.

[95] The number after the horse's name was a convention that was used to indicate the animal's best racing time.

[96] The Lexington Leader, September 14, 1933.

[97] The (Lexington) Morning Herald, 1901, various issues.

[98] Lowry, Biff and Tom White (2003) *The Red Mile,* Post Printing Co., Lexington; McCarr, Ken (1978) *The Kentucky Harness Horse*, The University Press of Kentucky, Lexington.

[99] The Western Horseman, Vol. 23, no. 30, p. 663; August 31, 1900.

[100] Calvary Cemetery records, Lexington, Kentucky; Sisters of Charity records, Bardstown, Kentucky.

[101] Fayette County Deed Book 646:180.

[102] Fayette County Deed Book 259:481.

[103] Personal communication, George Brown to Nancy O'Malley, 1995.

[104] O'Dell, Gary A. and James R. Rebmann, The Rescue of McConnell Springs Historic Site: A Partnership Between Local Government and the Citizens of Lexington, Kentucky, *1995 National Cave Management Symposium Proceedings*, pp. 255-266, Indiana Karst Conservancy, Inc., Indianapolis.

[105] Fayette County Deed Book 1315:600.

[106] O'Dell and Rebmann, p. 259.

[107] O'Dell and Rebmann, p. 260.

[108] Analysis of numerous maps and old photographs was critical to identifying former structures on the property. Newspaper photographs dating to 1901 showed many structures associated with the Cahill farm that dated back to the early nineteenth century. A 1937 aerial photograph loaned to Nancy O'Malley by George Brown enabled her to map many buildings, fences, and other landscape features. Two photographs taken by George T. Taylor, Jr. in 1954 and provided to O'Malley by Carolyn Murray-Wooley for this project also contributed important information about the various historic structures on the property. These clues were used to identify the archaeological remains of structures that still exist on the park.

[109] Fayette County Deed Book 1387: 480.

[110] Fayette County Deed Book 1620:104; 1660:128.

[111] O'Dell and Rebmann, pp. 261-263.