

**A PRELIMINARY SURVEY OF  
HISTORIC PERIOD GUNMAKING IN  
TENNESSEE**



**TENNESSEE DEPARTMENT OF CONSERVATION  
DIVISION OF ARCHAEOLOGY  
REPORT OF INVESTIGATIONS NO. 8**

**1991**

# A PRELIMINARY SURVEY OF HISTORIC PERIOD GUNMAKING IN TENNESSEE

by

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Tennessee Department of Conservation

Division of Archaeology

Report of Investigations No. 8

1991



Autho. no. 327343. This public document was promulgated  
at a cost of \$2.09 each. 12/22/91. TN Printing Div.,  
Nashville, TN 37919-5208.

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## ACKNOWLEDGEMENTS

This study is based on a project that was carried out during a five month period in 1990. This is the most recent in a series of historic archaeological site survey projects conducted by staff members of the Tennessee Division of Archaeology. All of these projects have been made possible by using a combination of funds and services provided by the Division of Archaeology and federal matching funds that are administered by the Tennessee Historical Commission. During the 1990 project, the United States Department of Interior Historic Preservation Fund provided 70 percent of the costs. The Division of Archaeology contributed the remaining 30 percent.

As with other recent archaeological site survey projects funded through the Tennessee Historical Commission, contract and budget administration were capably handled by Commission staff members Stephen T. Rogers and Linda T. Wynn.

The work that provided the basis for this report was carried out by the authors as employees of the Division of Archaeology (Prouty and Nance served as the archival research and field survey team; Smith served as project director). General project administration was provided by George F. Fielder, Director of the Division of Archaeology. Other Division staff members who assisted with the project are Jackie Berg, who helped with the project's financial administration and preparation of the camera-ready copy of this report, and Patricia Coats, who processed site information entered into the state archaeological site file.

The idea of conducting a survey of Tennessee gunmaker sites was originally suggested to the senior author during conversations with Dan Wallace, a long-time student of early guns manufactured in the Tennessee region. We are greatly indebted to him for providing some important initial resource information, helping us to make contact with other persons with special knowledge concerning this topic, and for taking the time to show us the locations of sites known to him.

The collecting of Tennessee-made guns is an activity participated in by a relatively small number of individuals, most of whom are dedicated researchers sharing a common interest in a subject that is unknown to most people. Almost every individual in this group that we contacted concerning this topic responded in a friendly and helpful manner. Special thanks is extended to: Wayne Battle, David Byrd, Don Hamilton, Robin Hale, John Irwin, Turner Kirkland, Tom Patton, and Hal Swann.

A special contribution toward the completion of this study was generously provided by Tennessee gunsmith L. Huston Harrison, who served as a consultant for questions relating to the technology of gunmaking and made available several of his drawings, which were used to illustrate the text of this report (those illustrations not credited to Mr. Harrison were prepared by Fred M. Prouty).

Other persons who provided help with some aspect of the survey include: Jim Bogel, Inez Burns, Jim Clouse, Chester Galyon, Ben Grindstaff, Kent Jones, Mrs. Boyd McKenzie, Sam Pickens, Clem Price, Mitch Price, Mrs. John R. Redwine, Parley Rice, H. David Wright, Charles Harris, and the late Clarence Harris.

## INTRODUCTION

This report presents the results of an archaeological site survey project that was conducted from May to September of 1990. It is the eighth major historic site survey project that has been carried out since 1977 by staff members of the Tennessee Department of Conservation's Division of Archaeology. The various reports concerning the first six of these survey projects are discussed and cited in a recently published summary (Smith 1990), and there is also a final report for the seventh project (Smith et al. 1990).

Several of these earlier site survey projects were what may be termed "thematic surveys." The sites recorded during each of these projects are related to a single historic theme and are often restricted in their occurrence and distribution according to specific temporal and spatial boundaries. With one of the manufacturing topics previously studied (historic pottery making), it was found desirable to carry out research at the state-wide level (Smith and Rogers 1979). In planning for a survey of early Tennessee gunmaker sites, it was felt that the survey work completed for Tennessee's early pottery craft industry provided a likely model for the kind of research needed. No meaningful regional boundaries seemed likely for the 1990 survey topic (guns were assumed to have been in more or less equal demand across all of the major regions), but background research for the entire state would be needed to determine if such boundaries did exist.

From the beginning it was apparent that Tennessee gunmaking was a topic that, though it had been the subject of little published information, had the potential to be a complex research problem. It seemed desirable to begin an examination of this theme by initiating a comprehensive review of relevant archival sources for each of Tennessee's 95 counties, with an understanding that the results of this research would dictate the amount of time that could be spent on actual site recording. The problem soon proved to be even more complex than anticipated, with a potential for perhaps 400 gunmaker shops that may be represented as archaeological sites. Within the 1990 project time frame (5 months) it was impossible to complete much more than the general background research, supplemented by the recording of a few selected sites. This study must, therefore, be regarded as a preliminary one. An overview of the problem has been developed, and enough research and recording of individual sites has been carried out to develop a limited understanding of the kind of cultural resources that are extant. A more comprehensive study will, however, have to await some future scheme.

In spite of these restrictions, the work completed should have a certain utility for cultural resource management purposes, and a main feature of this report, a list of Tennessee gunmakers, will no doubt be of interest to a variety of persons interested in the topic. Other researchers have been working on the publication of one or more studies of the surviving examples of Tennessee made guns, and during the 1990 survey project no attempt was made to duplicate their efforts. It is hoped that the present study will help to encourage the production of good visually illustrated publications concerning the products of the craftsmen listed herein.



Another main objective of this report is to provide at least a preliminary "statement of context" for the theme investigated. A considerable effort has been made to develop an understanding of the general history of gunmaking in Tennessee and to present this in a form potentially useful for future studies of gunmaker sites, particularly archaeological investigations. To date, no archaeological excavation of a Tennessee gun shop site has been reported, but the interpretation and preservation of rigorously collected archaeological data from some representative sites is a future goal eagerly anticipated by the authors.

## **HISTORICAL BACKGROUND FOR TENNESSEE GUNMAKERS**

This section of the report presents a body of information that is considered essential for interpreting the remains of Tennessee's historic period gunmaking industry. To understand the history of gunmaking in Tennessee it is important to understand how the basic elements of this craft were transported from Europe to North America and the subsequent evolution that occurred in the United States during the eighteenth and nineteenth centuries. Likewise, an understanding of the general technology of early gunmaking is needed to understand the technology that was employed in Tennessee. An exploration of these subjects is undertaken in the first two subsections. As will be demonstrated in the final subsection, the history of gunmaking in Tennessee can be subdivided into at least three major phases or periods.

### **OVERVIEW OF GUN USE AND MANUFACTURE IN EARLY AMERICA**

Of the various crafts practiced by early Americans, few, if any, demanded a higher level of technical and creative ability than the making of guns. By necessity the gunmaker was required to be proficient in the working of iron and other metals (including making the tools required to manufacture the final product), in carving and sculpting wood, and in creating intricate patterns of inlay. As one writer has expressed it, the finer examples of early American guns:

... work as intricately as Swiss watches, are as rugged and durable as Rolls-Royces, and are comparable artistically to fine paintings, music, or sculpture. Interestingly, they have the additional dimension that comes from their being, almost paradoxically, instruments of death - the tools by which enemies were slain, the frontier was conquered and tamed, and the table was filled with game. The fascination they hold for us is undeniable. Works of art that kill (Wiggington 1979: 208).

Studies of the evolution of the early American gunmaking craft have resulted in many varying opinions or theories as to the gradual migration routes and manufacturing trends that occurred. This is due, in part, to the relatively small number of signed and/or dated pieces that are available to indicate the progression of development and designs. There are also those

who contend that several of the observable trends began independently of each other (Wigginton 1979: 208).

In spite of uncertainty concerning such general trends, it is clear that the early settlers of the Southern Appalachian Mountains, including present day Eastern Kentucky, Southwest Virginia, Western North Carolina, North Georgia, and East Tennessee, placed great value on their guns. With a high demand for accurate weapons, the "gunsmith" and his gun shop were of major importance in these early mountain settlements (Irwin 1980: 6).

At this time of regional settlement, during the second half of the eighteenth century, the most widely manufactured gun was the muzzle-loading long rifle (Figure 1), which used a flintlock firing mechanism (Figure 2). The term rifle refers to the spiral grooves cut into the inner walls of the barrel. The date and place of the invention of rifling is unknown, but it is reasonable to assume that the first rifle was constructed in Central Europe, possibly Eastern Germany or Austria in the late 1400s (Peterson 1962: 130). Rifle grooves give the bullet a spin as it is fired from the gun and increase its stability and accuracy as compared to smooth bore muskets and fowling pieces (Peterson 1956: 198; Wigginton 1979: 209). A muzzle-loading rifle could hit a target as far away as 300 yards, whereas most muskets were not accurate at half that distance (Gusler 1959). The earliest American rifles were produced sometime during the first half of the eighteenth century, at least by 1740 (Moore 1967: 60).

The procedure for firing a flintlock long rifle consisted of several steps (Figure 3). First the shooter would pour the desired quantity of black powder into the muzzle of the rifle from a powder flask or horn (Figure 3, # 1). Then a greased patch of thin cloth was centered over the bore and a bullet was placed on this patch and "seated" with the thumb (# 2)(the patch insured a tight fit in the bore, increasing accuracy, while the grease in the patch facilitated easier loading and helped to reduce carbon buildup in the barrel). Using a ramrod, the patch and ball were then rammed down until they were seated atop the charge of relatively coarse-grained gunpowder (# 3). With the bullet loaded the ramrod was replaced into its groove under the barrel. The hammer, or cock, was then pulled back to half-cock, or loading position, and the frizzen, or battery, was opened to expose the flash, or powder, pan (# 4). About every fiftieth shot a vent pick was used to free the touchhole of carbon residue (# 5). The shooter then primed the pan with a fine grained powder from a priming flask (# 6) and closed the frizzen, which also served as a pan cover. When the hammer was pulled back to full-cock position (# 7), the gun was ready to fire. Pulling the trigger caused the hammer to snap forward striking the steel frizzen with the edge of a gunflint secured in the jaws of the hammer. This impact instantly knocked the frizzen into the open position, allowing sparks created by the impact to fall onto the priming powder and ignite it (#8). The flash that was created then ignited the main charge through a touchhole in the barrel (Neumann 1967: 11; Moore 1967: 5-6; Peterson 1968: 38-44).

The rifle that came to America with the pre-Revolutionary War settlers combined elements of earlier German and French design traditions. The Germans had used a distinctive style of gunstock, to which they added a

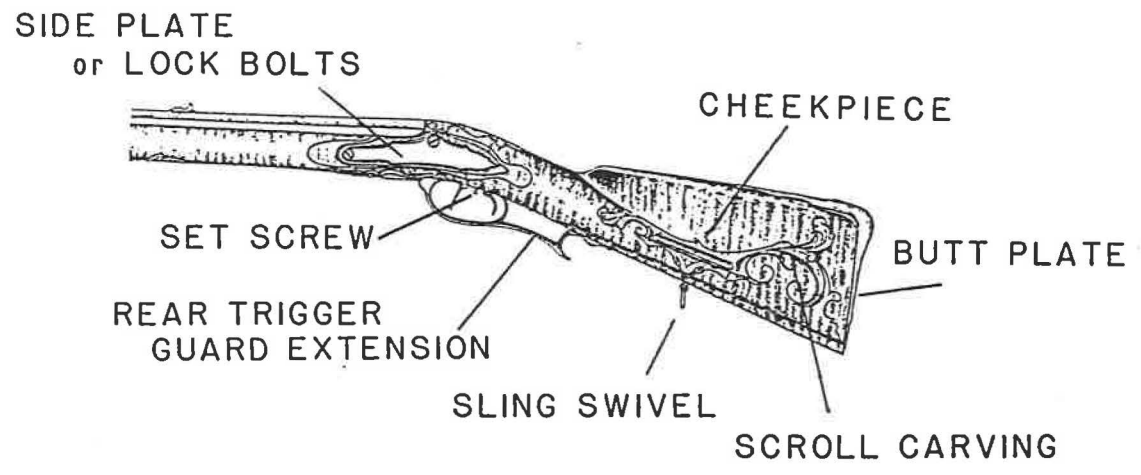
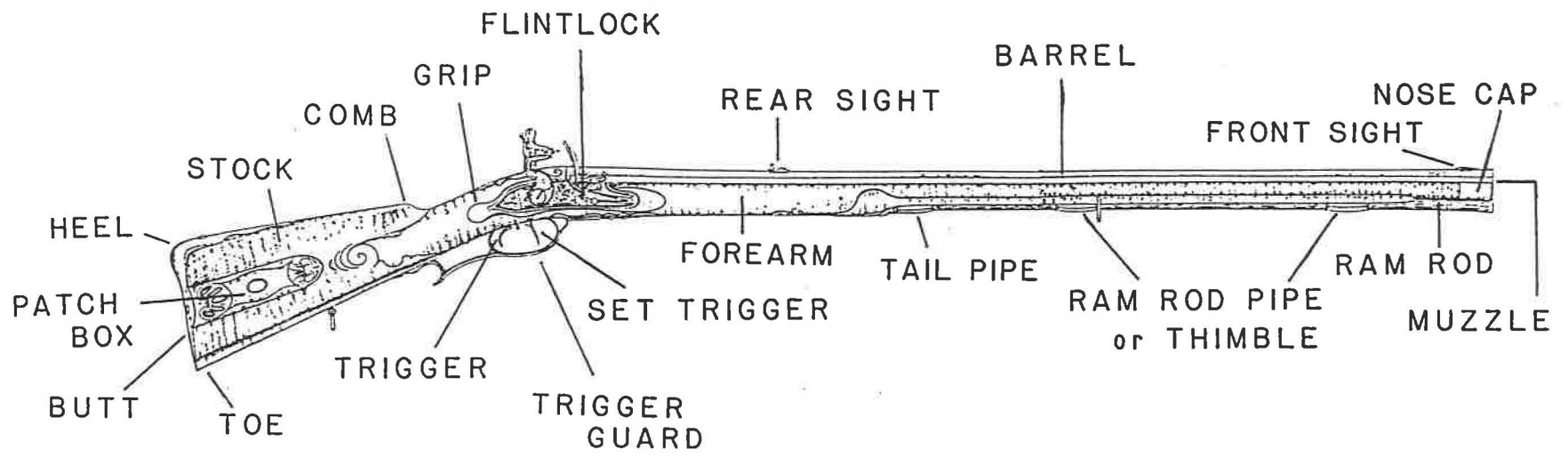


Figure 1. Nomenclature for an eighteenth-century muzzle-loading, flintlock long rifle (adapted from a drawing by Houston Harrison).

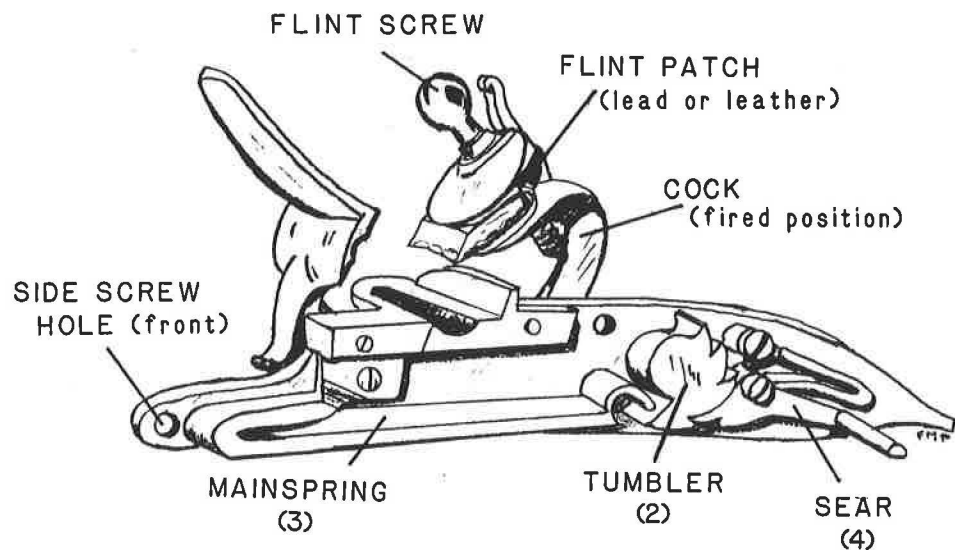
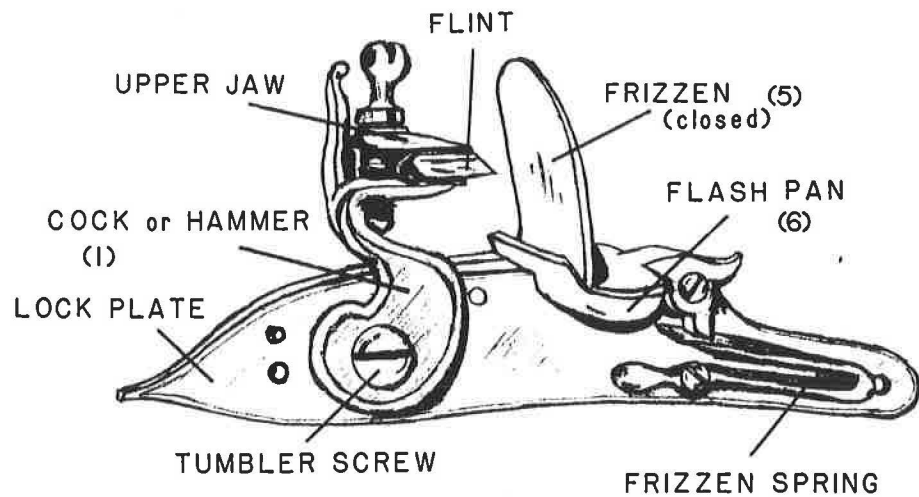


Figure 2. Exterior and interior views of a flintlock mechanism: Pulling back the COCK (1) rotates its pivot and the attached TUMBLER (2). This compresses the MAINSPRING (3), and when reaching the half cock position, the sharp edge of the SEAR (4) slides into the first notch of the Tumbler (loading position). For firing, the Cock is pulled back further until the Sear catches in the second notch of the Tumbler. Squeezing the trigger raises the horizontal arm of the Sear and disengages its edge from the Tumbler notch. The Cock then snaps forward, hitting the FRIZZEN (5) with its flint, and dropping sparks into the priming powder of the PAN (6). Its flash ignites the main charge through the touchhole in the barrel.

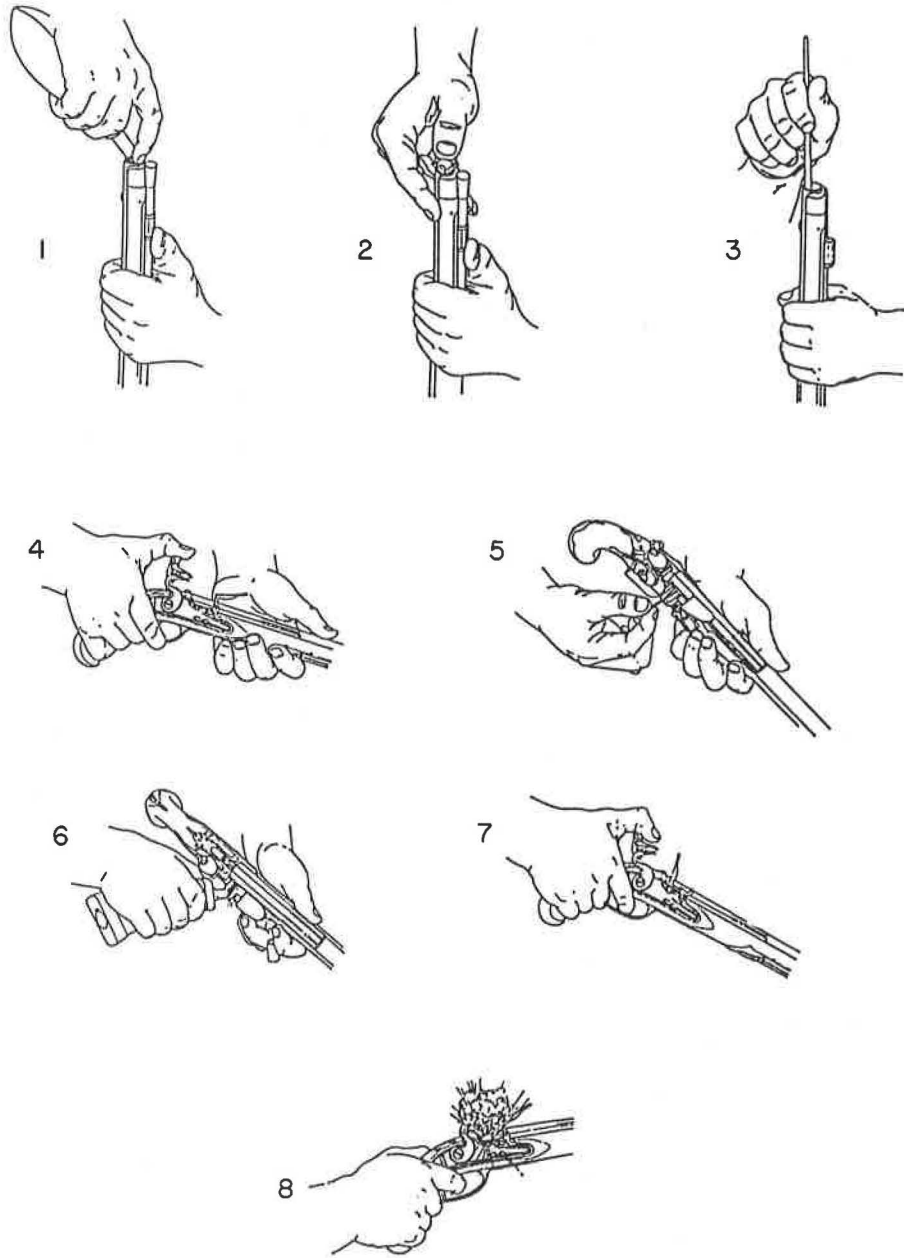


Figure 3. Steps in loading and firing a flintlock rifle or pistol (adapted from Moore 1967: 4 and 5).

flintlock ignition system that was developed by the French during the reign of Louis XIII in the 1620s (Gusler and Lavine 1977: 5-6; Peterson 1962: 93). This combination evolved into a type of rifle known as the Jäger (Figure 4), a German word that (based on German and English dictionaries, including Webster's Third New International Dictionary, 1971) also refers to a military rifleman or a huntsman. German flintlock rifles had a relief-carved edge around the patch box, which apparently served as a pattern for the brass plates that bordered the patch boxes on later American-made rifles (these patch boxes were used to hold the greased patches mentioned above or small tools and extra flints - Peterson 1962: 137). Many historians believe the German Jäger to be the predecessor of the American style long rifle (Kauffman 1960: 5-6; Moore 1967: 60; Wigginton 1979: 210).

Jäger rifles probably made their first appearance in this country as a result of a German and Palatine Swiss immigration that occurred around 1709, with a large number of these German immigrants settling in the Lancaster Valley area of Pennsylvania. Their gunsmiths were among the first in America and seem to have had a substantial influence on the development of the American long rifle (Peterson 1956: 192-193). German immigrants soon spread to other areas, including the Shenandoah Valley, where they had settled by 1729. Wallace Gusler (former master gunsmith at Colonial Williamsburg) has suggested that once these German gunsmiths were settled into "fringe" communities away from larger German populations, they began to design less traditional Jäger rifles. This may have been the "cutting edge" of the evolution of the American long rifle, with a debut date as early as 1740 (Moore 1967: 60; Wigginton 1979: 210). Another view of this evolutionary process is expressed by Kauffman (1960: 80), who suggests that from about 1725 to about 1775 there was a "period of transition" in the development of the classic elements of the "Pennsylvania-Kentucky rifle."

Early American gunsmiths in Pennsylvania made rifles that were obviously similar to ones that had been produced in Europe (Figure 4). This included the use of relatively large bore diameters, .45 to .60 caliber, and short, straight stocks with thick butts. These guns usually have a characteristic sliding wooden cover over the patch box in the butt stock (Peterson 1962: 137-138; Lindsay 1972: 2-4). Sometime around the mid-eighteenth century, rifles began to be manufactured in an American style, similar to what would later be called a Kentucky rifle. The earliest known example of such a rifle is one made by John Shrite of Reading, Pennsylvania, in 1761 (Figure 5, top), but it retains some notably older features, including a wooden patch box cover (Wigginton 1979: 213; Lindsay 1972: 5-7).

One of the more distinctive characteristics of later American rifles is that instead of wooden patch box covers they usually have a hinged metal cover (Figure 5, middle). The earliest known rifle with a hinged brass patch box cover is one from the James River Basin area of Virginia, dated 1771 (Wigginton 1979: 213; Lindsay 1972: 8-9). By the 1780s, most rifles were being made with this type of cover in either brass or iron, and these covers were often decorated with intricate rococo designs. This decorative treatment was a purely American innovation, often exhibiting a high level of artistic ability (Kindig 1960: 30; Lindsay 1972: 2).

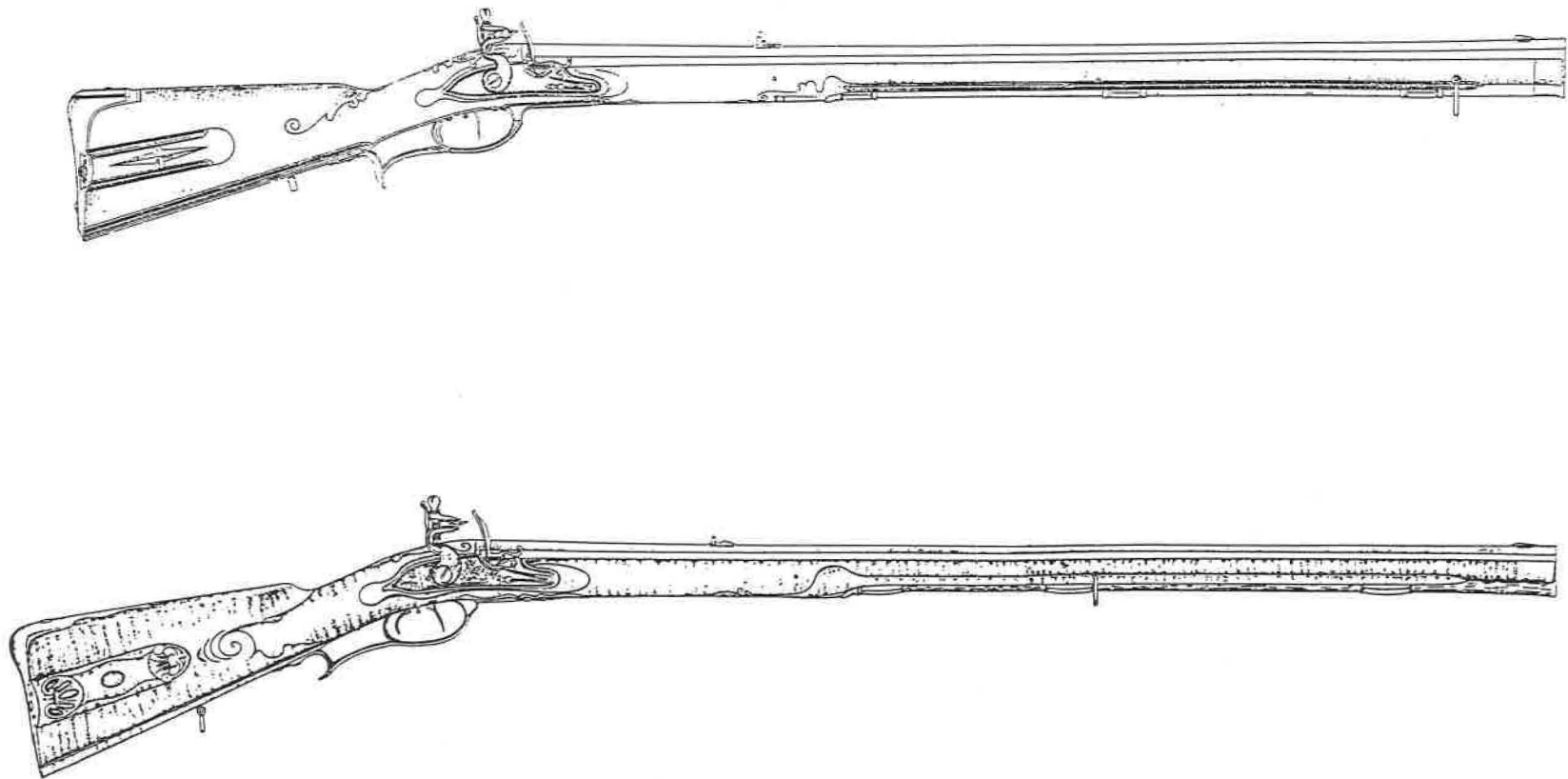


Figure 4. Example of a German Jäger rifle (top) and an early American-made version (bottom) of this rifle (adapted from drawings by Houston Harrison).

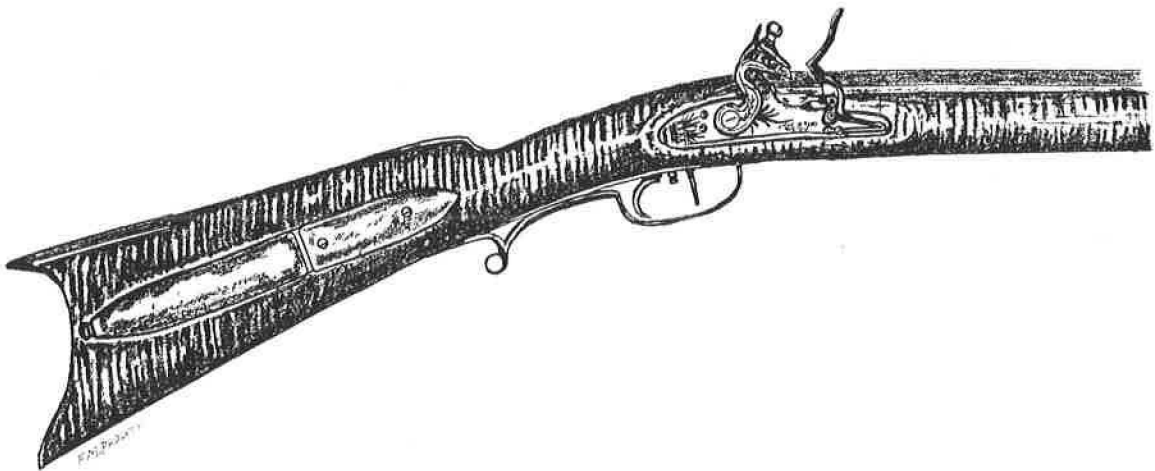
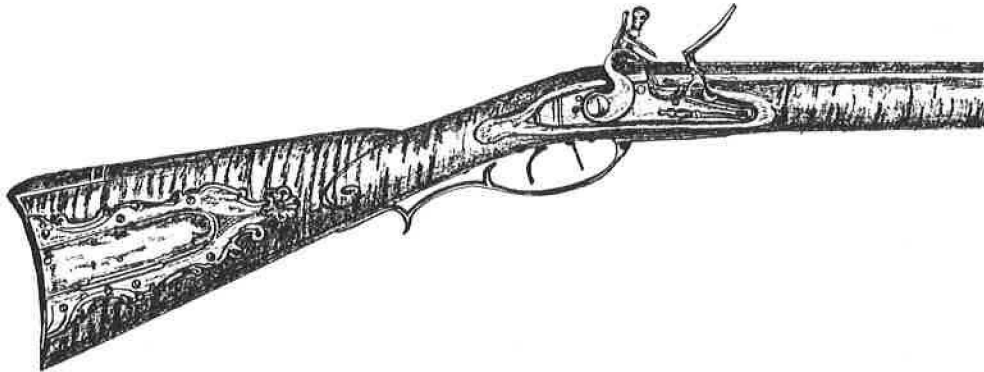
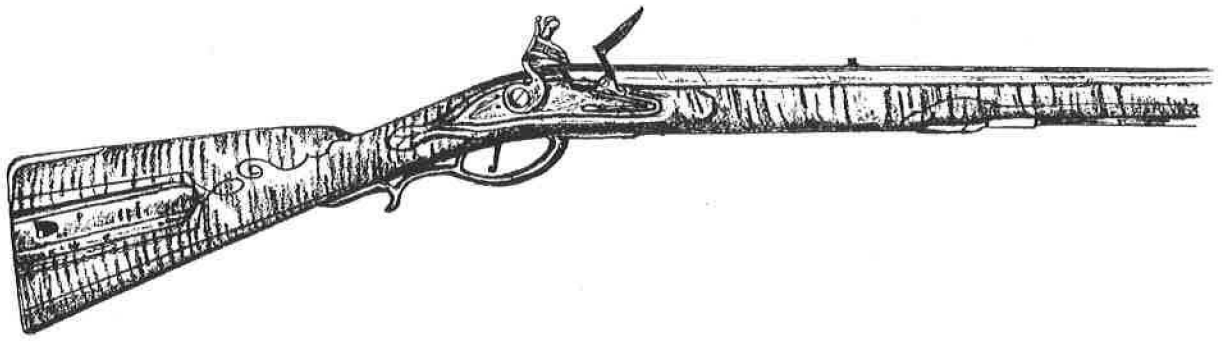


Figure 5. Stylistic development of the American long rifle. Top to bottom: Pennsylvania rifle dated 1761; Pennsylvania rifle, ca. late 1700s; Tennessee rifle made by J. G. Gross, ca. early 1800s (drawings based on photographs of the originals).



The American long rifle continued to evolve throughout the second half of the eighteenth century, reaching a peak in both design and performance about 1810. During this evolutionary process it developed a number of rather standard characteristics (Figure 5, bottom). Typical examples have long octagonal barrels, usually forty or more inches, with a somewhat decreased bore diameter, .40 or .45 caliber (the smaller bores may have developed as a measure to conserve powder and shot). The stock, usually of hard curly maple with intricate grain patterns, became lighter and more graceful as it developed a sweeping drop in the butt, a curving "Roman nose" comb on the upper edge of the butt stock, and a sharply crested butt plate designed to fit the upper arm portion of the shoulder. Especially for "Pennsylvania style" long rifles, brass, pewter, and silver inlays became increasingly common during the period (Peterson 1962: 137-138).

During this period of development of distinctly American long rifles, a comparable, though somewhat later, evolution occurred in the production of handguns. What is sometimes referred to as the "Kentucky pistol" probably has its beginnings in the late 1760s. Like the long rifle, it underwent a transitional period of development, which lasted until the time of the Revolution. Initially, American flintlock pistols were usually made as copies of British or French styles, but by the 1780s a true American style had emerged. Classic examples mirror the style of long rifles, with curly maple stocks, brass or silver mountings, and full octagon barrels (Flayderman 1990: 536).

The major eighteenth-century event bearing on the history of firearms in America was the Revolutionary War (1775-1783). During this conflict, the principal weapon for most combatants was a large caliber, smooth bore flintlock musket. A major reason for the use of muskets was that they could be loaded and fired rapidly, as often as three or four times a minute, but their drawback was a lack of accuracy due to the absence of rifling. At the beginning of the war, most American infantrymen were armed with older model British made muskets, many of them left over from the Colonial (French and Indian) wars. Many of the Colonies maintained magazines or arsenals with stores of such weapons. The earliest model British musket, known as a long land musket, had been adopted in the 1720s, and a second, or short land, model was introduced in the 1740s. All models were .75 caliber and were given the nickname "Brown Bess" by the soldiers, possibly due to the brownish-red color of the stock (Peterson 1968: 27-35).

In spite of large numbers of British arms in America, there were still not enough to completely outfit an entire army. In the summer of 1775, the Continental Congress let its first contracts to American gunsmiths for as many muskets as they could produce. At the beginning of the war the Colonies were governed by committees or councils of safety, and these were the groups that actually contracted for the manufacture of arms. The American made copy of the British Brown Bess eventually became known as the "Committee of Safety" musket. The demand was, however, too great for American gunmakers, and both Congress and the individual Colonies imported most of their firearms from Europe. A majority of these were .69 caliber Model 1763 through 1770-71 French muskets. These were stronger and lighter than the British Brown Bess, and after the French sided with the Colonies, they became easier to obtain. The French pattern musket

soon became the standard U. S. arm, and after 1777, the Committee of Safety musket was discontinued (Peterson 1968: 27-38).

Most Revolutionary War battles were fought by troops armed with these large caliber muskets, standing shoulder to shoulder in two or three lines. In a typical engagement, each side might exchange two or three volleys at a range of 100 to 50 feet apart, before a final bayonet charge and hand-to-hand combat decided the outcome. In spite of the popular myth that the Revolution was fought by American riflemen shooting from behind trees and stone walls at tight formations of British soldiers, it was the accepted European form of fighting between troops in close ranks that was the norm (Moore 1967: 59; Peterson 1956: 200).

American rifles did play a part in the Revolutionary War. When it began, such weapons were used by many of the first troops to enlist, and ten companies of riflemen were formed to act as light infantrymen. These units enjoyed initial success because of their accurate, long range shooting capabilities (from 250 to 400 yards), but there was a serious disadvantage in that the lack of a bayonet left the rifleman helpless in the face of a bayonet charge. While most riflemen carried a belt ax, this was no match for a trained soldier and his bayonet (Peterson 1956: 196-198). Early in the war, the Secretary of the Board of War for the Continental Army made these comments regarding some new troops:

If muskets were given them instead of rifles the service would be more benefitted, as there is a superabundance of riflemen in the Army. Were it in the power of Congress to supply muskets they would speedily reduce the number of rifles and replace them with the former, as they are more easily kept in order, can be fired oftener and have the advantage of Bayonets (Peterson 1956: 200).

The usefulness of the American rifle as a military weapon was greatest in the hands of special units such as light infantry, scouts, and snipers (Peterson 1956: 202). Soldiers using rifles as support weapons could exact a heavy toll of the advancing enemy troops at long distances before being withdrawn. Regular troops with muskets would then volley fire and advance with fixed bayonets (Moore 1967: 59). While this sort of use of the rifle was the main American contribution to military science of the period before 1783, the American rifle was not, as some have claimed, "the gun that won the American Revolution." Only when supported by musketry and used in accordance with its special capabilities was it a useful and deadly weapon of war (Peterson 1956: 193 and 202).

The next major event in the history of the American long rifle was the part it played in the War of 1812. The Battle of New Orleans, in 1815, was basically won by the use of this weapon in the hands of a few thousand Kentucky and Tennessee frontiersmen. This victory spurred the writing of a popular ballad, The Hunters of Kentucky, in which one of the verses exclaims "For well he (General Andrew Jackson) knew what aim we'd take with our Kentucky rifles." The name Kentucky Rifle has stuck for over a century, and is generally accepted as meaning the American flintlock long rifle. The irony lies in the fact that few "Kentucky rifles" were actually made in Kentucky, most being made in other states, including Tennessee. In

recent years a strong feeling has been expressed in favor of naming the long rifle the "Pennsylvania rifle" after the state of its origin (Peterson 1962: 138; Lindsay 1972: 1; Wigginton 1979: 210-211).

After the War of 1812, a general decline began in the use of meticulous carving, inlay, and other decorative embellishments associated with the "Pennsylvania style" long rifle. There was also a trend toward shortening the full stock to a half stock and switching from a flintlock to a percussion-cap lock firing system (Wigginton 1979: 221).

In 1822, the first American patent was granted for a reliable percussion cap, and the percussion firing system began replacing the flintlock during the late 1820s and 1830s. In early years this was often accomplished by altering a flintlock using percussion parts (Figure 6). Probably by the 1840s, most guns manufactured in America used a percussion type lock (Noel Hume 1969: 215). With the flintlock, a major problem was keeping the priming powder dry in wet weather. With the percussion system, instead of relying on a spark created by a gunflint striking a steel frizzen, there was a nipple or cone at the breech, upon which a percussion cap was placed. The percussion cap could be transported conveniently and safely, and attached to the nipple both quickly and securely. When attached, it formed a water-tight seal over the nipple, leaving the main charge protected from the elements (Russell 1957: 242).

The percussion cap was made of thin-gauge copper and was slightly conical with a flaring rim round the open end. Four to six slits (or flanges) extended halfway from the rim toward the dome of the cap, assuring a secure adjustment of the cap upon the nipple. The charge within the cap usually consisted of fulminate of mercury mixed with half its weight of saltpeter. Half a grain of this mixture was compressed into the cap and made waterproof and airtight by a drop of varnish. When the gun's hammer was placed in the "full-cock" position and the trigger pulled, the hammer striking this cap ignited the mercury fulminate and sent a flame through the nipple to ignite the powder charge in the gun's breech (Russell 1957: 243; Warner 1977: 42).

Well after the percussion cap system was perfected, older style flintlock guns remained in demand in some areas. While the major era of flintlock production ended in the 1840s, "some manufacturers continued to cater to the die-hards by producing flintlock arms even after metallic cartridges and breechloaders were commonly used" (Russell 1957: 241).

At least one distinctly American innovation that was inspired by the development of the percussion lock was a class of small pistols that became popular as "pocket" weapons (Figure 7). Though based on models developed in Pennsylvania by Henry Deringer before 1830, these were especially common in the South in the 1850s (Kirkland 1972: 5).

At the national level, all of the modifications that had been made to the Kentucky or Pennsylvania style rifle during the first half of the nineteenth century were overshadowed by the advent of breech loading and

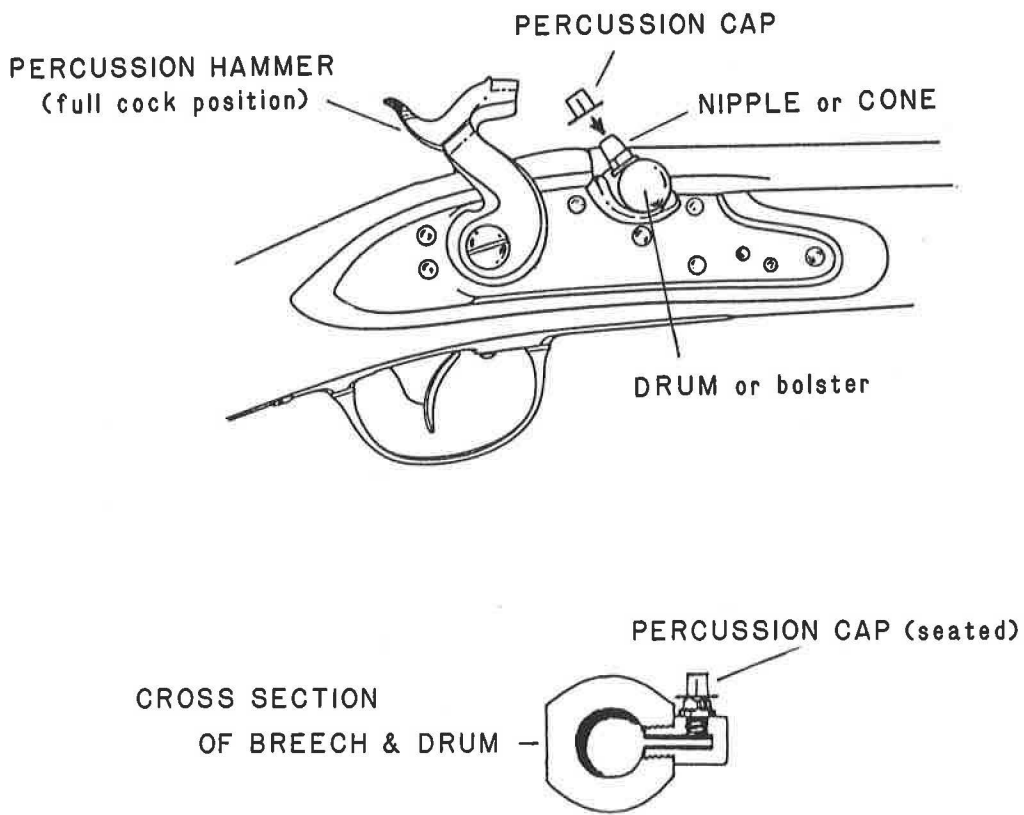


Figure 6. Exterior view of a percussion lock (altered from a flintlock), with cross section of the breech and drum.



Figure 7. Deringer-style pistols. Top to bottom: typical Deringer pocket pistol manufactured for a Tennessee dealer; Deringer-style pistol probably made in Tennessee, showing variation in trigger and butt design; Deringer-style pistol made for a Tennessee dealer, showing addition of ramrod (drawings based on photographs of the originals).

repeating rifles, which made muzzleloaders unfashionable (Wiggington 1979: 220-221). With the 1860 patent for Horace Smith and Daniel Wesson's metallic rimfire pistol cartridge, a whole new era of weapons was created. The success of this cartridge led to the development of Christopher M. Spencer's .52 caliber breech loading rifle and Benjamin Tyler Henry's .44 caliber lever-action repeating rifle in 1862 (Hoyem 1981: 127; Coggins 1962: 35; Flayderman 1990: 264).

This rapidly evolving new technology coupled with the large scale production of arms during the Civil War, left little demand for traditional gunmakers after the 1860s. "Gunsmiths" continued to be in great demand, but these were now almost entirely practitioners of the art of maintenance and repair of the readily available mass produced firearms. By the late nineteenth century a prospective firearms buyer could order by mail from Sears, Roebuck and Company any of some 150 models of shotguns, rifles, and pistols, most of them costing less than fifteen dollars each (Schroeder 1970: 352-378).

#### ADDITIONAL NOTES ON THE TECHNOLOGY OF EARLY GUNMAKING

Most of the work activities conducted by early American gunmakers were carried out in or near a building that served as the gunmaker's shop. Especially in the rural areas, this was often a small frame, log, or sometimes stone building located near the gunmaker's home. Surviving or historically documented examples of eighteenth-century Pennsylvania gun shops suggest that these were often two-room buildings, measuring about 19 by 26 feet (Kauffman 1960: 152-155). During the colonial period, the forge used by gunmakers was often constructed under a shed that was separate from the shop (Mordini 1990: 6). Later, it was probably standard practice to construct the forge inside the walls of the shop (Irwin 1980: 92). While more detailed specifics concerning early rural gunmaker shops are difficult to obtain, even less is known about early gunmaker shops in urban settings. To judge from some late nineteenth-century urban "gunsmith" shops known by way of information examined during the Tennessee survey, it can be supposed that many of the early shops in towns or cities occupied one or more rooms inside larger commercial buildings.

An important resource contributed for use in this survey project report is the set of drawings shown as Figures 8 and 9. These were prepared by L. Houston Harrison, a Hendersonville, Tennessee gunsmith, who specializes in the repair and replication of historic period guns. Based on his long familiarity with the types of tools and equipment used by early gunmakers, Mr. Harrison has rendered the interior appearance of a late eighteenth to early nineteenth-century gun shop, operated by a gunmaker and two assistants. Figure 8 shows the side of this one-room shop that contains the forge and illustrates the gunmaker and his assistant making a gun barrel. Figure 9 is a reverse angle view showing a wide variety of gunmaker tools, with the gunmaker using a rifling machine. A boring machine stands in the foreground.

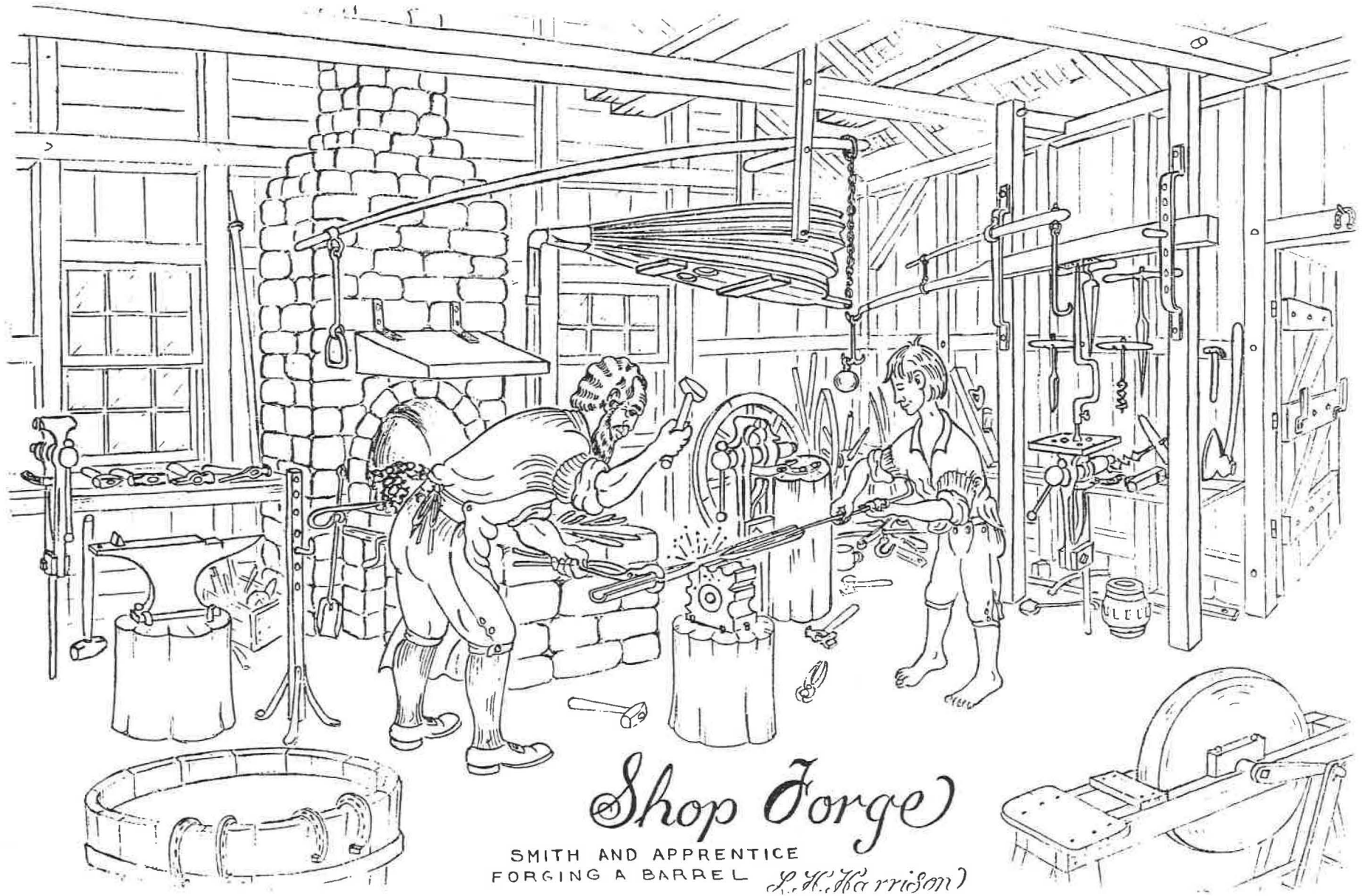
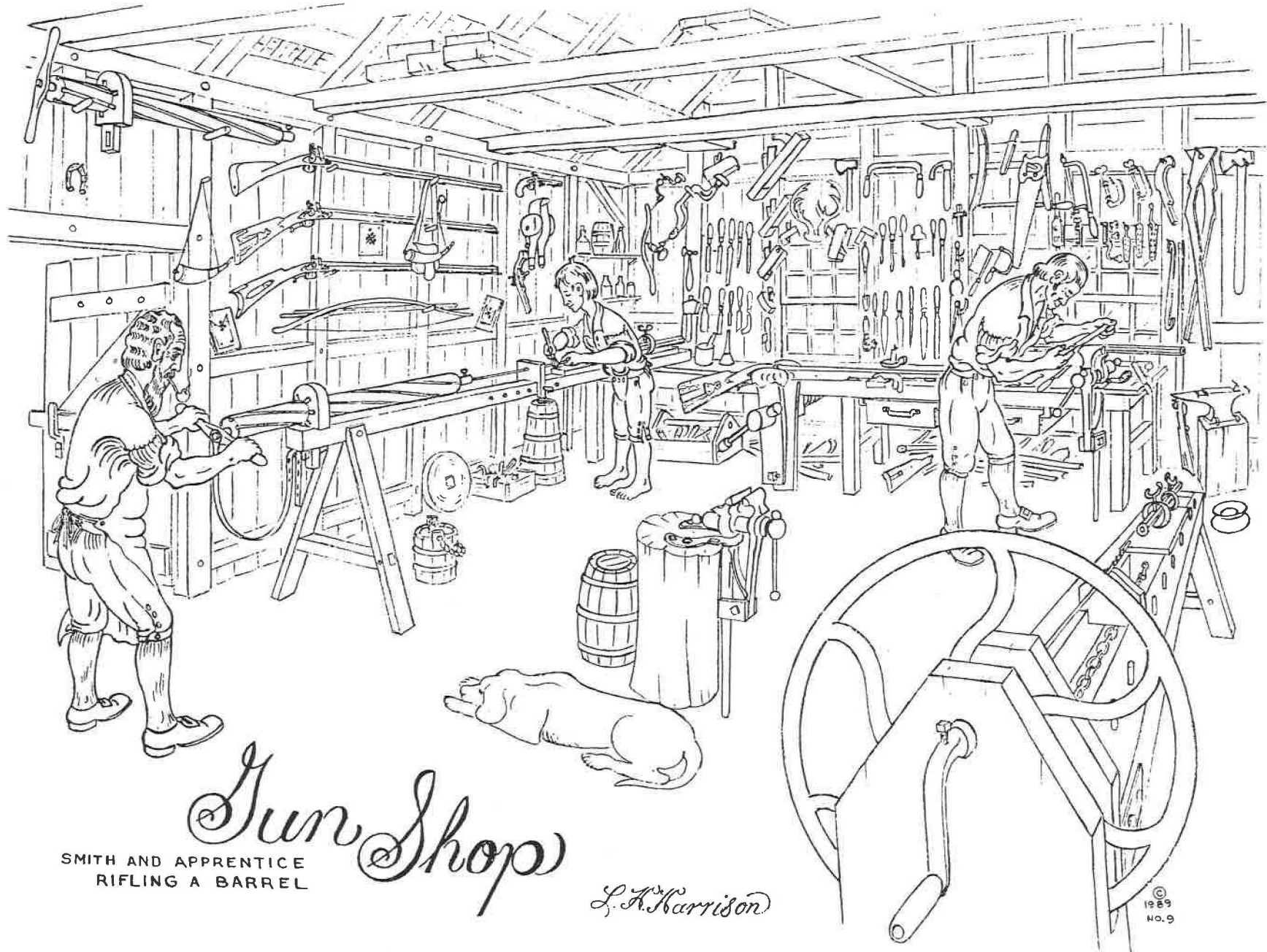


Figure 8. Gunmaker shop view entitled "Shop Forge" (by L. H. Harrison).



*Gun Shop*  
SMITH AND APPRENTICE  
RIFLING A BARREL

*L. H. Harrison*

© 1989  
No. 9

Figure 9. Gunmaker shop view entitled "Gun Shop" (by L. H. Harrison).



As suggested by Figure 8, much of the work of early gunmakers was carried out using a forge and required many of the same skills possessed by contemporary blacksmiths. Until the period when gun parts were readily available for purchase from large manufacturing companies, the gunmaker was obliged not only to make all of these parts, but also to make the tools with which to make the parts. A further indication of the skill required of early gunmakers is that they operated without the aid of micrometer calipers for precise measurements or metal lathes with which to turn pieces of iron, cut thread, or drill holes - items of equipment essential to modern arms manufacture. In spite of the absence of such devices, late eighteenth to early nineteenth-century American rifleshooters, particularly those in the Pennsylvania region, were able to produce by hand every part - lock, stock, and barrel - of some of the finest and most accurate muzzle loading rifles ever known (Roberts 1952: 187; Wigginton 1979: 226).

To make the barrel of such a weapon, a bar of wrought iron was hammered into a flat "skelp." This was usually three to four inches wide, about half an inch thick, and tapered slightly in both width and thickness from what would become the breech end to the muzzle section. This skelp was next formed into a "U" shape by hammering it on the concave recess of a "swage block." It was then heated in the forge until it reached a proper temperature for fusing the edges. A long core rod, or mandrel, was placed into the skelp, and, with periodic reheatings, the skelp was forged into a tube by hammering a weld half an inch at a time, starting at the center. To facilitate this welding process, the gunmaker used a flux, often made of borax, iron filings, and sand. The mandrel was removed after each weld to prevent its sticking inside the fold. After hundreds of welding reheats, a tapering iron tube or barrel, was formed, with a single weld running its entire length. Another process, used frequently in foreign countries, and possibly used by some American gunmakers, was called the "twist" or "Damascus" style. This consisted of forging an iron rod into a tight spiral around a mandrel to create the barrel blank. Following either process, the barrel was next flattened on its sides. Eight such "flats" were normally used (this flattening, including the number of flats, seems to have been a purely stylistic modification). Throughout all of this the barrel had to be continually straightened. It was finally annealed by burying it in hot coals and then allowing it to cool slowly (Roberts 1952: 189; Gusler 1959; Wigginton 1979: 5 and 228; Mordini 1990: 6-7).

The next step in barrel making was the boring process. To accomplish this the gunmaker forged a drill bit onto the end of an iron rod longer than the barrel. The barrel was then set into a sliding carriage, lined up with the drill bit, and held in place with wooden wedges. A heavy crank was used to turn the drill bit as the barrel was pushed onto it. Successively larger and longer bits were used, and after they began to make a cut the full length of the barrel, the carriage was pulled using an attached chain with a weighted end. This gravity activated system pulled the barrel onto the bit in a steady manner, which produced less breakage of bits. During the drilling, the bits were frequently removed so that they and the barrel could be cleaned of metal borings (these were saved for use in making flux) and so that the bore could be examined for straightness. Straightness was checked by sighting through the bore, or sometimes using a taunt steel wire passed through the bore as a guide, and a lead hammer was used to strike the barrel on the anvil to bend it into shape. After the final drill-bit cut was

made, a square reamer was used to polish the inside of the barrel. This was followed by a laborious filing of the exterior flats to smooth them and to improve the center alignment of the bore (Roberts 1952: 8-9; Gusler 1959; Wigginton 1979: 228).

The barrel was now ready to be rifled. This was achieved by the use of a hand operated rifling machine, the earliest form of which was made of wood and was referred to as a "rifling bench." An important part of this device was the rifling guide, a round hardwood pole about three inches thick and several feet long, into which four to eight deep radial grooves had been cut (Roberts 1952: 9). The grooves in this guide imparted the rifling that would be cut into the gun barrel, and different patterns were used for different purposes. One elderly Tennessee gunsmith with knowledge of traditional rifling techniques is quoted as stating that "a heavy charge of powder and a light ball required a barrel with more twists, ... whereas a heavy ball being used with a light charge of powder needed less twist for accuracy" (Wigginton 1979: 234).

The work of rifling a gun barrel required several hours to complete. The barrel was clamped in place on the bench in line with the spiral guide and a rifling rod that was attached to the end of this guide. The rifling rod was made of tough, straight-grained hickory, with metal cutting teeth set into the sides of the rod at its far end. As the guide was pulled through a stationary wooden block with teeth, the rifling rod was pulled through the barrel from the breech end to the muzzle end, and the attached metal teeth cut the first spiral groove on the inside of the barrel. The rod was then pushed back through the barrel, the cutting teeth were cleaned and oiled, the guide was rotated to the next position, and the next cut was begun. This was continued until several spiral grooves were completed. Wood and paper shims were used to raise and lower the cutting teeth to control the depth of the cuts, the desired depth being about .010 inch (Roberts 1952: 9; Gusler 1959; Wigginton 1979: 230-234; Irwin 1980: 42-46; Mordini 1990: 8).

The barrel was now an octagonal-sided tube with rifling, ready to be fitted with sights and a breech plug. The breech plug served to close the rear end of the barrel, and was forged with a tail-like tang with a screw hole, which provided a means for attaching the barrel to the stock. The body of the plug was threaded and screwed into matching threads in the barrel's breech. The threads had to fit perfectly and tightly, as this area was closest to the shooter's face. The breech plug tang had to align with the top of the barrel, and this was accomplished by filing down the bore end of the barrel until the final turn of the plug brought the tang into its proper position. The sights were then forged and filed to a finished shape, with the rear sight being left high, so that it could be filed down during a later sighting-in process. The touch hole was drilled, and the barrel was "proofed" by firing a charge several times larger than normal. This was done by securing the barrel to a plank or bench and firing by means of a fuse or powder trail, from a safe distance (Roberts 1952: 18; Gusler 1959; Wigginton 1979: 238; Mordini 1990: 8-10).

After the barrel was complete, the next step was the construction of the lock and various fittings. After about 1840, most gunmakers purchased ready-made percussion locks, of various grades, from large city-based firms,

but well after this date, some continued to produce their own locks (Roberts 1952: 25). In constructing a lock by hand, each piece, starting with the cock and the lock plate, had to be forged out of iron and then carefully filed into final shape. The springs that operated the lock were tempered by immersing them in boiling lead, then quenching them in linseed oil, followed by slow heating in the forge to remove some of the brittleness. Some pieces of the lock were case hardened by placing them in a crucible containing a mixture of powdered charcoal, ground charred bone, and charred leather. The crucible was then heated in the forge for five to six hours, allowing the pieces of iron to become red hot. During this process the pieces of iron absorbed carbon and were converted to steel. They were then quenched in water and assembled into a lock. Additional parts, such as the butt plate, side plate, and trigger guard were made by sand casting them in brass or forging them in iron (Gusler 1959; Wigginton 1979: 240).

Gun barrels were usually "browned" to prevent rusting and to reduce the glare of the polished metal, which could cause sighting problems. Each gunmaker had his own formula, but one of the oldest methods of browning was accomplished by rusting the exterior of the barrel using repeated applications of strong vinegar, followed by rubbing with a wire brush. When the desired brown color was obtained, the rusting was stopped by boiling the barrel in water or applying a coating of oil. The barrel was then laid aside for several days to "cure." A quicker method used full strength nitric acid instead of vinegar. This usually produced what was called a "plum brown" color (Roberts 1952: 25-26; Mordini 1990: 10).

The final steps in producing a rifle included carving the stock and then carefully fitting to it the barrel, lock, patch box, trigger and trigger guard, ramrod guides, butt plate, and inlays. The early Kentucky or Pennsylvania style long rifles were usually "full stocked," and made from "tiger flame" (or "curly") maple wood. By the 1840s this wood was out of "fashion" and most gunmakers used American black walnut. Many exceptions to this trend are known, included stocks made of cherry, beech, and apple (Roberts 1952: 24-25).

Early rifleshooters used relatively simple tools in making the stock, but these included saws, planes, chisels, draw-knives, rasps and files, bits and drills, and pocket knives. An ax might be used to fashion a rough stock, which was then fastened in a vice. The top was planned smooth from the small of the stock to the muzzle end, then a center line was laid out from the butt to the end of the forearm. Chisels were then used to inlet a channel for the octagonal barrel. The breech plug and tang were next fitted into place and then the lock, trigger, trigger guard, and other fittings. The exterior of the stock was then shaped to its final form and finely smoothed. Finally, it was stained, often using a mixture of iron filings dissolved in nitric acid, and finished with several coats of linseed oil. Each gunmaker had his own methods and materials for finishing the stock, but most included these basic elements (Wigginton 1979: 332; Roberts 1952: 191 and 193).

For help in understanding the technology of early gunmaking in Tennessee, examples of the wide variety of tools and equipment that were used in regional gunmaker shops, especially during the nineteenth century, can be found illustrated in the publications by Wigginton (1979: 208-436)

and Irwin (1980). There is also an interesting collection of early guns and gun working tools housed in a display known as the "Gunsmith Shop" at the Tennessee State Museum in Nashville. Of related interest is a statement concerning the contents of a nineteenth-century gunsmith's shop that appears in a recent Arkansas publication, which contains information on gunsmithing in that state (Bennett and Worthen 1990: 165-205). This is an 1834 inventory that is divided into blacksmith tools and gunsmith tools. The gunsmith tools list (Bennett and Worthen 1990: 171) includes:

11 Boring Rods	2 pair Compasses
8 firmer Chisels	3 pair Nippers
7 Gouges	4 bench Hammers
30 Files	2 hand Vices
3 drawing Knives	1 bench Vice
2 screw Plates	1 bench-pin Wrench
7 Burrs	11 Rifling Rods
18 Taps	8 Planes
1 Brace and 29 Bits	2 Ox Bands
36 Littering Tools	1 Frame and Emery
20 Cold sets and Chisels	Wheel
5 Saws	2 Hatchets
1 pair Shears	1 pair Flasks

A total of 35 dozen files of different types are among the items included in a 1757 document entitled "A List of Utensills & Materials necessary with a Pair of Bellows (without a Forge Cart) for one Gunlock Smith (Assisted by a Lad under him) to be set up & fixed in a Shop at one of the Forts in the Cherokee Nation of Indians." This list appears as Table 2 in the manuscript copy of a report, which is scheduled for publication (Kuttruff, n.d.), concerning the archaeological work at 1750s Fort Loudoun in East Tennessee.

#### EARLY GUNMAKING IN TENNESSEE

Information pertaining to early rifle making is abundant for the eastern part of the United States, particularly Pennsylvania, but very little has been published concerning early gunmakers in Tennessee. This does not, however, mean that Tennessee was lacking in such craftsmen. Settlement of the East Tennessee region began in the 1770s, followed by settlement of what would become known as Middle Tennessee in the 1780s, and virtually every early settler family brought with them one or more rifles. At the beginning of this early settlement period, the owner of a gun that had become inoperable would have had little choice other than to make a difficult journey back to some eastern population center for repairs. Such need, however, must have soon caused the appearance of numerous part-time gunsmiths, and at least a few small gun shops existed in what is now Tennessee by the end of the eighteenth century (Irwin 1980: 6-7). Given the absence of eighteenth-century records that would be useful for specifically defining such operations, it is unlikely that any accurate estimate of numbers of these very early establishments can ever be made.

In 1790, North Carolina ceded its western lands to the United States, and the area now comprising the state of Tennessee became known as the Territory South of the River Ohio (or Southwest Territory). The mountainous regions of East Tennessee, the area then known as the counties of Washington, Sullivan, Green, and Hawkins (from which other counties were eventually formed, including Knox, Jefferson, Sevier, and Blount), produced several highly skilled early rifle makers (Durham 1990: 63; Hamilton 1986: 14). While the origins of an early East Tennessee rifle-making tradition can be traced for the most part to Pennsylvania, there seems to have generally been an immediate simplification in the application of this tradition in the Southwest Territory. It is widely believed that this was a direct result of contemporary economic factors. A frontier economic environment would simply not support production of elaborate styles of long rifles like those that were made in Pennsylvania at this time (Wigginton 1979: 215; Irwin 1980: 6-7).

Instead of the ornately decorated curly maple stocks of the early Pennsylvania rifles, most early Tennessee rifles have a relatively plain appearance, and many of them were made using woods other than maple. They also seem to have commonly been fabricated using iron mountings or furniture instead of brass. This coupled with a narrow iron "banana-shaped" patch box (Figure 5, bottom), long barrel tang, and barrels in excess of 44 inches in length are features considered distinctive for East Tennessee mountain long rifles (Lindsay 1972: 70-71; Hale 1970: 4)

A number of writers have commented on the prevalence of iron mountings on "mountain rifles," and it has been assumed that this indicates that locally produced iron was more readily available than brass (Bivins 1968: 27 and 107-108; Wigginton 1979: 226; Hale 1970: 3-4). It is now clear that in the mountainous sections of East Tennessee there was a long tradition of producing relatively small quantities of wrought iron directly from iron ore, using a device known as a "bloomery" or "Catalan" forge. During the nineteenth century it was noted that such production was carried out on a part-time or seasonal basis by local farmers "who only make bar iron from ore whenever it is needed in their immediate neighborhood" (including, it can be assumed, as needed by local gunmakers). As late as 1880, about twenty of these small-scale bloomery forge operations were still in production in upper East Tennessee (Smith et al. 1988: 22-24).

While most writers seem to agree that early East Tennessee rifles usually have iron mountings, there may be a problem in establishing the true frequency of this trait. Because Tennessee's earliest gunmakers migrated here from North Carolina, Pennsylvania and other eastern states, it can also be assumed that they made rifles that were similar, if not identical, to those being made in their home states. Thus there may be "surviving examples of early Tennessee rifles which have not been recognized as such because they resemble the rifles of states to the east and northeast, and because the men whose names may appear on some of these guns are not identified as ever having worked in Tennessee" (Hale 1970: 3). Indeed, one of the earliest known dated examples (1818) of a Tennessee rifle is not iron mounted and is made in "the general form associated by many collectors with the rifles of Pennsylvania" (Hamilton 1986: 14).

Some of the better known early Tennessee gunmakers who did produce rifles in a relatively simple style include several members of the Bean family. William Bean, Sr., possibly the first permanent white settler in what is now Tennessee, moved from Virginia and built a cabin on the Watauga River in 1769. His son Russell, born in that same year, is commonly believed to be the first white child born in Tennessee. William worked as a farmer, a miller, a blacksmith, and probably as a gunsmith, and he was among the wealthiest of the early settlers. During one period of his life, Russell spent some time in Connecticut perfecting his skills as a gunmaker, and he seems to have practiced this trade throughout most of his life. The first solid evidence for a Bean family member being a gunmaker occurs in 1792. In this year Russell's older brother George advertised himself in the Knoxville Gazette as a goldsmith and jeweler, working near "Bean Station" in what is now Grainger County, and noted that he "makes Rifle Guns in the neatest and most approved manner." Besides George and Russell, other sons of William who apparently spent at least part of their time making guns include Robert, John, Jesse, Edmund, and William, Jr. At least four of Russell's sons followed this trade: Joseph, Baxter, Charles, Sr., and Robert. Much of the Bean family gunmaking activity took place in the Washington County area of East Tennessee, but at times there were family members working in various parts of the state. Documentation exists for a Wm. Bean (apparently William, Jr., working in Franklin County) making guns for the Cherokees in 1808, for a John Bean repairing Cherokee guns in 1815, and for a Joab Bean working as a gunsmith in Memphis in 1819 (Allen 1982: 14; Fink 1965 and 1966; Grady 1973: 12, 22, 60, and 95; Gump 1989: 155; Wigginton 1979: 215; Williams 1930: 127).

Jacob Brown is another figure in the very early history of gunsmithing in Tennessee. In 1771, he founded what became known as the Nolichucky Settlement (in what is now Greene County in East Tennessee ) and began trading with the Cherokees. He also worked for the Indians as a blacksmith and a gunsmith (Dixon 1976: 11).

Another well known early gunmaker is Jacob Gross, who settled in East Tennessee on the north fork of the Holston River about 1790. His rifles probably had a substantial influence on early Tennessee rifle design. According to family tradition, Gross would go to Iron Mountain (or Laurel Bloomery) each winter to make gun barrels. This practice of going to a forge where wrought iron was produced to make barrels was evidently more economical than hauling the iron stock to the gun shop. By one estimate twenty-two pounds of wrought iron were needed to make a six to eight pound finished rifle (Wigginton 1979: 215-116 and 226-227).

Other individuals who are indicated to have made guns in Tennessee before the end of the eighteenth century include: John Bull, John Ottinger, John Penny, and James Rice in East Tennessee, and Samuel Crockett, and Charles Snyder in Middle Tennessee (Appendix A). Very little specific information exists concerning eighteenth-century gunmaking in Middle Tennessee, which at the beginning of the territorial period consisted of what was known as the "Mero District," composed of Davidson, Sumner, and Tennessee (later Robertson and Montgomery) counties (Durham 1990: 63).

For the beginning of the nineteenth century, there is still little specific information concerning gunmaking in the state of Tennessee (Tennessee statehood was granted in 1796). The earliest available statistical data are for the year 1810. These data are presented in a report (Coxe 1814: 138) that lists seventeen counties enumerated in East Tennessee and shows three counties that produced the following values of "Guns Made": Greene - \$4,695; Roane - \$1,050; Washington - \$1,100. None of the counties in what was then referred to as the "Western District of Tennessee" (during the early 1800s the area now considered West Tennessee was still Indian territory) are listed as producing guns, but it is not even clear from the document if an enumeration of this category was made in the Middle Tennessee counties.

The most complete early gun manufacturing data for Tennessee come from the United States census schedules for manufacturers for the year 1820. Table 1 was constructed using a combination of the two sets of these data: the original schedules (microfilm copies at the Tennessee State Library and Archives) and the published statistics (Gales & Seaton 1823). While the original schedules had as many as twelve questions that could be answered, data collected for gun manufacturing most consistently concern four major categories: number of employees, raw materials used, the annual product, and the value of this product. Some of the forms also contain information about the kind of manufacturing equipment that was used, and this and other selected comments are included in Table 1 as notes. Most of the general comments made by the census takers concerning production indicate that these establishments were "doing well." This includes comments such as: "the establishment progressing in improvement. The demand for guns is considerable and sales made as fast as they can be manufactured"; "guns are in demand and sales easily made of all that can be manufactured"; and "guns are, and have at all times been in demand in this country, and sales of them easily made."

The 38 establishments enumerated were involved with the production of gun "barrels" (almost entirely rifle barrels), rifles and "guns" (in most cases also meaning rifles), and occasionally with the independent production of gun stocks. The basic raw material was iron, which had an average value of 8 to 10 cents per pound. Lesser quantities of steel and brass were used, the latter being mentioned for only two of the establishments. One form includes 2,000 bushels of "coal" as a raw material, and it is assumed that this means charcoal.

Total production figures for 1820 are rather speculative, due to a lack of consistency in how the information was recorded and an absence of data for some establishments. Minimum totals suggest an annual production of 435 rifle or other gun barrels and 427 complete rifles and "guns." In addition to the 435 barrels that were counted, there was an additional production of \$1,500 worth of barrels for which there is no count. However, using the average value of a barrel, which is \$9.37, the additional monetary value suggests another 160 barrels, or a state-wide total production of 595 barrels. Similarly for guns, there were \$4,175 worth produced for which there is no count. The average value of "rifles" and "guns" is \$19 to \$21, or about \$20, so it can be assumed that at least another 209 guns were produced, suggesting a state-wide minimum total for 1820 of 636 guns

TABLE 1

## GUNMAKING OPERATIONS FROM THE 1820 U. S. CENSUS OF MANUFACTURERS

<u>Proprietor</u>	<u>Emploves</u>	<u>Raw Materials</u>	<u>Product</u>	<u>Value</u>
<b>EAST TENNESSEE:</b>				
BLOUNT COUNTY				
Joseph Bogel	2	300 lbs. iron	30 guns	\$750
George Duncan	2	400 lbs. iron	40 guns	\$1000
John B. Harman	1	240 lbs. iron	20 rifles	\$500
Nathan Harman	1	240 lbs. iron	20 rifles	\$500
William Kelsoe	1	600 lbs. iron	50 barrels	\$500
CAMPBELL COUNTY				
Rice & Snoderly	2	400 lbs. iron	50 rifles	\$500
CLAIBOURNE COUNTY				
Daniel Rice (1)	2	1,500 lbs. iron	50 barrels	\$500
GRAINGER COUNTY				
John Easterly	1		( 2 guns)	\$500
GREENE COUNTY				
Nathaniel Davis	1	110 lbs. iron	10 barrels	\$80
John Harmon, Jr. (2)	1	?	8 rifles	\$200
John and Peter Harmon	2	?	10 guns	\$250
Moses Harmon	1	500 lbs. iron	20 rifles	\$400
			20 barrels	\$200
Ruben Luster	1	375 lbs. iron	25 barrels	\$225
William Luster (3)	3	1,200 lbs. iron	100 barrels	\$800
Joseph Melone	1	200 lbs. iron	(2 barrels - \$8 each)	
Obadiah Neal	1	175 lbs. iron	15 barrels	\$120
Aaron Parker (4)	2	400 lbs. iron	6 rifles	\$150
			25 barrels	\$250
Solomon Reid (5)	3	1,000 lbs. iron	20 guns	\$400
			40 barrels	\$400
KNOX COUNTY				
William Kelsoe	2	1,000 lbs. iron	25 rifles	\$625
H. McCullough	1	1,000 lbs. iron	40 rifles	\$800
MONROE COUNTY				
Stephen Harmon	1	300 lbs. iron	30 guns	\$450
Zachariah Luster	1	400 lbs. iron	40 guns	\$550
Benjamin Neel	1	1,000 lbs. iron	100 barrels	\$1000
ROANE COUNTY				
John Esary	1	500 lbs. iron	25 rifles	\$500
UNICOI COUNTY				
Israel McInturf (6)	4	2,000 lbs. bar iron 2,000 bus. coal	(2 barrels)	\$1500



TABLE 1 (continued)

<u>Proprietor</u>	<u>Employes</u>	<u>Raw Materials</u>	<u>Product</u>	<u>Value</u>
<b>MIDDLE TENNESSEE:</b>				
DAVIDSON COUNTY (name not legible)	3	1,500 lbs. iron, 20 lbs. steel, 20 lbs. brass, 30 gunstocks	20 guns	\$500
LAWRENCE COUNTY Robert Hightower(7)	2		( 2 guns)	
John McAnally, Sr.	1	700 lbs. iron	ca. 23 guns	\$576
LINCOLN COUNTY Allen Elston(8)	2	iron & steel(1,000 lbs.)	(2 guns - \$15 each)	
David N. Hawkins(9)	2	800 lbs. iron, 20 lbs. steel, and 5 lbs. brass	(2 rifles - \$20 each)	
MAURY COUNTY (no name given)	1	2 wagon loads timber	20 gun stocks	\$100
RUTHERFORD COUNTY (no name given)(10)	3	1,000 lbs. iron 25 lbs. steel	(2 guns)	\$1300
SMITH COUNTY Joel Dyer(11)	3		( 2 guns)	
WARREN COUNTY Jesse Neal(12)	2	2,500 lbs. iron 200 lbs. steel	(2 gun and pistol barrels) (\$10 to \$12 and \$8 each)	
WHITE George Loug(13)	2		(2 barrels)	
WILLIAMSON COUNTY Samuel Crockett	2	2,000 lbs. iron 150 lbs. steel	(2 guns and barrels) (\$27 and \$12 each)	
Joshua Farrington(14)	3	1,800 lbs. iron, 50 lbs. steel, 50 stocks	(2 guns)	\$1550
(? name)(15)	3	900 lbs. iron, 95 lbs. steel, 25 gun stocks	(2 guns)	\$825
<hr/>				
TOTALS:		-----Minimum Total-----		
38 establishments		25,040 lbs. iron	435 barrels	\$4075
		510 lbs. steel	? barrels	\$1500
68 male employes		25 lbs. brass	214 rifles	\$4175
			213 guns	\$4476
			? guns	\$4175
			20 gun stocks	\$100

TABLE 1 (continued)

Notes:

- 1) the schedule also mentions: "1 water wheel"
- 2) "a mill for boring and grinding - not in operation"
- 3) "no machinery"
- 4) "a boring and grinding mill"
- 5) "the machinery in use is one Booring [boring] mill worked by hand"
- 6) Original listing in Carter County, also notes: "one water wheel, one grindstone and boring machine, two anvils, two bellows, two sledge hammers"
- 7) "Blacksmith" - used 2,250 lbs. iron, 100 lbs. steel, and 28 lbs. brass to produce \$1000 worth of ploughs, hoes, axes, bells, guns, etc.
- 8) "1 boring machine"
- 9) "1 boring mill"
- 10) "1 furnace, boring machine, etc."
- 11) "Blacksmith" - used 2,100 lbs. iron and steel to produce \$2000 worth of guns, ploughs, hoes, axes, etc.
- 12) "anvil, vice, boring bench, & c."
- 13) "Blacksmith" - used 2,500 lbs. iron to produce rifle barrels, bells, axes, etc.
- 14) "refits ... guns and stocks" "1 bore mill for bore of guns"
- 15) name appears to be Fredrick & Stramler or Fredrick K. Stramler, but an informant has suggested that the form may be one intended for Francis Slaughter (Appendix A). A Reuben Stramler is listed on the 1820 population census for Williamson County.

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produced (most of them rifles). These figures are, of course, lower than the presumed correct amount because six of the establishments listed in Table 1 do not have any usable production figures.

Though most of this production was centered in East Tennessee, which had 25 (or 66 %) of the 38 establishments, the 13 Middle Tennessee operations seem to have been doing proportionately well. While Middle Tennessee had only 34 percent of the 1820 gunmaking shops, these employed 43 percent of the state-wide total of workers who carried out this work (the total of 68 employes listed in Table 1 were all men except for one or two boys). As production figures are missing for so many of the Middle Tennessee operations, it is difficult to more precisely evaluate them.

No other similar production figures exist for Tennessee gunmakers for the period before 1840. The 1830 United States census did not include the collection of industrial statistics (Wright 1900: 29), and the regular population schedules do not indicate professions.

It seems certain, however, that during the late 1820s and the 1830s there were at least some changes in how guns were manufactured in Tennessee. During the 1820s, the opening of the West Tennessee lands for settlement and the beginning of the steamboat era (Caldwell 1968: 187) moved the state out of its frontier phase and firmly connected it to a larger

American market economy. By the 1830s, the percussion lock system, described in a previous section, was influencing the beginning of a major revolution in how guns were made in America. While the isolation of some Tennessee settlements favored a resistance to such changes for several decades, it can be assumed that many of Tennessee's gunmakers, especially those in the more urban areas, would have quickly embraced these newly developing technologies. Some support for this is provided by an 1832 advertisement for a gunsmith in an adjoining state (in Little Rock, Arkansas) that described one of his services: "Guns and Pistols with common locks, fitted with percussion locks" (Bennett and Worthen 1990: 184)

## GUNMAKING IN TENNESSEE FROM 1840 TO 1865

With the 1840 U. S. census an effort was again made to collect information concerning manufacturing establishments in the various states. Unfortunately, there are no surviving original schedules from this undertaking, and the names of individual gunmakers cannot be determined. The available information is limited to what is contained in a published summary or "Compendium" (Allen 1841). Under the heading "No. of Cannon and Small Arms" there are statistics for Tennessee, divided into three districts (Allen 1841: 255). According to this report, no cannon were produced in Tennessee during 1840, but the figures for small arms production are shown in Table 2.

In contrast to the 1820 figures, which indicate a state-wide total of 63 persons employed in gunmaking, there were now only 34 men listed as practicing this trade (no doubt there were other gunmakers whose operations were too small to meet the minimum standards for listing on a manufacturers schedule). These same figures, to the extent that they are accurate, indicate that while fewer guns were being manufactured in Tennessee in 1840 (N = 564) than had been the case in 1820 (N = 636 +), a majority (62 %) of the production was now in Middle Tennessee. There were also nearly twice as many gunmakers listed in Middle Tennessee as in East Tennessee, but, somewhat surprisingly, none in West Tennessee.

For the year 1850, the available information for Tennessee gunmakers is more extensive than for previous decennial years, but it is also more difficult to interpret. One source is the general population schedules used with the United States Census. These attempted to list the occupations of all adult males in every household in each county (the 1850 census was the first to record occupations). The official published total for number of "gunsmiths" in Tennessee in 1850 is 164 (DeBow 1853: 584). This figure is in great contrast to the small number of gunmakers (28 employees working in 13 shops) that were recorded on the 1850 manufacturers census schedules ("Schedule 5, Products of Industry"). Probably the main reason for this difference is that, to be included in the manufacturers census, a proprietor was supposed to have an annual production value of at least \$500 (Smith and Rogers 1979: 4), and many Tennessee gunmakers must have made less than this amount. By 1850, it is also probable that many of Tennessee's "gunsmiths" were beginning to specialize in the repair of guns made outside Tennessee, and the value of their labor was perhaps becoming

TABLE 2

## SMALL ARMS PRODUCTION IN TENNESSEE IN 1840

<u>Eastern District</u>	<u>No. of Small Arms Made</u>	<u>No. of Men Employed</u>
Bradley County	18	1
Campbell County	20	2
Hawkins County	32	2
Meigs County	3	1
Monroe County	19	1
Washington County	120	7
Total	<u>212</u>	<u>14</u>

Middle District

Fentress County	17	3
Lincoln County	33	1
Marshall County	82	6
Overton County	20	2
Rutherford County	100	4
Wilson County	100	4
Total	<u>352</u>	<u>20</u>

Western District

- NONE -

less obviously a "manufacturers product." In spite of such definition problems, the available 1850 manufacturers census data are still of interest, and are summarized in Table 3. The compilation used here is based on a summary of the original schedules prepared by Hamilton (1981).

Superficially, the 1850 manufacturers information suggests relatively little change in how guns were being made in Tennessee. As in 1820, the gun shops employed 1 to 3 men, and most relied on hand power. At least three, located in hilly or mountainous areas where suitable streams were plentiful, used water power (probably for their boring machines and grindstones), and two of the 1850 gunshops, both in Robertson County, utilized horse-powered machinery. Using those values that are specific for a certain number of guns made (Table 3), the average value of a gun in 1850 was approximately \$17, which was less than the average value in 1820 (\$20).

Part of the reason for this decrease in gun value, and among the things not apparent from the Table 3 information, are changes that had occurred at the national level and were no doubt now affecting mainstream gunmakers in Tennessee as well. The percussion lock firing system was by now more or less universal, and factory produced percussion locks may have been less expensive than locally made ones. The popular style for rifles had become the "half-stock" rather than the "full stock," and these required a little less material to produce. Even more important, since 1840, American riflemakers had begun to rely on cast steel barrels made by large companies in the east. The manufacture of a rifle using one of these barrel blanks was much less time consuming than employing the traditional forge-welding technique of barrel making (Roberts 1952: 7 and 24-25; Wigginton 1979: 221; Irwin 1980: 8).

The 1850 census information provides the first opportunity to observe a truly comprehensive state-wide distribution pattern for gunmakers. A continuation of the trend of westward migration by gunmakers, suggested by the 1810 to 1840 data, is again apparent and can be more specifically addressed. There is a slight reflection of this in Table 3, which indicates for the first time the existence of a gun shop in West Tennessee. Much more specific than Table 3, however, is the information contained in Appendix A, which includes all of the individual gunmakers known to have been working in Tennessee in 1850 (the criteria used in creating this list are discussed in the next section). This information is tabulated by counties and regions in Table 4 (largely by coincidence the 1850 gunmaker count based on the 1990 survey project research information, which includes more sources than just census data, is 164, the same as the official 1850 census count, cited above, for "gunsmiths"). The Table 4 information indicates 29.9 percent of the 1850 gunmakers located in East Tennessee, 53.6 percent in Middle Tennessee, and 16.5 percent in West Tennessee.

Between 1850 and 1860 at least one significant change occurred in the types of guns that were produced in Tennessee. Around 1855, a number of Tennessee gunmakers, along with gunmakers in several surrounding states, began to focus on the manufacture of a class of small percussion pistols, which had gained great popularity in the South. This production continued until about 1870 (Kirkland 1972: 5-6).

TABLE 3

## GUNMAKING OPERATIONS FROM THE 1850 U. S. CENSUS OF MANUFACTURERS

<u>Proprietor</u>	<u>Employes</u>	<u>Power</u>	<u>Raw Materials</u>	<u>Product</u>	<u>Value</u>
<b>EAST TENNESSEE:</b>					
CARTER COUNTY					
Benjamin Dyer	2	hand & water	iron	25 rifles, pistols, etc.	\$975
COCKE COUNTY					
Isaac Fine	2	hand(?)	1000 lbs. iron	46 guns repairs	\$552 \$50
WASHINGTON COUNTY					
William Parks	2	water	1000 lbs. iron 50 lbs. coal	84 guns	\$672
<b>MIDDLE TENNESSEE:</b>					
BEDFORD COUNTY					
J. A. Bearden	3	hand	40 gun barrels 40 locks	40 guns	\$640
CANNON COUNTY					
James L. Cawthon	5	water	4 tons iron	5 wagons 80 guns	\$1700
HICKMAN COUNTY					
Thomas Kelly	2	hand	\$100 coal	40 guns	\$680
LAWRENCE COUNTY					
J. S. Bevin	1	hand w/ 1 lathe	iron, steel, etc.	guns wheels other	\$200 \$60 \$500
LINCOLN COUNTY					
Alfred Bearden	2	hand	?	50 rifles	\$1250
MAURY COUNTY					
R. Martin	2	hand	400 lbs. iron	40 firearms other	\$600 \$200
H. Estes	1	hand	200 lbs. iron	30 firearms other	\$750 \$250
ROBERTSON COUNTY					
C. B. Williams	2	horse	500 lbs. iron	50 guns	\$750
Daniel Mulloy	2	horse	800 lbs. iron	50 guns	\$800
<b>WEST TENNESSEE:</b>					
SHELBY COUNTY					
Chas. Hafmann	2	hand	200 lbs. iron 25 gun barrels	gun repair, etc.	\$950

TABLE 4

## 1850 AND 1860 TENNESSEE GUNMAKERS BY REGION AND COUNTY

<u>East Tennessee Counties</u>	<u>1850</u>	<u>1860</u>
Anderson (1801)		
Bledsoe (1807)	1	4
Blount (1795)	4	3
Bradley (1836)	1	1
Campbell (1806)	3	
Carter (1796)	2	3
Claiborne (1801)	2	3
Cocke (1797)	1	2
Cumberland (1855)		
Grainger (1796)	3	1
Greene (1783)	2	
Hamblen (1870)		
Hamilton (1819)		3
Hancock (1844)		1
Hawkins (1786)	1	
Jefferson (1792)		1
Johnson (1836)	2	
Knox (1792)	2	1
Loudon (1870)		
Marion (1817)		1
McMinn (1819)		1
Meigs (1836)		
Monroe (1819)	4	2
Morgan (1817)		
Polk (1839)		2
Rhea (1807)		1
Roane (1801)	3	2
Scott (1849)	1	
Sevier (1794)		1
Sullivan (1779)	4	7
Union (1850)	1	
Unicoi (1875)	3	9
Washington (1777)	9	4
	<hr/>	<hr/>
Sub-total	49	53

TABLE 4 (continued)

<u>Middle Tennessee Counties</u>	<u>1850</u>	<u>1860</u>
Bedford (1807)	4	1
Cannon (1836)	2	4
Cheatham (1856)		
Clay (1870)		
Coffee (1836)	2	4
Davidson (1783)	15	12
DeKalb (1837)	1	1
Dickson (1803)	1	1
Fentress (1823)	2	1
Franklin (1807)	1	1
Giles (1809)	2	
Grundy (1844)		1
Hickman (1807)	6	2
Houston (1871)		
Humphreys (1809)	4	
Jackson (1801)	1	1
Lawrence (1817)	7	5
Lewis (1843)	3	1
Lincoln (1809)	4	6
Macon (1842)	1	
Marshall (1836)	4	6
Maury (1807)	3	2
Montgomery (1796)	1	5
Moore (1871)		
Overton (1806)	3	4
Perry (1819)	1	
Pickett (1879)		
Putnam (1854)		1
Robertson (1796)	5	1
Rutherford (1803)	2	6
Sequatchie (1857)		1
Stewart (1803)		3
Smith (1799)	1	
Sumner (1787)	3	4
Trousdale (1870)		
Van Buren (1840)	1	1
Warren (1807)	1	1
Wayne (1817)	2	1
White (1806)	2	
Williamson (1799)	1	1
Wilson (1799)	2	6
Sub-total	88	84



TABLE 4 (continued)

<u>West Tennessee Counties</u>	<u>1850</u>	<u>1860</u>
Benton (1835)	1	1
Carroll (1821)	1	4
Chester (1879)		
Crockett (1870)		
Decatur (1845)		1
Dyer (1823)	1	
Fayette (1824)	2	
Gibson (1823)		1
Hardeman (1823)	1	1
Hardin (1819)	2	
Haywood (1823)	1	1
Henderson (1821)	4	2
Henry (1821)		2
Lake (1870)		
Lauderdale (1835)		1
Madison (1821)	2	
McNairy (1823)	1	1
Obion (1823)	2	2
Shelby (1819)	7	15
Tipton (1823)	2	1
Weakley (1823)		1
	<hr/>	<hr/>
Sub-total	27	34
Total	164	171

These guns (Figure 7) were inspired by those of Henry Deringer, a German gunmaker working in Philadelphia, who, in 1825, made the first examples of a small percussion pistol designed for individual protection. During the 1840s, the novelty of this idea caught on, and soon respected citizens as well as gamblers and thieves were carrying these compact and inconspicuous weapons in their pockets. Most Deringer pistols measured from 3 3/4 to 9 inches in length, with calibers ranging from .31 to .51. Deringer did not patent his pistol, and during the height of its popularity, in the 1850s and early 1860s, many imitations were made (Peterson 1962: 122-125; Wilson and Eberhart 1985: 179-201).

Because so much of Henry Deringer's trade was in the southern states, this region produced a large number of independent makers of imitation or "Deringer-style" guns. Information contained in the two better known publications that concern these guns (Kirkland 1972: 5; Wilson and Eberhart 1985: 179-201) indicates that there were at least eighteen firms in Tennessee that either made or distributed Southern Deringers. Eleven of these were in Memphis, in Shelby County (F. Clark; F. Glassick; Holyoake, Lownes & Co.; A. Linde; Lullman & Vienna; J. Merriman; W. Schneider; Schneider & Glassick; F. Schumann; A. Weisgerber; and E. Wolff); six were in Nashville, in Davidson County (F. Bitterlich; Bitterlich & Legler; James Burlington; W. Calhoun; Kirkman & Ellis; and E. Sieber), and one was in Chattanooga, in Hamilton County (DeLong & Son). All of these are also listed in Appendix A.

For 1860, there is a major problem in determining the relationship between census and other information concerning gunsmiths and how this relates to gunmaking in Tennessee. The official total for persons in Tennessee listed on the census as "gunsmiths" is 122 (Kennedy 1864: 471). However, another federal publication (Secretary of the Interior 1865: 560-579), which lists Tennessee "Manufactures, by Counties, 1860," does not include any mention of gunsmiths or gunmakers (it is possible that some gunmaking activity may have been subsumed under "Blacksmithing" operations, 239 of which are accounted for in Tennessee). Only one Tennessee gunsmith (H. A. Therlin, Shelby County) is represented by a surviving 1860 manufacturers census schedule (Hamilton 1981: 6). This absence of information concerning Tennessee gunmaking is presumably related to what had become a general, nation-wide trend. The vast majority of American firearms were now being produced in "factories," with this production concentrated in the northeastern part of the country (Secretary of the Interior 1865: cxc).

While, by 1860, most Tennessee "gunsmiths" may have worked primarily on the repair of these factory made guns, most probably still made at least a few complete guns (with at least some in the rural areas continuing full-time traditional gunmaking). This assumption has been applied to those individuals represented by the tabulation in Table 4. The main reason that the number of 1860 gunmakers (171) listed on Table 4 is greater than the number (122) suggested by the 1860 census is that there are 51 "gunsmiths" listed in the 1860 Tennessee State Gazetteer and Business Directory (Mitchell 1860: 429), many of whom were not found listed as gunsmiths on the census.

For 1860 (Table 4), the trend toward increasing numbers of gunsmiths/gunmakers in West Tennessee, seems to have continued. Percentage figures for the three grand divisions are: East Tennessee - 31.0 percent; Middle Tennessee - 49.1 percent; and West Tennessee - 19.9 percent (as opposed to 16.5 % in 1850). Most of the increase in this part of the state seems to have been related to a continuing viable market for Deringer-style pistols produced by gunmakers in Memphis, which served as a major "jumping-off point" for participants in America's westward movement (Kirkland 1972: 6).

The period of the American Civil War (1860-1865) was one of rapid and major changes in the production of guns. As noted in previous sections, the start of this war coincided with what was already the beginning of a period of significant modification of the technology of gun production. The war only served to increase the rapidity of these changes. Tennessee joined the Confederacy in May of 1861 and for the next several months to a year, a considerable portion of the state's resources were devoted to the production of war materials. Before its capture by Federal forces in February of 1862, Nashville, in particular, was an important center of arms production and a major Confederate supply depot. Under Federal control for the remainder of the war, it was developed into an even larger military supply center, but for arms and equipment now manufactured in northern states (Smith et al. 1990: 4-9 and 15).

In 1861 and 1862, Tennessee, as part of the Confederacy, participated both in the production of new guns and in the large volume "destruction" of old ones, the latter caused by the wide-spread converting of flintlock rifles into percussion muskets. Apparently the largest production of new guns was carried out at the Pulaski Gun Factory, which manufactured approximately 500 Model 1841 .54 caliber muskets. At least a few guns were also produced in Gallatin at the Sumner Armory, possibly including some Model 1855 carbines. Other places where old guns were converted to new, where gun parts were made, or where at least a few new muskets may have been produced include: the Nashville Armory & Arsenal (sometimes known as the Nashville Gun Factory); the Nashville State Armory; the Nashville Penitentiary (using prison labor); the Knoxville Arsenal; and two other state armories in Columbia and Memphis (Hill and Anthony 1978: 163; Albaugh and Simmons 1957: 236, 242, 249, and 266). There must have also been some type of gun workshop or armory in Murfreesboro, for in the summer of 1861 Tennessee's governor:

called for 2,000 riflemen, each man to bring his gun, to be taken by the State at valuation and converted into minie rifles, shooting sixty balls to pound. In response to this call ten companies are in camp at Murfreesboro, Middle Tennessee, and their guns are being converted into the minie rifle at the rate of 300 per week. Other companies more than sufficient to fill the call have tendered themselves and are marching or preparing to march into encampment. It is believed that from 4,000 to 5,000 men armed in this way can be raised in the State as twelve-months' volunteers (Official Records 1880-1901, Vol. 52, Part 2, pp. 123).

## POST-1865 GUNMAKING IN TENNESSEE

Though it is extremely difficult to assess the immediate post-Civil War period in Tennessee in terms of an activity such as traditional or non-factory gunmaking, it can only be assumed that this was a time of major decline for this craft. Presumably a large volume of surplus military guns would have been available after the war, and it seems likely that the repair of these and other factory-made weapons would have provided the major demand for Tennessee gunsmiths working at this time. From this period on, the large-scale production of breech-loading weapons and metallic cartridges completely overshadowed the traditional industry. Some gunsmiths did continue to make muzzle-loading weapons on a limited basis for a few more years, but eventually traditional gunmakers could only be found in the state's most remote areas.

Persons who are listed as gunsmiths on the 1870 and later census reports for Tennessee are not automatically assumed to have been makers of guns. Such individuals are included in this study only if there is other evidence that they were gunmakers. At least three such individuals or firms are indicated by the surviving 1870 manufacturers census returns (only about half of Tennessee's counties are represented by 1870 returns). William Douglas in Cocke County (identified as a "gunsmith" in 1860) was listed as a "blacksmith" in 1870, but in addition to horseshoes and other farm items, he also made 12 gun barrels valued at \$60, 12 gun locks valued at \$24, and 12 rifle guns having a value of \$180. G. W. Kemper's 1870 business in Davidson County specifically included "making new guns." His annual product was 70 new guns valued at \$980 and the repair of 25 guns valued at \$25. The Nashville (Davidson County) firm of Bitterlich and Legler had an 1870 production of 4 guns valued at \$400 and an unknown number of pistols valued at \$200, as well as repairs valued at \$100 (Hamilton 1981: 6-7).

The 1880 manufacturers census returns (again for only half of Tennessee's counties) include nine "Lock and Gunsmiths" (Hamilton 1981: 8-10), but it is not evident from the schedules that any of them were gunmakers. Three of them (Appendix A) are known from other sources to have made at least some complete guns. These are Joseph Legler (Davidson County), Frank Schumann (Shelby County), and J. G. Schmidt (Shelby County).

Some of the traditional gunmakers who continued this craft into the late nineteenth and early twentieth centuries are discussed in the works by Wigginton (1979: 208-436) and Irwin (1980) and are listed here in Appendix A. Perhaps the most famous late-period traditional Tennessee gunmaker was Hacker Martin (1895-1970), who is featured in both of these publications.

As traditional rifle making became more and more a craft practiced only in remote areas, such as the mountains of East Tennessee, the common names for such weapons often became idiomatic terms, reflecting how these guns were later used.

Even after the homestead was well established and hunting was not so important, the rifle was used to kill the hogs, which provided the most staple meat in the region. They often ran wild and could only be brought down with the accurate rifle ... the Kentucky rifle was most commonly referred to in our area as the "hog" rifle. When I was a child, I never heard it called anything except the "old hog rifle" or sometimes the "squirrel gun." I never heard the 'old folks' use the term "Kentucky rifle" (Irwin 1980: 8).

Since the early part of the twentieth century, there has been, in Tennessee as well as the rest of the nation, a rebirth of interest in the manufacture and sporting use of muzzle-loading rifles. There are probably more makers of muzzleloaders now than at any time since the 1850s. This varies from the casual or even one-time maker to individuals who devote all of their work time to mastering the craft as it was practiced in the eighteenth or early nineteenth centuries (Wigginton 1979: 294-436).

### **TENNESSEE GUNMAKERS**

The main documentation used to explain this section's central topic is a "Tennessee Gunmaker List." This is presented at the end of the report as Appendix A.

As should be apparent from the foregoing discussions, part of the problem in identifying Tennessee's historic period gunmakers is a semantic one. In contemporary documents, the indicated profession of almost all early Tennessee gun producers is "gunsmith" [defined in Webster's Third New International Dictionary (Unabridged) as "one whose occupation is to design, make, or repair small firearms," as opposed to "gunmaker," "a maker or manufacturer of guns"]. For the eighteenth and early nineteenth centuries, it can be assumed that most Tennessee gunsmiths were gunmakers and gun repairers. At some point, however, the number of factory made guns, imported from eastern arms production centers, became so great that there was little remaining need for the traditional or small scale production of firearms. The demand for gunsmiths as repairers of guns, however, remained great.

While in reality this transition of meaning did not occur in a uniform manner in either time or space (e.g., the production of completely hand-made flint-lock rifles continued in some regions much later than in others; some percussion-lock, muzzle-loading guns were still made locally for many years after the majority of guns in use in Tennessee were metallic-cartridge models produced in eastern factories; a few Tennessee gunsmiths continued to make traditional guns in their small, mostly rural shops into the late nineteenth and early twentieth centuries; etc.), it was during the period of the American Civil War that so much seems to have changed so rapidly. Until the mid-1860s, almost all of the individuals who were listed in contemporary documents as gunsmiths seem to have worked in relatively small gun shops, where it is known or can be assumed that the making of guns consumed more of their time than gun repair. From about 1840 on, many makers worked in a somewhat less than "traditional" manner, with

guns often being produced using some parts that were not made in Tennessee. But, even so, the manufacture of guns in Tennessee seems to have remained a small-scale often "cottage-like" industry until the first "armories" for the manufacture of military weapons were established during the Civil War. Afterwards, the technology and national economics of gunmaking were so different that it does not seem justifiable to assume that persons listed as gunsmiths were also gunmakers, unless there is other supporting evidence that they were.

This interpretation of general trends provided the guidelines for the creation of Appendix A, which is presented in an attempt to identify all of the individuals who made guns in Tennessee during the "historic period" (at least earlier than 50 years ago), using "traditional" gunmaking skills (as opposed to factory production - something that was never common in historic-period Tennessee anyway). The major dividing point is approximately 1865. Gunsmiths listed on census or other contemporary documents before 1870 are assumed to have probably made guns. Later gunsmiths are considered to have been gunmakers only when there is direct evidence for such activity in the form of guns marked with their names or other supporting documentation.

Appendix A contains the names of approximately 400 individuals (one or two names could not be resolved as to number of people - e.g., William Kelsoe is the name of the proprietor of separate 1820 gun shops in Blount and Knox counties, but it remains unclear if this is the same or different persons). As noted in the historical sections, the distribution of Tennessee gunmakers changed through time from being most concentrated in East Tennessee during early years to increasing numbers in Middle and West Tennessee in later years. The sum total of the locations listed in Appendix A, however, is a rather even state-wide distribution. This is illustrated by Figure 10, in which the counties that lack any information concerning gunmakers working there are shaded. Such an absence of gunmakers only occurs in 14 of the state's 95 counties, and 10 of these are counties created after 1860. Only Anderson (1801) and Morgan (1817) Counties in East Tennessee and Cheatham County (1856) in Middle Tennessee are county areas with a true absence of gunmakers on 1860 and earlier documents.

As one of the primary methods used in identifying the persons who are listed in Appendix A was scanning the occupational columns on the census schedules used for all Tennessee counties in 1850 and 1860, the "Work Period" column in Appendix A represents, in many cases, a very conservative estimate of the time during which an individual may actually have been active as a maker of guns. For many of them all that is presently known is that they are listed on one of these censuses (which, as previously noted, are the first two that recorded occupations). Obviously, most of these same individuals can be assumed to have worked for many years before or after the known date. In some cases a more accurate work period was determined from documents in addition to census reports, and for most of the persons listed, a considerably clearer understanding of their work history could have been completed if there had been more time available for such research.

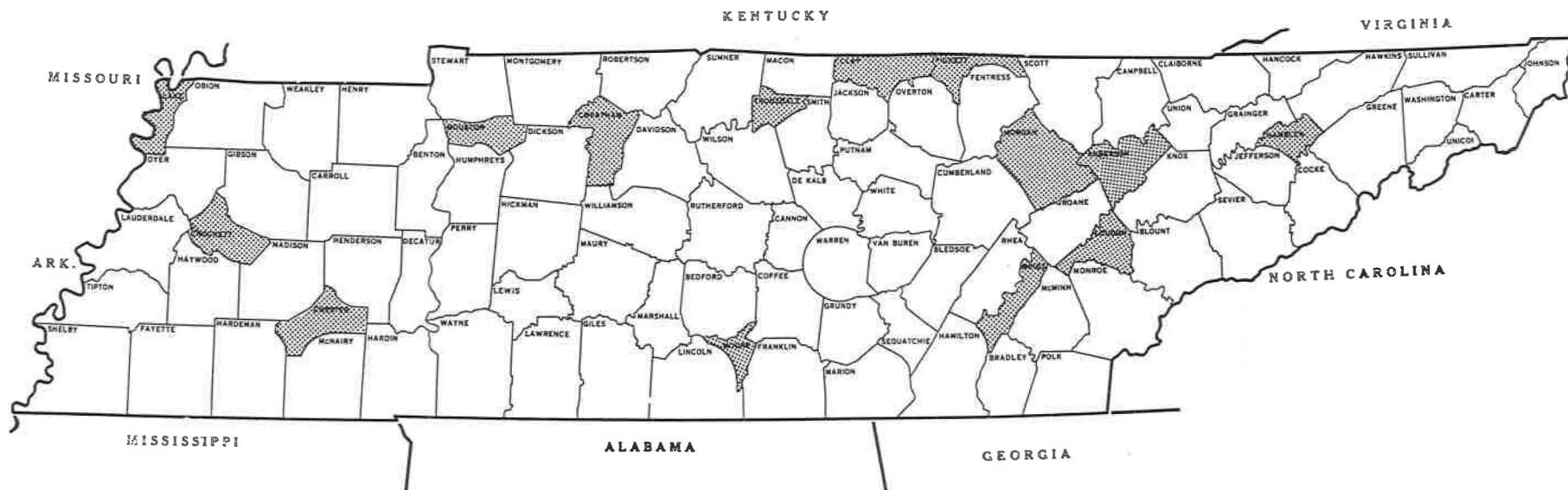


Figure 10. Distribution map showing 81 Tennessee counties (those counties that are not shaded on the map) where one or more historic period gunmakers worked.

As indicated by the repetition of family names in Appendix A, many Tennessee gunmakers were born to their trade, belonging to the kind of craft "dynasties" that were common for some other small industries in the South (Burrison 1983: 43). It also appears that a substantial number of early Tennessee gunmakers, at least through the mid-nineteenth century, were trained for their profession through an apprentice system that had its origins in the American colonial period. According to this practice, a young man was bound to a master craftsman by a contract, called the indenture, which specified that he would work for the craftsman for a period of several years, usually four or five, in return for being fed, clothed, housed, and trained in the craft. At the end of this period the apprentice became a journeyman, available for hire by other master craftsmen, and before departing, he was customarily given a new set of clothes by the man who had trained him (Tunis 1965: 14-15). One of the collector-researchers of Tennessee guns stated that several years ago he had the opportunity to examine some early nineteenth-century indenture papers used by Tennessee gunmakers, at least one of which specified that, upon completion of the indenture, the gunmaker was to supply the apprentice with a set of gunmaking tools (David Byrd, personal communication, 1991). Six "apprentice gunsmiths" were found on the 1850 and 1860 censuses (Appendix A). On the date of reporting, they ranged in age from 16 to 23.

The information contained in Appendix A also provides an indication of the origins of Tennessee gunmakers, particularly those that were listed on the 1850 and 1860 census reports. Those individuals for whom a place of birth was determined suggest that most of the gunmakers not born in Tennessee came from North Carolina and Virginia. At least 252 of the Tennessee gunmakers were born in American, in the following states: Tennessee (55.1 %), North Carolina (20.2 %), Virginia (9.5 %), Kentucky (4.4 %), South Carolina (4.0 %), Maryland (1.6 %), Pennsylvania (1.2 %), Georgia (1.2 %), Ohio (0.8 %), Alabama (0.8 %), New York (0.4 %), New Jersey (0.4 %), and Massachusetts (0.4 %). There were also fourteen gunmakers who were born in Germany, two in Prussia, and one each in England, Baden (Switzerland), and Bohemia (Czechoslovakia).

### **TENNESSEE GUNMAKER SITES**

The potential number of gunmaker shops that once existed in Tennessee and may now be represented as historic period archaeological sites appears to be somewhere between 300 and 400, possibly closer to the latter figure. Some of the approximately 400 individuals listed in Appendix A worked at different locations during different periods of their lives, and this might seem to suggest more than 400 sites. Actually, however, this is more than offset by the number of cases in which two or more gunmakers worked together in the same shop. The destruction of the archaeological remains once associated with at least three shop sites was documented during the 1990 survey, and it can be assumed that this has happened in a number of other cases. This too indicates that the number of extant gunmaker shop sites is less than 400.



## 1990 SITE SURVEY

Even if the potential number of sites of historic period Tennessee gunmaker shops is closer to 300 than 400, it would still have required a survey project of much larger scope than the one that was possible during the short 1990 season to develop even a representative sample of recorded sites. Before carrying out the initial phases of this project it was difficult to predict probable numbers of gunmakers or gun shop sites, but the complexity that was discovered meant that relatively little time could be devoted to the field recording of individual sites.

In an effort to make maximum use of this field survey time, most of the site recording activity that was conducted was based on visiting sites known to informants. Focusing on definite or probable site locations known to the gun collector-researchers willing to help with this project was felt to be a quicker means of finding sites than the alternate process of working from the documents to field locations.

A known site location, however, does not preclude the need for site documentation, and some amount of such research was either carried out before the field visit or after the fact. For survey projects, this almost always has to be a less than complete effort. To completely research (through county, state, and federal records) the entire history of use of a single site, as well as the related history of the persons associated, often requires an enormous amount of time, and this generally has to be left to some later date, when a particular site might become the subject of a more intense historical or archaeological investigation.

For those sites that were recorded during the 1990 Tennessee gunmaker site survey, a procedure was followed that has become more or less standard for such projects (Smith et al. 1990: 18-19). This included locating the site on a quadrangle map, creating written descriptions of its location and physical characteristics, and (if appropriate) preserving an additional record of its physical appearance with a sketch map and/or photographs. This field information was then used with the historical documentation to complete an archaeological site form, which was entered into the state-wide site file maintained by the Division of Archaeology. At this time, each site was assigned one of the permanent site numbers that are used with this system.

## SAMPLE SITES RECORDED

With archaeological site survey projects, different historic period site themes present specific challenges connected with finding and interpreting the remains of the activity being investigated. For some of the industrial themes that have been examined in Tennessee - the survey of a regional iron industry is a good example (Smith et al. 1988) - the complexity of the former operations creates major problems for defining meaningful boundaries for what now remain as archaeological sites, some of which may be extremely large. For the survey of Tennessee gunmaker sites a major problem proved to be simply finding each individual site, that is, the exact

location where a gun shop once stood. Once this was accomplished, the remaining questions concerning site definition were relatively simple. A major problem associated with determining the location of gun shop sites is that the activities carried out when the shops were in use were restricted to small areas, in many cases little larger than the spaces of ground covered by the shops. Gun shops in long use may have left behind an intense "midden" of debris composed of ash, charcoal, cinders, scraps of iron, and broken tools, but finding such a spot in the middle of a non-cultivated pasture, in the yard of a modern house, or in the midst of a now heavily wooded area (all common site situations) is usually very difficult.

These restrictions, a short period of time for field work and a difficult type of site to find, resulted in a total of only 14 gunmaker shop sites recorded during the 1990 project. Even for these, the level of confidence concerning correct location varies. For each recorded example a reasonable level of confidence concerning where the former shop was situated was developed, but there is still a considerable amount of variation in how definite each of the proposed locations may be. Some are based more on informant information than visible physical remains, while some of the physical remains were much more specific than others. In spite of such problems, these fourteen sites presently form the only existing data base for this site type, and a brief summary of each will be presented.

#### Blount County

##### Archaeological Site # 40BT59 (Keller Home and Gun Shop)

Samuel Keller, who during the early 1850s may have served as an apprentice to another Blount County gunsmith, John Hood (Appendix A), eventually moved to a new location in Blount County and for 1860 is listed on the census as an independent gunsmith. The log house that Keller lived in until the late 1880s is still standing and forms the central feature of this farmstead site. It is assumed that some remains of Keller's gun shop exist within the boundaries defined for this site, and that such remains probably exist close to the main house. Archaeological testing would be needed to confirm this.

##### Archaeological Site # 40BT60 (Bogle Farmstead)

Indirect evidence suggests that one or more members of the Bogel family may have been involved with gunmaking in Blount County before 1800, but the first hard evidence is for Joseph Bogel in 1820 (Table 1). Bogel seems to have remained in the same location from around this date until he died in 1853, at which time his will specified that his "smith shop and all the tools of different kinds that is in it" were to go to his son Hiram Bogel. Nothing has been found to suggest that Hiram was a gunsmith, but it appears that the Bogel shop may have been used by Isaac Murphy (Appendix A), perhaps initially as an apprentice to Joseph Bogel, from the 1840s to 1865. The former location of Joseph Bogel's house, which was replaced by one constructed in 1875, was determined during the survey. It seems certain that some archaeological remains of the Bogel gun shop must exist on the farmstead site, but archaeological testing would be required to confirm this.

## Franklin County

### Archaeological Site # 40FR183 (Bean Gun Shop)

Jesse Bean, one of several of William Bean, Sr.'s gunmaker sons, probably worked in upper East Tennessee in the late 1700s, but relocated to Franklin County in the early 1800s (he later worked as a gunmaker in Alabama). While in Franklin County he seems to have worked with his brothers John and William Bean, Jr. The 40FR183 site is a location where local history maintains that Jesse Bean, the "first permanent settler" of Franklin County, established "a forge and gun shop." The validity of this contention needs to be evaluated by archaeological testing.

## Hardin County

### Archaeological Site # 40HR125 (Allen Gun shop)

Little is know about John Allen except that he is listed as a Hardin County gunsmith on the 1850 census and apparently operated a shop in the town of Savannah. The site location for this shop is based on informant information. Confirmation of remains might require a relatively complex "urban archaeology" type project.

## Lincoln County

### Archaeological Site # 40LN160 (Bearden Gun Shop - 1)

Alfred Bearden moved to this site location in the 1830s and seems to have made guns here until the 1860s, possibly continuing work as a gunsmith until the 1880s. A reasonably exact location for his shop site was established during the survey. The operation was documented by federal census takers in 1850 (Table 3). Alfred and his sons Lucious J. C. Bearden and Napoleon M. Bearden worked together at this site during the 1850s. Lucious is listed as a gunsmith living with his father on the 1850 census, but he had moved to another location by 1860. This same year his 23 year old younger brother was first identified as a gunsmith, still living in their father's household.

### Archaeological Site # 40LN161 (Bearden Gun Shop - 2)

The same year that Napoleon Monroe Bearden was listed on the census as a gunsmith living in his father's household, he was also listed in the Tennessee State Gazetteer (Mitchell 1860: 429) as a gunsmith working at "Robinson's Store," a small community a few miles from his father's home. Napoleon soon joined the Confederate Army and was killed at the Battle of Stones River (December 1862 or January 1863). An approximate location for his 1860 Robinson's Store shop was obtained from an informant, but it may be difficult to find any archaeological remains relating to gunmaking. N. M. Bearden was only about 25 when he died, and he could not have operated his "town" shop for very many years.

## Sullivan County

### Archaeological Site # 40SL65 (Gross Gun Shop)

This is one of at least two locations in Sullivan County where gunshops were operated by members of the Gross family. This location was recorded based on informant information and needs to be archaeologically tested for confirmation (the second shop site was not found). It is not entirely clear which of the family members worked at the 40SL65 site, but at one time or another, all of those listed in Appendix A may have. The site is on land that was granted to Jacob Gross in 1792. This first Jacob Gross came from Germany, and apparently had considerable influence on how early gunmaking was practiced in upper East Tennessee. His sons, Jacob (b. 1797) and Jonathan (b. 1812), and their sons Alfred (b. 1823) and Jacob B. (b. 1832) continued the production of large numbers of guns, at this or other Sullivan County locations, through the Civil War period and perhaps later.

## Unicoi County

### Archaeological Site # 40UC8 (Bean Gun Shop)

In the late 1850s, Charles Bean, Jr., a great grandson of William Bean, Sr., established a gun shop in that portion of Washington County that became part of Unicoi County in 1875. Like many of the mountain gunmakers he seems to have utilized water power for some of his early gunmaking activities. He is listed as a gunsmith on the 1860 census, and apparently was working at that time with his brother-in-law, James Brown (Appendix A). During the Civil War, Bean served with the Confederate Army, and after being captured and paroled, he returned to his former home. During the post-war period, he seems to have worked for a few years with a William Brockus (whose name is known from some signed guns). It is not certain how long Bean continued to make rifles, but he and/or Brockus probably produced a few as late as the 1880s. He is said to have continued the "gunsmithing trade" until the early 1900s (he died in 1919). Bean's gun shop (or perhaps more accurately his last shop) was still standing until the 1970s, and it was described by an informant as a rectangular log building that was about 20 feet long. The foundation of this shop is one feature within the 40UC8 archaeological site, a large multicomponent site initially recorded in the early 1980s.

### Archaeological Site # 40UC34 (Harris Gun Shop)

Local history remembers Jason Harris as a gunmaker, blacksmith, locksmith, silversmith, and fiddlemaker. It is also believed that he died in 1863 in a Confederate prison in North Carolina after being arrested for attempting to help a sick friend escape from the same prison. Harris is listed as a blacksmith on the 1850 census for Washington County (the portion that became part of Unicoi County in 1875), but on the 1860 census he is identified as a gunsmith. At least two guns made by him are still in existence. There is no record of Jason Harris owning any land, and this has made it difficult to establish an exact location where he worked as a gunmaker. The original location for site 40UC34 was based on one

interpretation of some informant information. Due to a potential threat to this location a brief archaeological test excavation was conducted, and no evidence for the supposed shop was found. Following the collection of additional historical and informant information the location for site 40UC34 was changed, but this new location also needs to be archaeologically tested for confirmation.

#### Archaeological Site # 40UC35 (Lawing Gun Shop)

Ambrose Lawing moved from North Carolina to what would eventually become Unicoi County before 1850, but there is no direct evidence for him making guns until later in life (he and his father are identified as wheelwrights on the 1850 census). He may have become a blacksmith and gunsmith after joining the Union Army in 1864. He is first listed as a gunsmith on the 1870 census but died soon afterward, in 1872. There is a surviving photograph of Lawing (Irwin 1980: 21) that shows him standing in his log, dirt-floored shop. Visible in the photograph are three of his rifles, a bench vice holding a gun stock, and a portion of the bellows for his forge. An approximate location for the site of this shop was determined during the survey.

#### Archaeological Site # 40UC36 (Beals Gun Shop)

Like several of his contemporaries in that portion of Washington County that became part of Unicoi County, William Beals is remembered locally as a gunmaker who also practiced some other trades, including carpentry and cabinet making. He is listed on census reports as a gunsmith in 1850 and 1870 and as a farmer in 1860 (he died around 1898). In 1860, he was probably working with his younger brother Joseph Beals, who is listed in that census year as a gunsmith. William is said to have made a "typical mountain rifle" with iron mountings. As seems to have been customary for gunmakers in Unicoi County, Beals shop was located near a creek, presumably to utilize water power. According to local tradition, however, this resulted in the shop site being destroyed by a flood. This would need to be confirmed by archaeological testing before it is presumed that all remains were lost. A February 12, 1855, letter to "Wm N. Bales [Beals]," contained in the Philip P. C. Nelson Papers (Manuscript Collections, Tennessee State Library and Archives, Nashville) provides an informative look at one customer's order:

I want one more Gun Barel for my self 4 feet Long to weigh 7 lb as near as possible to Run 250 balls to the pound I want you [to] cross grind her all Round and Polish the uper Squares do your best on her for me put yours & my name on her

George Roberts wants one of the Same Size only to weigh 6 lb he wants his name on his Barel Yours respectfully

J. A. Sarth

#### Archaeological Site # 40UC37 (McInturf Gun Shop)

In the late 1790s, Israel McInturf, Sr. moved to the southern portion of Carter County, the area that became part of Unicoi County in 1875, and was probably soon operating a gun shop (he died in 1851). In 1820, he owned what appears to have been the largest operation in the state for

making gun barrels (Table 1). At least six members of the McInturf family were gunmakers (Appendix A), and it is believed that several of them may have started work at what is now identified as the 40UC37 site. Distinct remains for what is assumed to be Israel McInturf, Sr.'s gun shop were found adjacent to the creek that probably supplied his water power in 1820 (Table 1, Note 6).

### Washington County

#### Archaeological Site # 40WG62 (Bean Gun Shop)

Charles Bean, Sr., the son of Russell Bean, seems to have made guns during most of his life (he died sometime in the 1850s), but his ability was impaired to some extent by vision problems related to a wound received during the Battle of Horseshoe Bend (War of 1812). Consequently, while he was listed as a gunsmith on the 1850 census for Washington County, an ad in the Jonesboro Railroad Journal (September 21, 1850) shows that he was also attempting to support himself by selling "the most fashionable ... transparent window blinds ... representing a great variety of American and Foreign scenery," as well as "fire-screens and other ornamental work." Bean's business at this time was located on a lot in the town of Jonesboro (now site 40WG62). In a humorous directive to prospective customers, his 1850 ad stated that his "office" could be found opposite a local church:

... one door above Goat Avenue, where you will see a small locust tree in the yard, one Jamestown weed and two bunches of dog-fennel, besides two cows and forty hogs always around the gate, and a yellow bob-tailed dog, but walk in, for he won't bite.

### Williamson County

#### Archaeological Site # 40WM125 (Forge Seat and Crockett Gun shop)

An inscription on the tombstone of Samuel Crockett's son Andrew Crockett indicates that the family moved from Virginia to Williamson County in 1799, and it is believed that Samuel immediately began work as a blacksmith and gunmaker. Perhaps by 1808, Samuel had built a brick house, known as "Forge Seat," which is still standing and is listed on the National Register of Historic Places. Also standing behind the main house is what is believed to be the forge building from which the site name derives. This is a small two-room log construction on partial stone foundations, which has been expanded with frame additions. The base of a stone forge remains in one corner of the log building. Tradition maintains that Samuel and his son Andrew were working together by the time of the War of 1812, and that they made rifles and bullets used by some of the American troops. Samuel Crockett's two-man gun and barrel making operation was documented in 1820 (Table 2). He died in 1827, and his will directed that various items that were not being left to his heirs were to be sold. These included his "blacksmith tools," "all my iron on hand old and new," "two guns and pouch," and materials related to the operation of his gunpowder mill, which is also documented on the 1820 manufacturers census. A more detailed recording and archaeological testing of the "forge" building at Forge

Seat would be desirable as it is the only known example of a standing shop probably used by an early Tennessee gunmaker.

## ARCHAEOLOGICAL CONSIDERATIONS

No Tennessee gunmaker or gunsmith shop site has ever been archaeologically excavated and reported. For the next most closely related site type, blacksmith shops, only one excavated example is known. Appropriately enough, this is what was probably the oldest surviving Tennessee example, the blacksmith shop at Fort Loudoun, constructed in 1756 (Kuttruff, n.d.). Blacksmith shops, which often overlapped functionally with gunsmith shops, have begun to receive some archaeological attention in other places. Examples range from the excavation of frontier-period blacksmith sites (Light and Unglik 1984; DeVore 1990) to the investigation of much more recent sites where the shop buildings were still standing (Rotenstein 1987). The articles by DeVore (1990) and Rotenstein (1987) are especially valuable for their lists of references cited, which would be useful for investigators planning work on either a blacksmith or gun shop site.

So far as could be determined within the time restraints of this project, there are no reported archaeological excavations where the investigations were specifically concerned with an American gunmaker's shop site. The most closely related examples found are four reports concerning shop sites or activity areas related to some extent to gunsmithing. The earliest example reported is the armorer's workshop site at seventeenth-century French Fort Pentagoet in Maine. Primarily from 1635 to 1654, this building housed the post's armorer, who repaired guns but also carried out a wide variety of other metal working activities. Among the gunsmithing tools illustrated are numerous types of files (Faulkner 1986). Several seasons of archaeological work at eighteenth-century Fort Michilimackinac in Michigan produced a variety of evidence for gun use and repair. The gunsmithing information for this fort, which was in reality a fortified French fur-trading village, is summarized in studies by Hamilton (1976 and 1980: 118-119). A similar period is represented by the excavation of the site of a shop that included (but was not limited to) gunmaking at Colonial Williamsburg. The James Getty and sons 1730s to 1760s Williamsburg workshop site (the Gettys were brass founders, gunsmiths, and silversmiths) was excavated and reported by Ivor Noel Hume (1970). For the next century there is some information that derives from the archaeological discovery of a cache of nineteenth-century gunsmith supplies at a mission site in the state of Washington. The original report concerning this 1847 cache of gunsmith tools and parts, excavated at the Whitman Mission site near Walla Walla, Washington, is a relatively rare publication, but a summary of the discovery is presented in Russell (1957: 97).

It becomes obvious then, that there is a great need for information concerning the archaeological record pertaining to gunsmithing and gunmaking. Numerous questions remain that relate to the specifics of gun maintenance and repair carried out by gunsmiths working during different periods of time. Even more striking, gunmaking, as a specific topic, appears

to have not yet even been addressed in terms of insights that the archaeological record can provide. The excavation of any gunmaker's shop site would probably be an important goal in most states, and it is certain that in Tennessee such remains represent a significant missing portion of the historic site archaeological record that has so far been investigated.

## CONCLUSIONS

An investigation of archaeological sites pertaining to the theme historic period gunmaking in Tennessee has proven to be a complex state-wide research problem that could only be approached in a preliminary manner during the time available for the 1990 survey. The document presented in this report as Appendix A provides a summary of the information that is now available for understanding the number of potential site occurrences. It is assumed that there are between 300 and 400 shop sites where some amount of historic period gunmaking was conducted, and it is further estimated that the true number of such sites is probably closest to 400. These archaeological sites are distributed over the entire state, with examples in almost every county, but with greater numbers, particularly greater numbers of early sites, in East and Middle Tennessee.

Historically, gunmaking in Tennessee derived from antecedents that evolved in Pennsylvania during the early to mid-eighteenth century, but the transplanting of this technology of flintlock rifle production to the Tennessee frontier of the late 1700s seems to have resulted in a simplification of many of the elements. While a basically simpler style of long rifle continued to be regarded as "traditional" for the mountainous areas of East Tennessee, such simplicity was not universal throughout the state. Gunmakers in the more urban areas were quick to adopt such technological advances as the percussion lock, and during the mid-nineteenth-century era of pocket pistol popularity, copies of Deringer-style guns were made in Tennessee with as much skill as anyplace. That the state of Tennessee contains great topographic diversity, and that some "remote" areas continued to produce what were essentially archaic rifles long after they were supplanted elsewhere by the products of a factory technology only increases the degree of historic interest felt by students of this subject. What is clearly missing from any historic overview of Tennessee gunmaking that can presently be developed, however, is an understanding of the details of technology that could be derived from a close examination of the products of individual craftsmen during specific periods of time. This can be done in a very limited way by examining surviving examples of the complete products, guns known to have been made by certain individuals, but a central argument of this report is that it could be done best through an archaeological examination of selected sites.

This raises the issue of which gunmaker sites would be suitable for archaeological investigation. Historical archaeologists have struggled a great deal with questions relating to archaeological site significance, and there are numerous approaches that have been considered (Lees and Noble 1990). One set of arguments (Smith 1990) provided the rationale for conducting a survey of Tennessee gunmaker sites. Part of this rationale is a belief that, more than any other effort, the completion of a thematic survey



makes it possible to address the potential significance of individual sites related to that theme in a relatively non-subjective manner. This is referred to as context significance (the main statement of historic context being provided by the survey's final report). A dilemma created by the present study is that not enough actual site survey was completed to permit a clear understanding of the relevant archaeological site data base. The fourteen sites recorded provide only a hint of the variety and complexity that must surely exist for the remaining 300 plus sites that have not been examined. In order to eventually develop a clear understanding of both the history of Tennessee gunmaking and the remaining cultural resources that were produced as products or by-products of this industry, it is recommended that three areas of continuing research are needed.

The first of these is the development of a better base of recorded sites. Ideally this should be done through one or more additional state-wide or regional survey projects devoted to the gunmaker theme. It can also be done at the level of county surveys (Smith 1990: 38-39), but this restricts the site data base, and the broader understanding that is possible, to only those counties that have been adequately surveyed.

There is simultaneously a pressing need for obtaining archaeological excavation data for individual sites, no single example of which has yet been investigated in this manner. In this age of rapid development, no class of historic period archaeological sites in Tennessee can be considered unendangered. Threats range from the slow, eating-away of site data by persons engaged in the collecting of historic period relics for private gain, to the mass destructions caused by urban expansion. Each passing year sees the loss of increasing numbers of sites, often, as in the case of large private development projects, in a completely arbitrary manner in so far as this relates to the types of sites destroyed. Certain kinds of archaeological excavation data not obtained in the next few years may well not be available at all in future years. In so far as state and federal cultural resource protection activities are concerned, it is suggested that over the short term any site belonging to the historic gunmaker site category should be considered to be probably worthy of archaeological investigation. Once a representative sample of gunmaker sites has actually been excavated and reported, then there would be a basis for considering if additional sites are worthy of preservation or mitigation, first in terms of their state-wide level of significance, then at the level of their importance to understanding the cultural development of individual counties.

The third area of need for better understanding the Tennessee gunmaker theme is published data concerning the surviving products of the craftsmen. Such works have long existed for Pennsylvania (Kauffman 1960) and Tennessee's parent state North Carolina (Bivins 1968), and a recent study has been completed for the adjoining state of Arkansas (Bennett and Worthen 1990: 165-205). This survey report has deliberately avoided any attempt to deal with this area of research, but it is hoped that its completion will provide an additional incentive for those individuals who have so ardently studied the works of Tennessee gunmakers to finally complete some good, photographically illustrated publications devoted to these surviving guns.

The potential for additional, continuing research on the theme Tennessee gunmaking is viewed as an exciting and more-or-less open-ended opportunity. This report is certainly not intended to be the end product of such research, but rather it is hoped that it is a beginning point for various kinds of investigations that remain to be completed at the state, local, and individual site levels. Many forms of research are still needed and should lead to a variety of interesting products, ranging from broad studies of Tennessee-made guns, to specific histories of individuals or firms, to archaeological studies of representative sites.



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APPENDIX A  
TENNESSEE GUNMAKER LIST

<u>NAME</u>	<u>BORN</u>	<u>COUNTY AND WORK PERIOD</u> *	<u>OCCUPATION</u> **
ADAMS, FOSTER	1823 TN	COFFEE 1850	GUNSMITH
AHART, A. R.	1823 TN	DAVIDSON 1850	GUNSMITH
AHART, ABRAM	1783 TN	DAVIDSON 1850	GUNSMITH
AIRHART (EARHART), ADAM	1820 TN	DAVIDSON 1850-1860	GUNSMITH
AIRHART (EARHART), THOMAS	1817 TN	DAVIDSON 1850	GUNSMITH
" " "	" "	WILSON 1860	"
AIRVINE, ELIZAH	1829 TN	CLAIBORNE 1860	GUNSMITH
AIRVINE, FIELDING	1837 TN	CLAIBORNE 1860	GUNSMITH
ALBRIGHT, SIMPSON	1816 TN	CAMPBELL 1850	GUNSMITH
ALLEN, JOHN	1805 NC	HARDIN 1850	GUNSMITH
ANGEL, (?) [STACY &]	? ?	KNOX 1870-1871	
ANGLEN, PHILIP	1803 GA	ROBERTSON 1850	GUNSMITH
ARCHART, R.	1826 TN	DAVIDSON 1860	GUNSMITH
ARY, JACOB	1803 NC	PERRY 1850	GUNSMITH
BANNER, LEWIS	1810 (?) NC (?)	UNICOI 1860	GUNSMITH
BARKER, JOHN G.	? ?	SEQUATCHIE 1860	(*1) GUNSMITH
BEALS, JOSEPH	1835 ?	UNICOI 1860	GUNSMITH
BEALS, WILLIAM	1822 TN	UNICOI 1850-1870	GUNSMITH
BEAN, BAXTER	1790 TN	WASHINGTON 1820s-1840s	
BEAN, CHARLES R., SR.	1795 TN	WASHINGTON 1820s-1850	GUNSMITH
BEAN, CHARLES R., JR.	1835 TN	UNICOI 1860-1880s	GUNSMITH
BEAN, EDMUND	1763 VA	WASHINGTON 1790s (?)	
BEAN, GEORGE	1754 VA	GRAINGER 1790s	
BEAN, JAMES	? ?	WASHINGTON (?) 1810s-1830s	
BEAN, JESSE	1756 (?) VA	FRANKLIN 1810s (?)	
BEAN, JOAB	? ?	SHELBY 1819	
BEAN, JOHN	? ?	FRANKLIN (?) 1815	
BEAN, JOSEPH	1800 (?) TN	UNICOI (?) 1830s (?)	
BEAN, ROBERT	1747 (?) VA	GRAINGER (?) 1790s (?)	
BEAN, ROBERT	1802 TN	WASHINGTON 1820s-1830s (?)	
BEAN, RUSSELL	1769 TN	WASHINGTON 1790s-1820s	
BEAN, WILLIAM, SR.	1721 VA	WASHINGTON 1770s (?)	
BEAN, WILLIAM, JR.	1745 (?) VA	GRAINGER (?) 1790s (?)	
" " "	" "	FRANKLIN 1808	
BEARD, A. M.	1801 NC	SUMNER 1850	GUNSMITH
BEARDEN, ALFRED	1811 SC	LINCOLN 1835-1860	GUNSMITH
BEARDEN, BENJAMIN	1829 TN	BEDFORD 1850	APPRENTICE [G.S.]
BEARDEN, J. A. (W. ?)	1824 SC	BEDFORD 1850	GUNSMITH
BEARDEN, LUCIOUS J. C.	1833 TN	LINCOLN 1850-1860	GUNSMITH
BEARDEN, NAPOLEAN M.	1837 TN	LINCOLN 1860	GUNSMITH
BELL, PHEOSOLAS	1813 KY	MONROE 1850	GUNSMITH
BENSON, P. P.	? ?	WILSON 1860	(*1) GUNSMITH
BEVIN (BIVENS ?), JOSEPH	1799 GA	LAWRENCE 1847-1850	GUNSMITH
BIBLE, J. E.	? ?	GREENE 1870s (?)	
BITTERLICH, FRANZ J.	1829 BOHEMIA	DAVIDSON 1854-1879	GUNSMITH
BLAKE, TOM	? ?	CUMBERLAND 1810s-1820s	
BOGLE, JOSEPH	1778 TN	BLOUNT 1820-1853	
BOSHAM J.	? ?	CANNON 1860	(*1) GUNSMITH
BOSTLEMAN, WILLIAM	1800 PRUSSIA	DAVIDSON 1850-1854	GUNSMITH

BOYLES, JOHN	?	?	LINCOLN	1820	
BRADFORD, THOMAS	1796	TN	PUTNAM	1860	GUNSMITH
BREWER, H. N.	1826	TN	ROBERTSON	1850	GUNSMITH
BRISTOW, JOHN H.	1808	TN	BENTON	1850	GUNSMITH
"	"	"	STEWART	1860	"
BRISTOW, JAMES	?	?	STEWART	1860	(*1) GUNSMITH
BROCKUS, WILLIAM K.	?	?	UNICOI	1870s-1880s	
BROWN, JACOB	?	?	GREEN	1770s	
BROWN, JAMES	1836	?	UNICOI	1860	GUNSMITH
BRYANT, I. W.	?	?	GRUNDY	1860	(*1) GUNSMITH
BUIE, GEORGE W.	1820	TN	DAVIDSON	1850	GUNSMITH
BULL, ELISHA	1790	TN	GRAINGER	1850	GUNSMITH
"	"	"	COFFEE	1860	"
BULL, JOHN	1777	MD	GREENE	1780s-1810s	
BULL, JOHN	1820(?)	TN	GRAINGER(?)	1840s-1850s(?)	
BULL, VINCENT G.	1801	TN	JEFFERSON	1820(?)	
BURLINGTON JAMES	?	?	DAVIDSON	1853-1854	GUNSMITH & REPAIR
BURLINGTON JOHN	1804	MA	DAVIDSON	1853-1861	GUNSMITH
CALISON, W. R.	1820	AL	WEAKLEY	1860	GUNSMITH
CAMERON, GEORGE WASH.	1804	TN	DEKALB	1850-1860	GUNSMITH & JAILOR
CARD, JO	1837	TN	BLEDSE	1860	APPRENTICE GUNSMITH
CARTRELL, A. J.	?	?	HENRY	1860	(*1) GUNSMITH
CARUTHERS, JOS.	?	?	OVERTON	1860	(*1) GUNSMITH
CAWTHON, JAMES L.	1812	TN	CANNON	1850-1860	GUNSMITH
CAWTHON, WILLIAM	1833	TN	CANNON	1860	GUNSMITH
CHAMLEE, WILLIAM	1818	SC	McMINN	1860	GUNSMITH
CHAPMAN, C. (CUPID ?)	?	?	SUMNER	1860s	ARMORER (?)
CLARK, JONAS	1821	TN	BLEDSE	1860	GUNSMITH
CLAWSON, ROBERT E.	1803	VA	JOHNSON	1850	GUNSMITH
CLEMENTS, JOHN	1819	NC	HAMILTON	1860	GUNSMITH
CLEMENTS, JOHN, JR.	1841	TN	HAMILTON	1860	GUNSMITH
CLOYES, B. F.	?	?	OBION	1860	(*1) GUNSMITH
COLE, JAMES A.	1836	TN	SULLIVAN	1860	GUNSMITH
COLLINS, DANIEL	1809	VA	CARROLL	1860	GUNSMITH
COLLINS, J. A.	1805	SC	BENTON	1860	GUNSMITH
COLLINS, ROBERT	1821	TN	WHITE	1850	GUNSMITH
"	"	"	OVERTON	1860	"
COMPTON, BERRYMAN H.	1820	SC	GILES	1850	GUNSMITH
"	"	"	LAWRENCE	1860	"
COPPS, JORDAN	1805	NC	HAWKINS	1850	GUN STOCKER
CRABTREE, SAMUEL	1799	TN	FENTRESS	1850	GUNSMITH
CRAIN, ANDREW	1829	MD	WASHINGTON	1850	GUNSMITH
CROCKETT, ANDREW	1793	VA	WILLIAMSON	1812-1820	
CROCKETT, SAMUEL	1772	VA(?)	WILLIAMSON	1799-1827	GUNSMITH
CRUSON, ANDREW	?	?	CUMBERLAND	1884-1887	
DAVAULT, HENRY	1808	TN	WILSON	1860	GUNSMITH
DAVIDSON, SAMUEL	?	?	FENTRESS	1860	(*1) GUNSMITH
DAVIS, NATHANIEL	?	?	GREENE	1820	
DAVIS, THOMAS	1838	TN	DAVIDSON	1860	GUNSMITH
DAVIS, THOMAS N.	1828	TN	WILLIAMSON	1850-1860	GUNSMITH
DAVISON, WILLIAM	1813	TN	FENTRESS	1850	GUNSMITH
DELONG, ? [& SON]	?	?	HAMILTON	1860s-1870s	
DERICK, ANDREW	1798	TN	ROANE	1850	GUNSMITH
DERICK, WILLIAM	1821	TN	ROANE	1850	GUNSMITH

DERR, DANIEL	1786	PA	GILES	1850	GUNSMITH
DILL, JAMES	?	?	WILSON	1860	(*1) GUNSMITH
DOUGLAS, JACOB	1798	TN	WASHINGTON	1850	GUNSMITH
" "	"	"	SULLIVAN	1860	"
DOUGLAS, JOHN B.	1834	TN	SULLIVAN	1860	GUNSMITH
DOUGLAS, WILLIAM	1828	TN	CAMPBELL	1850	GUNSMITH
DOUGLAS, WILLIAM	1819(?)	NC	COCKE	1860-1870	GUNSMITH
DUGGER, JAMES B.	1821	TN	JOHNSON	1850	GUNSMITH
DUNCAN, ALFRED	1809	TN	SULLIVAN	1830s-1850	GUNSMITH
DUNCAN, GEORGE	?	?	BLOUNT	1820	GUNSMITH
DUNCAN, WILLIAM	1807(?)	TN	LAWRENCE	1847-1850	GUNSMITH
" "	"	"	DECATUR	1860	"
DUNN, JAMES	?	?	STEWART	1860	(*1) GUNSMITH
DYER, BENJAMIN	1811	NC	CARTER	1850	GUNSMITH
DYER, JOEL	?	?	SMITH	1820	BLACKSMITH
EARLY, BENJAMIN	1820	MD	WASHINGTON	1850	GUNSMITH
EASTERLY, JOHN	1786	VA	GRAINGER	1820-1850	GUNSMITH
EASTRIDGE, ISAAC	1820(?)	TN	CLAIBORNE	1850-1860	GUNSMITH
ELSTON, ALLEN	1792	NJ	LINCOLN	1820	GUNSMITH
ESARY, JOHN	?	?	ROANE	1820	
ESSA, ISAAC	1813	TN	OBION	1850	GUNSMITH
ESTES, ALSTON	1844	TN	MAURY	1860	APPRENTICE GUNSMITH
ESTES, H.	1808	VA	MAURY	1850-1860	GUNSMITH
FARRINGTON, JOSHUA	?	?	WILLIAMSON	1820	GUNSMITH & STOCKER
FAIRCHILD, ABIJAH	1815	TN	HANCOCK	1860-1870	GUNSMITH
FINE, ISAAC	1785	TN	COCKE	1850	GUNSMITH
FINE, WILLIAM	1838	TN	SEVIER	1860	GUNSMITH
FINE, WILLIAM R.	?	?	COCKE	1860	(*1) GUNSMITH
FINCHER, ?	?	?	GREENE	pre-1900(?)	
FISKE, HENRY	1810	GERMANY	MONTGOMERY	1860	GUNSMITH
FLEWERS, THOMAS	1830	VA	HAYWOOD	1860	GUNSMITH
FOLAND, V.	?	?	JEFFERSON	1860	(*1) GUNSMITH
FORREST, WILLIAM	?	?	CARROLL	1860	(*1) GUNSMITH
FOZEL, J.	1836	BADEN	SHELBY	1860	GUNSMITH
FRANCISCO, JOHN	1803	TN	MONTGOMERY	1860	GUNSMITH
FRAZER, TROY	?	?	GIBSON	1860	(*1) GUNSMITH
GARDNER, H.	?	?	HAMILTON	pre-1900(?)	
GAY, S. E.	1823	TN	MONROE	1860	GUNSMITH
GIBSON, STEPHEN	?	?	KNOX	1850s(?)	
GIBSON, WILEY	?	?	SEVIER	1930s	
GILLMOND, WILLIAM	?	?	GRAINGER	1860	(*1) GUNSMITH
GLASSICK, FREDERICK G.	?	?	SHELBY	1850s-1860s	GUNSMITH
GLEDEWELL, JOHN	1823	TN	LINCOLN	1860	GUNSMITH
GLOVER, SAMUEL	1831	TN	SULLIVAN	1860-1900	GUNSMITH
GOODMAN, WES	?	?	FENTRESS	pre-1900(?)	
GOODMAN, WILLIAM E.	1831	TN	LEWIS	1860	GUNSMITH
GODWIN, THOMAS	1819	KY	DAVIDSON	1850	(*2)
GORDON, JOHN T.	1820	OH	LINCOLN	1850-1860	GUNSMITH
GREEN, ELISHA	1802	NC	POLK	1860	GUNSMITH
GRIMSLEY, ABRAM	1797	TN	OVERTON	1847-1860	GUNSMITH
GROSS, ALFRED	1823	TN	SULLIVAN	1850-1870s	GUNSMITH
GROSS, JACOB	?	GERMANY	SULLIVAN	1790s(?)	
GROSS, JACOB	1797	TN	SULLIVAN	1850-1860	GUNSMITH
GROSS, JACOB B.	1832	TN	SULLIVAN	1860	GUNSMITH

GROSS, JONATHAN	1812	TN	SULLIVAN	1850	GUNSMITH
HACKER, ISAAC	1797	TN	WASHINGTON	1850	GUNSMITH
HAFMANN, CHAS.	1817	GERMANY	SHELBY	1850	GUNSMITH
HAINES, FOUNTAIN	1794	VA	MACON	1850	GUNSMITH
HALBROOKS, GEORGE	1825	TN	HICKMAN	1850	GUNSMITH
HAMILTON, W. F. R.	1803	TN	SUMNER	1860	GUNSMITH
HARDIN, ENOCH	?	?	HAMILTON	1860 (?)	
HARMAN, JOHN B.	?	?	BLOUNT	1820	GUNSMITH
HARMAN, NATHAN	?	?	BLOUNT	1820	GUNSMITH
HARMON, BENJAMIN	1802	TN	OVERTON	1850-1860	GUNSMITH
HARMON, CHARLES	1809	KY	OVERTON	1844-1850	GUNSMITH
HARMON, JACOB	1770	PA	GREENE	1820	
HARMON, JOHN	1780 (?)	NC (?)	GREENE	1820	
HARMON, JOHN, JR.	?	?	GREENE	1820	
HARMON, MOSES	?	?	GREENE	1820	
HARMON, PETER	1785	VA	GREENE	1820	
HARMON, STEPHEN	?	?	MONROE	1820	
HARRIS, JASON	1815	NC	UNICOI	1860-1862	GUNSMITH
HARRIS, MARK	1812	TN	DICKSON	1850	GUNSMITH
HARRIS, THOMAS	1840	TN	DAVIDSON	1860	GUNSMITH
HARRISON, WILLIAM	1796	TN	McNAIRY	1860	GUNSMITH
HATCHER, RUEBEN	1804	TN	CARTER	1850	GUNSMITH
HAULSONBACK, LOUIS D.	1791	SC	COFFEE	1850	GUNSMITH
HAWKINS, DAVID N.	?	?	LINCOLN	1820	
HEATH, A. J.	1837	TN	SUMNER	1860	GUNSMITH
HEATH, RICHMOND	1806	TN	SUMNER	1860	GUNSMITH
HEATHCOCK, B. M.	1826	NC	KNOX	1860	GUNSMITH
HIDE, JOHN	1815	TN	MONROE	1850	GUNSMITH
HIGHTOWER, ROBERT	?	?	LAWRENCE	1820	BLACKSMITH
HILS(?), W. S.	1830	GA	RUTHERFORD	1860	GUNSMITH
HISE, JAMES	1773	TN	GREENE	1850	GUNSMITH
HOLLAN, BUFORD	1807	TN	SUMNER	1850	GUNSMITH
HOLLAND, JOHN	1822	NC	TIPTON	1850	GUNSMITH
HOLT, R. D.	?	?	BLEDSON	1860s (?)	
HOOD, JOHN	1793		BLOUNT	1850	GUNSMITH
HOOVER, MARTIN S.	1810	NC	CANNON	1850	GUNSMITH
HOOVER, THOMAS	?	?	RUTHERFORD	1860	(*1) GUNSMITH
HORN, JOHN	1798	TN	BLEDSON	1850	GUNSMITH
HOSSE, A. F.	?	?	DAVIDSON	1868-1875	
HOUSELY, STEPHEN	1803 (?)	KY	DAVIDSON	1850-1860	GUNSMITH
HOWARD, HENRY	?	?	HAMILTON	1860-1900s	
HOWARD, ISAAC	1795	TN	VAN BUREN	1850-1860	GUNSMITH
HUNING(?), ANDERSON	1831	TN	SHELBY	1850	APPRENTICE GUNSMITH
INGRAM, ISAAC	?	?	WAYNE	1860	(*1) GUNSMITH
JACKERD, WOODSON	1800	KY	DAVIDSON	1850	GUNSMITH
JACKMAN, W.	1804	KY	DAVIDSON	1860	GUNSMITH
JACKSON, HESEKIAH	1814	SC	LAWRENCE	1850	GUNSMITH
JOHNSON, CALVIN	1822	TN	COFFEE	1860	GUNSMITH
JONES, EDMUND	1802	NC	HICKMAN	1850	GUNSMITH
JONES, W. E.	?	?	SEVIER (?)	1860 (?)	
JUSTIS, J. B.	1830	TN	CANNON	1860	GUNSMITH
KEELING, WILLIAM	1814	NC	ROANE	1860	GUNSMITH
KELLER, SAMUEL	1815	VA	BLOUNT	1850-1860	GUNSMITH
KELLY, THOMAS	1811	TN	HICKMAN	1850	GUNSMITH

KELLOG, GEORGE	?	?	COCKE	pre-1900(?)	
KELSOE, WILLIAM	?	?	BLOUNT	1820	GUNSMITH
KELSOE, WILLIAM (same ?)	?	?	KNOX	1820	
KEMPER, G. W.	?	?	DAVIDSON	1870	GUNMAKER
KILE, JOHN	1815	TN	MONROE	1850	GUNSMITH
KILLINGSWORTH, FREEMAN	1795	NC	MAURY	1850	GUNSMITH
KILLINGSWORTH, HENRY	?	?	MARSHALL	1860	(*1) GUNSMITH
KILLINSWORTH, JACKSON C.	1830	TN	MARSHALL	1860	GUNSMITH
KITCHEN, JOHN B.	1809	TN	LAWRENCE	1850-1860	GUNSMITH
LARUE, J. W. [& CO.]	?	?	MARSHALL	1860	(*1) GUNSMITH
LAURENCE, DAVID T.	1812	TN	MARSHALL	1850	GUNSMITH
LAWING, AMBROSE	1825	NC	UNICOI	1860s-1872	GUNSMITH
LEE, JOSIAH	1824	NC	McNAIRY	1850	GUNSMITH
LEFFLER, ?	?	?	SHELBY	1860s	
LEGLER, JOSEPH	1837	?	DAVIDSON	1867-1931	LOCK & GUNSMITH
LEAP, NICHOLAS	1828	GERMANY	OBION	1850-1860	GUNSMITH
LEWIS, ISAAC	1829	NC	CARTER	1860-1880	GUNSMITH
LEWIS, JAMES L.	1851	NC	CARTER	1870s-1880s	GUNSMITH
LEWIS, LAWSON	1834	TN	CARTER	1860-1870	GUNSMITH
LEWIS, WILLIAM S.	1842	TN	CARTER	1860	APPRENTICE GUNSMITH
LINDE, ALBERT	1813	GERMANY	SHELBY	1850-1869	GUNSMITH
LITFORD, JAMES	1881	VA	DAVIDSON	1860	GUNSMITH
LOUG, GEORGE	?	?	WHITE	1820	BLACKSMITH
LOVELACE, PRYOR L.	1820	NC	HICKMAN	1850-1860	GUNSMITH
LUSTER, RUBEN	?	?	GREENE	1820	
LUSTER, WILLIAM	?	?	GREENE	1820	
LUSTER, ZACHARIAH	?	?	MONROE	1820	
MARABLE, S.(?) N.	1821	TN	RUTHERFORD	1860	GUNSMITH
MARTEN, JAMES	1805	NC	SHELBY	1860	GUNSMITH
MARTIN, AMOS T.	1819	TN	CARROLL	1850	GUNSMITH
MARTIN, ELBERT	?	?	WASHINGTON	1890s-1910s	
MARTIN, HACKER	1895	TN	WASHINGTON	1920s-1940s	
MARTIN, R.	?	?	MAURY	1850	GUNSMITH
MASCHEK, [WOLFF &]	?	?	SHELBY	1860	GUNSMITH
MASON, ELIJAH	1786	NC	FRANKLIN	1860	GUNSMITH
MATHEWS, THOMAS	1800	VA	HUMPHREYS	1850	GUNSMITH
McANALLY, JOHN, SR.	?	?	LAWRENCE	1820	
McANALLY, F. M.	1827	TN	WAYNE	1850	GUNSMITH
McANLY, E. R.	1796	NC	WAYNE	1850	GUNSMITH
McBRIDE, WILLIAM H.	1806	KY	HARDEMAN	1850	GUNSMITH
McCULLOUGH, H.	?	?	KNOX	1820	
McDANIEL, JAMES	1840	TN	BLEDSON	1860	APPRENTICE GUNSMITH
McDONALD, ELIAS M.	1820	TN	LAWRENCE	1850-1860	GUNSMITH
McINTURF, CHRISTOPHER J.	1801	TN	UNICOI	1860	GUNSMITH
"	"	"	GREEN	1870	"
McINTURF, GABRIEL	1805	TN	UNICOI	1850-1852	GUNSMITH
McINTURF, ISRAEL, SR.	1776	VA	UNICOI	1820-1851	
McINTURF, ISRAEL, JR.	?	?	UNICOI	1830s-1845	
McINTURFF, LABAN W.	1833	TN	UNICOI	1860-1866	GUNSMITH
"	"	"	GREEN	1870	"
McINTURFF, URIAH	1808	TN	UNICOI	1860	GUNSMITH
McKEE, JAMES P.	1788	NC	FAYETTE	1850	GUNSMITH
McKEE, STEPHEN	1820(?)	TN	MONROE	1850-1860	GUNSMITH
McMURRY, THOMAS	?	?	BLOUNT	1820	SILVERSMITH

McNEAL, JOHN	?	?	DAVIDSON	1855-1856	GUNMAKER
MELONE, JOSEPH	?	?	GREENE	1820	
MEREDITH, A. B.	1810	ENGLAND	LAWRENCE	1850	GUNMAKER
MERIDA, A. B.	1804	VA	DAVIDSON	1860	(*3)
MILLER, J. G.	1830	KY	SUMNER	1860	GUNSMITH
MISSKELLY, WILLIAM	1800(?)	SC	LAUDERDALE	1860	GUNSMITH
MITCHELL, JOHN	1775	TN	CLAIBORNE	1850	GUNSMITH
MORGAN, JOHN H.	1812	NC	GREENE	1850	GUNSMITH
"	"	"	WASHINGTON	1860	"
MULLOY, DANIEL	1793	NC	ROBERTSON	1850	GUNSMITH
MURPHY, ISAAC A.	1819	TN	BLOUNT	1842-1865	GUNSMITH
NAIL, W. A.	1834	NC	SHELBY	1860	GUNSMITH
NEAL, JESSE	?	?	WARREN	1820	
NEAL (NEEL?), OBADIAH	?	?	GREENE	1820	
NEAL, W. T.	?	?	BEDFORD	1853-1854	
NEAL, JOHN	1831	TN	BEDFORD	1860	GUNSMITH
NEEL, BENJAMIN	?	?	MONROE	1820	
NELSON, JAMES	1832	TN	WASHINGTON	1850	GUNSMITH
NICHOLS, HENRY	1812	NY	HUMPHREYS	1850	GUNSMITH
ODUM, S.	?	?	BLEDSE	1860	(*1) GUNSMITH
OTTINGER, JOHN	?	?	GREENE	1790s	
OWENBY, MATT	?	?	SEVIER	1930s	
OZMENT, DAVID	1797	NC	HAYWOOD	1850	GUNSMITH
PARKAM, THOMAS	1794	NC	HUMPHREYS	1850	GUNSMITH
PARKER, AARON	?	?	GREENE	1820	
PARKER, ARCHABALD	1813	TN	SMITH	1850	GUN & BLACKSMITH
PARKEY, BILL	?	?	HANCOCK	pre-1900(?)	
PARKS, WILLIAM	1805	TN	WASHINGTON	1850	GUNSMITH
PENDERGRASS, A.	?	?	BRADLEY	1860	(*1) GUNSMITH
PENNY, JOHN	?	?	WASHINGTON	1790s	GUNSTOCKER
PHARRIS, ABSALOM	?	?	JACKSON	1860	(*1) GUNSMITH
PIRTLE, JOHN B.	?	?	HARDEMAN	1860	(*1) GUNSMITH
POPE, LEMUEL	1829	TN	HICKMAN	1850	GUNSMITH
POLLEY, JAMES	?	?	SHELBY	1858-1860	GUNSMITH
PORTER, ISAAC L.	1817(?)	TN	LINCOLN	1850-1860	GUNSMITH & FARMER
PORTER, PATRICK	?	?	SHELBY	1851	
POWELL, JAMES C.	1820	TN	TIPTON	1850	GUNSMITH
PRICE, A. W.	?	?	MARION	1860	(*1) GUNSMITH
PRICE, ALFRED	1813	NC	HENRY	1860	GUNSMITH & FARMER
PRICE, JAS. C.	?	?	MARSHALL	1860	(*1) GUNSMITH
PRICE, T. C.	1808	TN	RUTHERFORD	1860	GUNSMITH
PRICE, W.	1827	TN	RUTHERFORD	1860	GUNSMITH
QUILLIAM, TIM	?	?	SEVIER	pre-1900(?)	
RAMER, HENRY	1803	TN	DAVIDSON	1850	GUNSMITH
REED, JNO. M.	1816	TN	SUMNER	1850	GUNSMITH
"	"	"	RUTHERFORD	1860	"
REID, SOLOMAN	1791	?	GREEN	1820	
REES, JAMES	1811	TN	SCOTT	1850	GUNSMITH
RICE, DANIEL,	?	?	CLAIBOURNE	1820	GUNSMITH
RICE, GEORGE	1794	TN	UNION	1820-1860s(?)	
RICE, JAMES	1763	?	UNION	1790s(?)	
RICHARDSON, T. F.	?	?	KNOX	1860	(*1) GUNSMITH
RIGDON, CHARLES H.	1822	OH	SHELBY	1861	
RIGGS, CLISBY	1820	TN	GRAINGER	1850	GUNSMITH

RIGGINS, THOMAS	1821	?	KNOX	1850s-1860s	
RILEY, JOHN A.	1812	NC	MARSHALL	1850-1860	GUNSMITH
RILEY, JOHN	1783	PA	MARSHALL	1850-1860	GUNSMITH
ROACH, THOMAS	1809	KY	DYER	1850	GUNSMITH
ROE, SAMUEL	1830	TN	TIPTON	1860	GUNSMITH
ROGERS, WILLIAM A.	1818	VA	MADISON	1850	GUNSMITH
RONEY, WILLIAM	1805	NC	CARROLL	1860	GUNSMITH
ROYDEN, JESSE	?	?	FENTRESS	1850s(?)	
RUNION, ESQR.	1830	NC	WASHINGTON	1860	GUNSMITH
SAPER, JAMES T.	1815	NC	FAYETTE	1850	GUNSMITH
SCHEIB, HENRY	1804	GERMANY	SHELBY	1850	GUNSMITH
SCHMIDT, J. G.	?	?	SHELBY	1860s-1880	LOCK AND GUNSMITH
SCHNEIDER, WILLIAM	1823	GERMANY	SHELBY	1848-1860s	GUNSMITH
SCHUMANN, FRANK W.	1853	?	SHELBY	1870s-1880	LOCK AND GUNSMITH
SCHUMANN, LOUIS	?	?	SHELBY	1860-1875	GUNSMITH
SEAMORE (SEMORO), DAVID	1810	TN	HICKMAN	1850-1860	GUNSMITH & FARMER
SELVIDGE, JOHN G. L.	1808	TN	BRADLEY	1860	GUNSMITH & FARMER
SEVER, RUDOLF	1827	PRUSSIA	SHELBY	1860	GUNSMITH
SHILLERY(?), PETER	1832	GERMANY	SHELBY	1860	GUNSMITH
SHIP, W.	?	?	LAWRENCE	1860	(*1) GUNSMITH
SHIPP, HEARTWELL	1835	TN	LEWIS	1850	GUNSMITH
SHIPP, ROBERT D.	1833	TN	LEWIS	1850	GUNSMITH
SHIPP, WILLIS	1806	NC	LEWIS	1850	GUNSMITH
SHOEMAKER, PHIL.	1843	GERMANY	MONTGOMERY	1860	GUNSMITH
SHORT, GEORGE W.	1817	TN	ROANE	1860	FARMER-TANNER-GUNSMITH
SIEBER, E. R.	?	?	DAVIDSON	1860s(?)	
SIMPSON, JAMES M.	1809	KY	WHITE	1850	GUNSMITH
SIMMONS, JAMES S.	1793	NC	HARDIN	1850	GUNSMITH
SLAUGHTER, FRANCIS	?	?	MAURY	1820s	
SLAUGHTER, WILLIAM	?	?	MAURY	1820s	
SLOAN, ARCHIBALD	?	?	MONROE	1820s(?)	
SLOAN, JOHN ROSS	?	?	MONROE	pre-1900(?)	
SLOAN, MADISON J. C.	?	?	MONROE	1850s(?)	
SMITH, FRANKLIN	1802	SC	MARSHALL	1850	GUNSMITH
SMITH, JAMES C.	1817	NC	HENDERSON	1850	GUNSMITH
SNELL, LOUIS	1790	NC	MONTGOMERY	1850	GUNSMITH
SNODLEY, GEORGE	1787	NC	CAMPBELL	1820-1850	GUNSMITH
SNODDERLY, HENRY		NC	UNION	1830s(?)	
SNYDER, CHARLES	?	?	DAVIDSON	1791	
SPAIN, DANIEL	1823	GERMANY	SHELBY	1850	GUNSMITH
SPELLMAN, CHAS.	?	?	BLOUNT	1860	(*1) GUNSMITH
SPURLOCK, RUSSEL	1808(?)	TN	WARREN	1850-1860	GUNSMITH
STACY, (?) [& ANGEL]	?	?	KNOX	1870-1871	
STALCUP, ALEX. T.F.M.	1828	TN	DAVIDSON	1850-1860	GUNSMITH
STUART, JOHN, JR.	1790	NC	DICKSON	1860	GUNSMITH
STULLS (STUTS), CHRIST.	1813	NC	HENDERSON	1850-1860	GUNSMITH
SULLIVAN, JESSE H.	1830	TN	DAVIDSON	1850	GUNSMITH
SUMMERS, THOMAS	1785	VA	KNOX	1850	GUNSMITH
SWAIN, JAMES M.	1809	NC	WILSON	1860	GUNSMITH
SWAIN, THOMAS J.	1811	TN	RUTHERFORD	1850	GUNSMITH
SWAIN, WILLIAM M.	1784	NC	WILSON	1850-1860	GUNSMITH
TEAGUE, J. W.	1814	NC	HENDERSON	1850	GUNSMITH
TERRILL, E.	?	?	CUMBERLAND	1882-1886	
THERLIN, H. A.	?	?	SHELBY	1860	GUNSMITH



TILFORD, JAMES	1780	VA	DAVIDSON	1850	GUNSMITH
TODT(?), FRANZ	1825	GERMANY	SHELBY	1850	GUNSMITH
TOLIVER, EDMOND	1825	NC	COFFEE	1860	GUNSMITH
TOLIVER, L. D.	1827	NC	COFFEE	1860	GUNSMITH
TRIBBLE, MICHAEL	1831	TN	BEDFORD	1850	APPRENTICE [G.S.]
TYLER, THOMAS	1827(?)	TN	HENDERSON	1850-1860	GUNSMITH
UNVERZAGT, WILLIAM	?	?	SHELBY	1868-1875	
VANCE, W. R.	1803	TN	JACKSON	1850	GUNSMITH
VAUGHN, CHARLES	1827	TN	DAVIDSON	1850-1860	GUNSMITH
VIRNNA, A. J.	?	?	SHELBY	1880	LOCK & GUNSMITH
WADKINS, JAMEW(JAMES ?)	1808	KY	HUMPHREYS	1850	GUNSMITH
WALKER, BENJAMIN R.	1825	AL	LAWRENCE	1850-1860	GUNSMITH
WALKER, WILLIAM	1838	TN	SEVIER(?)	1860s(?)	
WALLACE, JAMES G.	1807	SC	POLK	1860	GUNSMITH
WARREN, A. [& CO.]	?	?	SHELBY	1860	GUNSMITH
WATSON, JAMES	?	?	RHEA	1860	(*1)GUNSMITH
WEATHERLY, DENNY	1806	NC	WILSON	1850	GUNSMITH
WEATHERLY, LEVI	1816	NC	RUTHERFORD	1850	GUNSMITH
WEAVER, PETER	1806	TN	FRANKLIN	1850	GUNSMITH
WEBBER, J. H.	?	?	SHELBY	1869-1875	
WEISGERBER, A.	?	?	SHELBY	1853-1860	MANUFACTURER OF GUNS
WEST, HENRY	1825(?)	TN	WASHINGTON	1860	GUNSMITH
WELLENDING(?), SAM	1839	GERMANY	MONTGOMERY	1860	GUNSMITH
WELLENDING(?), THOMAS	1836	GERMANY	MONTGOMERY	1860	GUNSMITH
WHITLOCK, GEORGE H.	1814	TN	WASHINGTON	1850	GUNSMITH
WHITLOCK(WHEELOCK), JOHN	1825	TN	WASHINGTON	1850-1860	GUNSMITH
WILLHELM, G.	1813	MD	DAVIDSON	1860	(*4)
WILLIAMS, CARR B.	1823	TN	ROBERTSON	1850	GUNSMITH
WILLIAMS, JAMES	1825	TN	BEDFORD	1850	GUNSMITH
WILLIAMS, NICHOLAS	1817	TN	ROBERTSON	1850	GUNSMITH
WILLIAMS, O. P.	?	?	DAVIDSON	1871-1876	
WILLIAMS, WILLIAM	1828	TN	ROANE	1850	GUNSMITH
WILSON, JOHN M.	1817	VA	MADISON	1850	GUNSMITH
WOLFF, E.	?	?	SHELBY	1855-1859	GUNSMITH
WOLFF, ROBERT	1838	GERMANY	SHELBY	1860	GUNSMITH
WOODSON, A. W.	1795	KY	ROBERTSON	1860	GUNSMITH
YEARWOOD, ?	?	?	GREENE	1870s(?)	
YOUNGER, JOHN	?	?	CARROLL	1860	(*1)GUNSMITH

\* WORK LOCATION IN TERMS OF ITS MODERN COUNTY DESIGNATION IF THIS HAS BEEN DETERMINED (NOT ALWAYS THE SAME AS THE COUNTY IN WHICH THE INDIVIDUAL WAS LISTED IN NINETEENTH-CENTURY CENSUS OR OTHER RECORDS) AND KNOWN OR APPROXIMATE PERIOD DURING WHICH THIS INDIVIDUAL WORKED IN THIS COUNTY.

\*\* INDIVIDUAL'S OCCUPATION AS RECORDED IN CENSUS OR OTHER CONTEMPORARY DOCUMENTS. ONLY A FEW OF THE PERSONS INCLUDED IN THIS LIST ARE REFERRED TO IN CONTEMPORARY DOCUMENTS AS "GUNMAKERS," BUT FOR ALL OF THEM THERE IS SUPPORTING DOCUMENTATION OR CIRCUMSTANTIAL EVIDENCE INDICATING THAT THEY MADE GUNS (AS OPPOSED TO THE REPAIR OF GUNS). ALL INDIVIDUALS LISTED AS "GUNSMITHS" ON THE 1850 AND 1860 GENERAL POPULATION CENSUS SCHEDULES ARE ASSUMED TO HAVE BOTH MADE AND REPAIRED GUNS.

NOTES:

\*1 LISTED AS A "GUNSMITH" IN THE 1860 TENNESSEE STATE GAZETTEER AND BUSINESS DIRECTORY, NO OTHER PERSONAL DATA AVAILABLE AT THIS TIME

\*2 LISTED ON 1850 CENSUS AS A "GUNSMITH" INCARCERATED IN THE STATE PENITENTIARY BECAUSE OF A "SHOOTING"

\*3 LISTED ON 1860 CENSUS AS A "GUNSMITH" INCARCERATED IN THE STATE PENITENTIARY BECAUSE OF "COUNTERFEITING"

\*4 LISTED ON 1860 CENSUS AS A "GUNSMITH" INCARCERATED IN THE STATE PENITENTIARY BECAUSE OF AN "ASSAULT"

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ADDITIONAL GUNMAKERS WHO PROBABLE WORKED IN TENNESSEE  
(SPECIFIC LOCATIONS UNKNOWN)

KINCAID, J.	1840(?)
LEDBETTER, W.	PRE-1870(?)
SHELL, SAMUEL	1780s(?)
WOLFE, MEREDITH	1840s(?)

PRE-1870 FIRM NAMES FOR TENNESSEE GUN MANUFACTURERS  
AND DEALERS IN GUNS \*

BEAUMONT & BARNES	1859	MONTGOMERY COUNTY
BITTERLICH AND LEGLER	1867-1879	DAVIDSON COUNTY
BLUFF CITY ARMORY (A. WEISGERBER)	1855-1860	SHELBY COUNTY
W. H. CALHOUN	1850s-1860s	DAVIDSON COUNTY
F. H. CLARK & CO.	1850s-1860s	SHELBY COUNTY
DELONG AND SON	1860s-1870s	HAMILTON COUNTY
FALL & CUNNINGHAM	1853-1861	DAVIDSON COUNTY
FALL & TURNLEY	1859	MONTGOMERY COUNTY
HENRY FOLSOM & CO.	1866	SHELBY COUNTY
F. GLASSICK & CO.	1855 & 1866-1871	SHELBY COUNTY
HIGHAM AND MACKENZIE	1865	DAVIDSON COUNTY
HILLMAN BROS.	1860s	SHELBY COUNTY
HOLYOAKE, LOWNES & CO.	1851-1853	SHELBY COUNTY
KIRKMAN AND ELLIS	1853-1857	DAVIDSON COUNTY
J. W. LARUE & CO.	1860	MARSHALL COUNTY
A. LINDE & CO.	1869	SHELBY COUNTY
LONSDALL & WEISGERBER	1853	SHELBY COUNTY
LOWNES, ORGILL, & CO.	1855	SHELBY COUNTY
LULLMAN & VIENNA	1860s-1870s	SHELBY COUNTY
MACEY & HAMILTON	1860	DAVIDSON COUNTY
KNOXVILLE ARSENAL	1861-1863	KNOX COUNTY
A. L. MAXWELL, JR. & CO.	1850s-1863	KNOX COUNTY
McCALL & CO.	1860	DAVIDSON COUNTY
J. E. MERRIMAN & CO.	1850s	SHELBY COUNTY
NASHVILLE ARMORY & ARSENAL	1861-1862	DAVIDSON COUNTY
NASHVILLE STATE ARMORY	1861-1862	DAVIDSON COUNTY
ORGILL BROS. & CO.	1860	SHELBY COUNTY
PULASKI GUN FACTORY	1861-1862	GILES COUNTY
W. A. REED	1860	RUTHERFORD COUNTY
RICE & SNODERLY	1820	CAMPBELL COUNTY
SCHNEIDER & CO.	1850-1855	SHELBY COUNTY
SCHNEIDER AND GLASSICK	1855-1862	SHELBY COUNTY
STACEY & ANGEL	1870-1871	KNOX COUNTY
SUMNER ARSENAL	1861-1862	SUMNER COUNTY
SAMUEL VANLEER & CO.	1860	DAVIDSON COUNTY
A. L. (or A. J.) WARREN & CO.	1860	SHELBY COUNTY
WEISGERBER & CARROLL	1856	SHELBY COUNTY
A. WEISGERBER & CO.	1850s(?)	SHELBY COUNTY
A. J. WHITE & CO.	1860	SHELBY COUNTY
WOLFF AND MASCHECK	1860	SHELBY COUNTY

\* MANUFACTURERS NAMES CROSS-REFERENCE TO GUNMAKER LIST.