Utilization of Iron at Fort Mitchell 1RU102:
A Functional Analysis

by

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Abstract

From 1813 until 1840, the Fort Mitchell site, 1RU102, was a significant character in the history of the United States. It served as a fortification during both Creeks wars and as a focal point of trade between the United States government and Native Americans in the surrounding area between those wars. Despite the significance of this site, little is known about the interior of the forts and how the people who lived and worked in the forts *made do* with limited resources on the American Frontier. Iron in the 19th century was not as readily available as it is today. In fact, it could be said that it was actually scarce. This study looks at how the people who lived and worked in and around the Fort Mitchell site used iron.

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CHAPTER 1: INTRODUCTION

Fort Mitchell Overview

In 1803, the border between the American frontier and the United States was delineated by the Chattahoochee River. The United States Government wanted to expand its territory, and it acquired interests in Mobile and New Orleans. In order to better protect these interests, the government improved what was originally a post route to better allow military access to the newly acquired land. The result of this and other encroachments on Indian land resulted in the Creek War of 1813. Fort Mitchell was built by the Georgia Militia on the west bank of the Chattahoochee River to serve as a staging point for assaults on Creek settlements. After the war, Fort Mitchell served as the location of the Indian factory, which was a trading house through which Native Americans acquired trade goods at cost. After the termination of the factory system in 1822, a second fort was built on the site by the United States Army for use during the Creek war of 1836. After the end of that war, the second fort served as a staging point for Indian removal, and the site was abandoned in 1840 (Cottier 2004).

Peter A. Brannon visited the Fort Mitchell site "during the early 1900s" (Cottier 2004:24). While there, he took photographs of the site including the then extant ruins of one of the Indian agencies (Cottier 2004). Dr. John Cottier visited the site during the late 1950s, and made some initial observations (Cottier 2004:24). David Chase and Frank Schnell visited the site in 1957; they conducted the first archaeological excavations during this visit. Soldiers from Fort Benning found the site in the early 1960s, and they

searched for and recovered military artifacts using metal detectors (Cottier 2004). Individuals took rocks and bricks from the site in the 1950s and 1960s (Cottier 2004:24). David Chase later excavated in earnest in 1971; he successfully identified both of the forts at this time. Dr. John Cottier returned to the site from 2000 to 2004 and fully excavated the majority of what remained of the site (Cottier 2004; Stickler 2004).

Iron at Fort Mitchell

Iron has been an important factor in human history since its earliest discovery. In America, iron was used in prehistoric times mainly as a pigment and to a lesser extent, material for the manufacture of blades (Gordon 1996). In the 17th century, Europeans came to the continent in search of iron sources. Europeans had already discovered its usefulness for a variety of things such as hardware, tools, and weapons (Gordon 1996; Mulholland 1981). Iron in the 19th century was still not as readily available as it is today. In fact, it could be said that it was scarce. Iron was not cheap, and as money was often a scarcity at Fort Mitchell, so was iron (Chase 1974). This study investigates how people who lived and worked in and around the Fort Mitchell site used iron. My research will attempt to answer four questions: (1) can Stanley South's Frontier Pattern be discerned by an examination of the iron artifacts alone, (2) does the artifact percentage distributions from all three major occupations display characteristics of Stanley South's Frontier Pattern, (3) was there any physical evidence to suggest the presence of a blacksmith at the site, and (4) was there any physical evidence of a blacksmith shop located within the fort walls? I expect that Stanley South's Frontier Pattern will be discernible upon an examination of the iron artifacts alone, because I believe that the artifacts recovered from the area within the fort walls will be mostly primary refuse that consists mostly of

architecture related artifacts. I expect that the Frontier Pattern will be evident in the artifact percentage distributions from all of the three major occupation periods. I expect to find evidence of a blacksmith's presence at the site, but I do not expect to find evidence of a blacksmith shop within the fort walls. I believe that the potential fire hazard posed on the structures within the forts along with the additional danger of a substantial fire in near proximity to a powder magazine would preclude the construction of a blacksmith shop within the confines of the forts.

Overview of the Chapters

Social change characterized much of the 19th century in America. Change occurred for United States citizens, Native Americans, and Europeans of many nationalities. Imperialism was the most influential policy in American history during the 19th century. The citizens of the United States were eager to claim land for their own and few were concerned with the fact that said lands were already inhabited. The first Fort Mitchell was originally constructed as a direct result of conflict between the native peoples that inhabited the area and the citizens of the United States. The second fort was constructed to aid in the final removal of the natives that lost their bid to retain their land.

In chapter two, I discuss historical events and entities that represent the struggle between the United States and the Native Americans that lived in the region. This chapter focuses on: the construction and evolution of the Federal Road, the War of 1812, the Creek War of 1813-1814, the Creek War of 1836, and finally, southern Indian removal. In chapter three, I discuss what unfolded at the Fort Mitchell site. I discuss the three main periods of occupation at the site: the first fort (1813-1814), the Indian factory (1817-1825), and the second fort (1825-1840) (Cottier 2004). I also discuss the factory system;

Panton, Leslie, and Company; iron in early Alabama and Georgia; and finally, forts in 19th century America.

In chapter four, I describe the geographic location of the site, and I describe the characteristics of the site itself. In chapter five, I discuss the methodology used in both the field excavations and the laboratory procedures used to record and analyze the artifacts recovered from the site. I discuss the methods I used in my analysis of the data as well as the limitations of this study. In chapter six, I discuss the iron artifacts recovered from the features identified during the excavations. I discuss the temporal indicators used to associate these features with the occupation periods of the site; I also discuss the problematic nature of these indicators. This chapter is divided into ten sections: (1) unused feature numbers, (2) temporal placement, (3) features associated with the first fort, (4) features associated with the Indian factory, (5) features associated with the second fort, (6) features associated with both the first and the second fort, (7) features with an undetermined temporal association, (8) features associated with neither the forts nor the Indian factory, (9) features associated with the Indian factory and the second fort, and (10) modern features. In chapter seven, I describe the data used in this study. I examine the data obtained from the iron artifacts recovered from both the features and the general excavations. I discuss the data in terms of Stanley South's functional artifact groups. The eight groups represented in this study are: (1) the Kitchen group, (2) the Architecture group, (3) the Furniture group, (4) the Arms group, (5) the Clothing group, (6) the Personal group, (7) the Activities group, and (8) the Miscellaneous group. In chapter eight, I present the reader with a summary analysis of the data that represent all the iron artifacts recovered from Fort Mitchell. I present frequency distributions and

percentage distributions of the artifacts on the group, class, and occupational levels. In chapter nine, discuss my conclusions with regards to the research questions upon which this study focuses.

CHAPTER 2: REGIONAL HISTORY

The Federal Road

As early as the 1700's, Europeans from the east were using Native American trails to navigate the Southeastern United States. Most of these trails connected "major Creek villages" to one another and ultimately ran their way to "the Coosa, Tallapoosa, and Alabama" rivers (Hitchcock 1985:41). The path that passed through central Alabama was known as both "The Great Trading Path" and "The Southern Trail" prior to 1805 (Hitchcock 1985:41). In 1805, it became known as "a horse path" and subsequently "Three Notch Road"; it was ultimately named "the Federal Road" (Hitchcock 1985:41).

The United States purchased the Louisiana Territory from France in 1803, and President Jefferson immediately expressed a need for a direct and reliable communication link between New Orleans and the nation's capital (Southerland and Brown 1989; Cremer 2004). At this time, the frontier line was the Chattahoochee river, and the Creek Indians controlled much of the land that separated New Orleans and Mobile "from the rest of the United States" (Cremer 2004:12). There was already a postal trail that made use of the Natchez Trace, but the United States government opted to build a more direct passage through what would later constitute the state of Alabama (Cremer 2004).

In "1805,… the Federal government" obtained permission from the Creek Indians to open "a "horse path" from the Oakmulgee River in Georgia to the Mobile River in Alabama, directly through the heart of the Creek nation" (see Figure 1) (Chase 1936:47). The treaty also provided for the building of bridges, ferries, boarding houses, and other

accommodations along the path, but as evidenced by accounts from travelers, no significant improvements were made for years to come (Chase 1936). The United States government largely ignored the conditions of the path until 1809 when it was faced with the possibility of fighting another war with Great Britain (Southerland and Brown 1989; Cremer 2004). "In 1811 additional permission was secured to widen the path" to facilitate timely communication as well as troop and supply movement to Mobile and New Orleans in the event of war (Hitchcock 1985:42). This is the point where the postal path became the Federal Road (Southerland and Brown 1989).

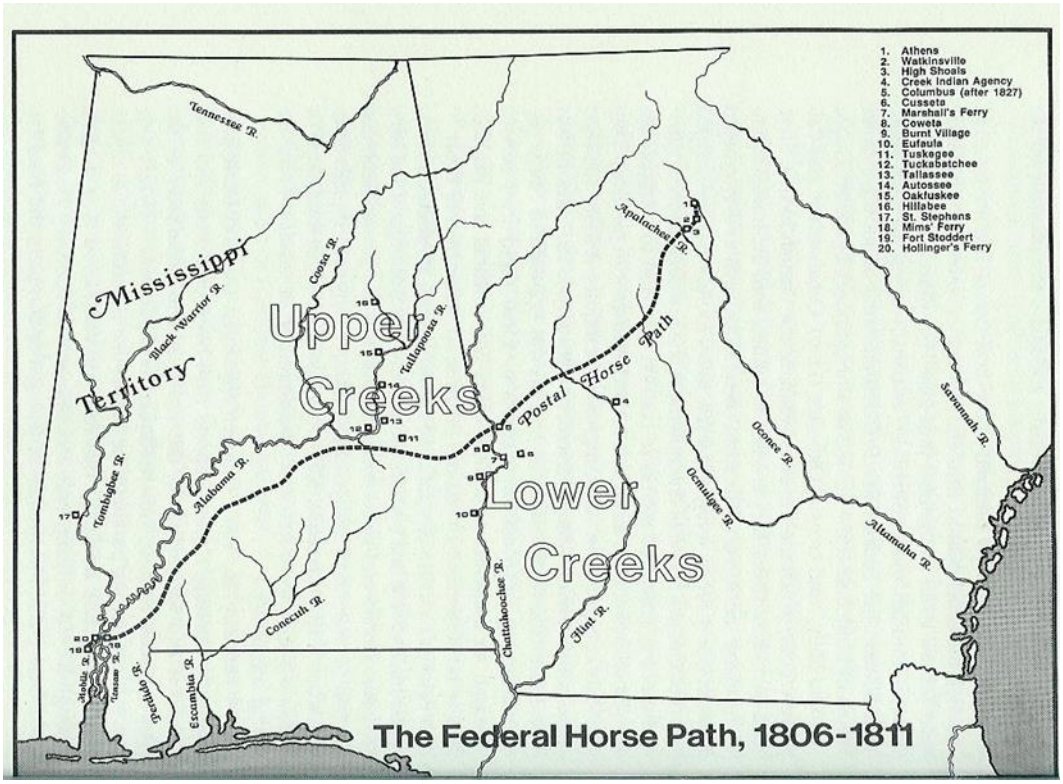

Figure 1: The Route of the Federal Horse Path (Southerland and Brown 1989:30).

Many of the Creeks were concerned with a potential influx of white settlers into their lands if the path was enlarged. Their concerns were well founded; once the improvements were completed, settlers streamed into Creek territory in large numbers.

The Louisiana Purchase encouraged white settlers to move beyond the established borders of the United States, and the Federal Road provided easy access to the frontier (Cottier and Waselkov 1985). At this time, the Creeks were losing their land to the white settlers, some of their people to white society, and they were being urged to fight against Americans by Tecumseh and Britain. All of this tension caused conflict between the Creeks and the white settlers as well as within the Creek tribes. This culminated in The First Creek War.

The Creeks were subdued by Andrew Jackson in The First Creek War, which was a part of the War of 1812. The War of 1812 ended in 1815, and the lure of land once again gripped the white settlers. At this time, there were far fewer obstacles for the settlers to overcome in Alabama since the United States had subjugated the Indians, the Spanish were out of Mobile, and the United States had exclusive rights to navigate the Mississippi River (Southerland and Brown 1989). The Spanish relinquished Florida to the United States in 1821, which allowed American settlers easier access to move into the frontier.

By this time, the Creek Nation had waned significantly, and its members that remained in the area were plagued with host of economic and social problems including American demands for land. On April 4, 1832, the Upper Creeks surrendered the remainder of their territory to the United States (Benton 1998:3). The Upper Creeks were those who inhabited settlements along the Coosa and Tallapoosa rivers; the Lower Creeks were those who lived along the Chattahoochee River (Halbert and Ball 2009:19-20). The Federal Road was still considered by the U.S. government a path for the purpose of transporting mail, and as such, it was not well maintained until 1833 (Southerland and

Brown 1989). In 1833, a large bridge was built over the Chattahoochee River between "Columbus, Georgia, and Sodom or Girard (today's Phenix City, Alabama)," and the road was moved north so that it "traversed higher ground" (Benton 1998:4).

In 1836, all the Creeks were relocated to Indian Territory, and "the former Creek Territory west of the Chattahoochee River was annexed to the state of Alabama" (Benton 1998:3). After the Creeks were removed from Alabama, "there was no longer a need for a single road through the territory" (Benton 1998:4). By 1839, there were several stagecoach lines carrying mail and passengers along the Federal Road, but the Montgomery Railroad Company built "a line from Montgomery to the Chattahoochee River" a few years earlier (Hitchcock 1985:42). This line was eventually extended, and it, along with steamboats and new roads, superseded the Federal Road (Hitchcock 1985; Southerland and Brown 1989).

The War of 1812

The years between the American Revolution and the start of the War of 1812 were marked with tension between the United States and Great Britain (Perkins 1953). War between France and Great Britain caused the British to neglect their foreign policies; the British began impressing American sailors into the royal navy (Horsman 1975; Mahon 1972). The royal navy "impressed more than six thousand Americans" between 1808 and 1811 (Weeks 2001:814). The War of 1812 began on June 18, 1812, and during its course, the United States fought Great Britain on the high seas, along the Canadian border, and near the coast of the Gulf of Mexico. The war ended in a stalemate on February 17, 1815, and it achieved little for either the United States or Britain (Hickey 1995).

The Treaty of Ghent

Peace talks had begun prior to the end of the War of 1812. The United States sent "an exceptional group of men" to the peace talks in Ghent, Belgium while Britain's delegation consisted of "men of diplomatic second rank" (Browne 1997:209). From August 8 until December 24, 1814, the United States and Britain debated peace terms (Hickey 1995; Browne1997). Initially, Britain's demands were high, but they were merely a means for the British to judge how willing the United States was to issue concessions (Hickey 1995). The British dropped a great number of their initial demands, after "the Duke of Wellington… bluntly advised his government to make peace without further haggling" (Elting 1991: 322). The treaty generally restored relations to the way they were prior to the war, and created committees to settle land disputes along the border between the United States and Canada. It also made some reparations to the Native Americans, and included an agreement that attempted to end slavery in both England and the Unites States. (Hickey 1995).

Results of the War

During the War 1812, the United States was plagued by incompetent military leaders, low enlistment, an expensive and undisciplined militia, and domestic trade with the enemy (Hickey 1995). The United States government accrued significant debt, and by 1814, the nation's credit system failed. President Madison's weak leadership has been cited as an underlying influence on the war. He was a very judicious leader, but he was slow to act. He permitted inept people to attain and retain significant positions; he did not readily promote capable people to critical positions, he was not effective in congress, and he lacked the backing of the nation's people (Hickey 1995). The war ended in military

stalemate, and the United States did not succeed in taking Canada or in winning any of its maritime goals (Hickey 1995:105). As a result of the war: the Indians to the northwest and southwest of the United States were subjugated, a portion of Spanish Florida became permanent property of the United States, a strong sense of pride in the United States was invoked, the federal government began to spend more on strengthening the nation's defenses, the military began staffing itself with more suitable personnel, and the nation's animosity towards Great Britian was strengthened (Hickey 1995). The United States won the respect of Great Britain, and the British neither impressed another American sailor, nor did it ever tamper with American trade again. Several political careers advanced from the War of 1812. The political successes of Presidents Adams, Harrison, Jackson, and Monroe were in part a result of their actions during this war. There were many other politicians who ignited their careers during this war (Hickey 1995). The Federalist Party was blamed for all the shortcoming and failures of the United States during the war, and the Battle of New Orleans helped concoct the illusion of a United States victory (Owsley 2000). This parable soon fostered a general acceptance that the United States had defeated Britain and was solely responsible for the peace that ensued afterwards (Hickey 1995).

The Creek War of 1813-1814

On February 9, 1813, a Creek Indian named Little Warrior was returning from a British-Indian collaborative victory at the Battle of the River Raisin in Michigan when he and six accomplices murdered two families of Europeans that were living on the north bank of the Ohio River (Mahon 1972:231). Upon word of this, the General Superintendent for Indian Affairs Benjamin Hawkins immediately demanded that the

Creek chiefs hand Little Warrior and his accomplices over to the American Government. Instead of granting Hawkins his request, they decided to execute Little Warrior and three of his accomplices themselves (Halbert and Ball 2009). The faction of young Creeks that were "influenced by Tecumseh" was enraged by the news of the execution because they saw it as a sign of "subservience to the United States," and they sought to exact revenge on "every leader who had taken part in the execution" (Mahon 1972:232).

It should be noted that it was not only Tecumseh who served as a force of disruption during this time. The Indian Agent Benjamin Hawkins was also a factor in Creek culture change, as he sought through a series of reforms to transform the Creeks from hunter-gatherers to horticulturalists. As time passed, the Creek confederation became increasing at odds with itself. There were those in the nation who embraced the reforms (the Lower Creeks) and there were those who rejected the white man's way of living in favor of the traditional ways of their people (the Upper Creeks) (Mahon 1972). These two factions "were all but reconcilable" (Mahon 1972:232). Historically, the Upper Creeks have also been referred to as the Hostile Creeks or the Redsticks while the Lower Creeks have also been referred to as friendly Creeks or the Whitesticks (Halbert and Ball 2009; Waselkov 2006). Another source of discontent was influences of the Spanish, French, and British. All European directions were to use the Creeks to assist them in defeating the United States Government. The British sent messengers to reassure the Creeks that they would be well armed if they should decide to take up arms against the United States. The United States was "upset by unfounded rumors that Spain intended to transfer East-Florida to the England" (Mahon 1972:232). The Spanish in Florida were unsure how to respond to the news that the United States had become disquieted by this

hearsay, and after being goaded by the representatives from the British, they decided to arm the Creeks (Mahon 1972:232).

The Spanish sent an invitation to Peter McQueen, "a half-breed Creek leader to come to Pensacola for ammunition" (Mahon 1972:232).The Americans heard of this, and Colonel James Caller of the Mississippi Territory (Owsley 2000:30). Caller collected 180 militiamen near St. Stephens with the intention of intercepting McQueen and his party on their way back from Pensacola. Colonel Caller sent an advanced attachment that found McQueen and his party camping "on a low pine-barren peninsula formed by a bend in Burnt Corn Creek" (Owsley 2000:30). The Detachment defeated McQueen and his party, and after this, Caller had to gather up his men in order to secure "the pack train which carried the precious ammunition from Pensacola" (Mahon 1972:232). McQueen was not keen on accepting defeat that easily, and he later reorganized his forces, and set them upon Caller in an ambush that was later named the Battle of Burnt Corn Creek (Mahon 1972:232).

The Battle of Burnt Corn Creek "is often called the opening battle of the Creek War" (Mahon 1972:232). After the Indian had regrouped, they took refuge in a nearby swamp and began to fire their weapons upon the whites from the cover of the tall grass and various growths that were abundant in the swamp. Unknown to the Americans, there were additional Creeks nearby. Some of these were warriors that were encamped further down the path from Pensacola, and some of them were local residents that heard the exchange of fire that took place between McQueen and the militia parties. In all, the Indian forces had grown to nearly 100 Indian warriors in a very short period of time. When Caller's undisciplined militiamen had assumed that they had won the battle and

were engrossed in dividing the spoil from the conflict amongst themselves, the Creeks charged. Caller and his militiamen were caught off guard, and they retreated from the battle field. The Creeks pursued the American militia for a short period of time, and after a very seriously atrophied force of Caller's men held off the Creek for a couple of hours, the militiamen were able to successfully escape (Halbert and Ball 2009).

The Battle of Burn Corn Creek was a disaster for the United States, and a surprising victory and a confidence builder for the Creeks. All previous conflicts between United States and Creek forces of approximately equal sizes had resulted in losses for the Creeks, but they had won the day in this skirmish. The Creeks used this victory to reinforce their claim that their forces possessed some form of supernatural power and as a result of this power, they claimed to be invincible. Using this propaganda and possibly his family as hostages, the hostile Creeks (the Red Sticks) soon recruited William Weatherford to support their cause. For the white frontiersmen and their families, the defeat at Burnt Corn Creek finally impressed upon them the fact that they were involved in a real war with the natives. This realization led to the families living on the frontier to take more precautions such as moving themselves and their families to forts that were defended by block houses and garrisoned by armed militiamen (Owsley 2000).

Their resolve to destroy the Americans was strengthened, and by the urging of the tribal prophets, hostile Creeks began to rid the area of the whites by attacking and destroying Forts Mims and Pierce, which were located in the Alabama and Mississippi territories respectively (Owsley 2000). Fort Mims was especially sought by the Creeks for two reasons: it would serve as revenge for the attack on the Creek's party by Colonel Caller's attack on Peter McQueen's party at the Battle of Burn Corn Creek, and it

harbored a “large number of friendly Creeks and mixed bloods” that the hostile Creeks hated (Owsley 2000:34).

The hostile Creeks had achieved the element of surprise on the residents of Fort Mims by traversing an open space of approximately 150 yards before being seen (Waselkov 2006). The hostile Creeks “were within 30 steps of the fort at 11 A.M. before they were noticed” by the people inside (George 1815:9). The Redsticks gave a war call, and then they flooded into the gate along the eastern side. During the battle, three of the original four men that were chosen by the “Alabama prophet Paddy Walsh and made invulnerable to bullets by his magic,” were killed when they had reached the center of the fort (Waselkov 2006:128). Soon, a fray broke loose in between the outer and inner eastern gates. This is the area within the fort in which the volunteers from the Mississippi Territory had set up their tents. More than half of these volunteers were killed in just a few minutes. Many civilians as well as many soldiers were slaughtered in this battle; this included white men, métis (mixed white/Native American ancestry), women, and children. It has been estimated that approximately 29 people escaped from the fort during this battle (Waselkov 2006). The slaughter ceased “just before 5:00 P.M., an hour and a half before sunset” (Waselkov 2006:135). After the bloodbath at Fort Mims, the Redsticks raided and looted the abandoned settlements in the vicinity for several months.

The Fort Mims massacre terrified settlers on the frontier, and it “awakened the most fervid sympathies and hottest indignation of the people of the Mississippi and Gulf regions” (Lossing 2001:758). The civil war among the Creeks had turned into a war against the United States, and Tennessee, Georgia, and Mississippi responded to the threat (Hickey 1990; Cremer 2004). From Tennessee, Major General Andrew Jackson

and Colonel John Coffee attacked the Creek lands from the Northwest, and General John Cocke attacked from the Northeast (Lossing 2001; Stickler 2004). From Georgia, General John Floyd directed an attack from the east (Kane and Keeton 1997). From Mississippi, General Ferdinand L. Claiborne was sent to "protect the American settlements north of Mobile" (Cottier and Waselkov 1985:30).

The Mississippi Territory's Response

The Mississippi militia under the command of General Ferdinand L. Claiborne was ordered "to proceed to Weatherford's Bluff and there establish a depot of provisions for General Jackson" (Halbert and Ball 2009:241). One of the small encounters they experienced on the way there "was the famous canoe fight in which Sam Dale, Jeremiah Austill, James Smith, and a black slave named Caesar, fighting from a canoe, killed the nine Indians in another large canoe, with no loss of any of Dale's men" (Owsley 2000:45-46). At Weatherford's bluff, they constructed a stockade/depot, and they named it "Fort Claiborne in honor of the commander" (Halbert and Ball 2009:243). They were reinforced by a company of regular army troops under the command of Colonel Gilbert Russell, they left Fort Claiborne on an expedition to destroy William "Weatherford's town called Holy Ground" (Owsley 2000:47). They marched to within striking distance of the Holy Ground and built Fort Deposit. From there, they destroyed the Holy Ground, fought one more scuffle in a nearby town, and returned to Fort Claiborne where General Claiborne discharged his men leaving only Russell's men at the fort (Owsley 2000; Halbert and Ball 2009). "The defeat of the Creeks at the Holy Ground practically closed their military career in south Alabama" (Halbert and Ball 2009:262).

Georgia's Response

The main Georgia army was under the command of John Floyd, and there was a smaller company under Major General David Adams (Owsley 2000:51). General Adam's company fought a number of battles, burnt the village of Nuyaka, and damaged the hostile Creek's supply of food (Owsley 2000:51). General Floyd's army came into the frontier from Fort Hawkins via the Federal Road, and as soon as Floyd's army reached the west side of the Chattahoochee River, they built an encampment that later became Fort Mitchell (Southerland and Brown 1989; Chase 1974). Floyd described Fort Mitchell to Andrew Jackson in a letter as: "a strong stockade fort defended by block houses" (Basset 1926:399). The fort was "named in honor of the governor of Georgia, David B. Mitchell" (Southerland and Brown 1989:43). Fort Mitchell served dual purposes: a base from which Floyd attacked the Creeks, and later, a supply depot in a chain of depots that included Forts Hull and Bainbridge (Southerland and Brown 1989; Owsley 2000). Floyd, with 950 militiamen and 400 friendly Indians left Fort Mitchell and attacked the Creek town of Autossee; they killed approximately 200 Indians, drove the remainder out, and burned the town (Halbert and Ball 2009). "At the same time, or about the same time, Tallassee was also destroyed… After destroying these towns the Georgia troops returned to Fort Mitchell" (Halbert and Ball 2009:273). After recovering from a wound suffered at the Battle of Autossee, Floyd took his men 41 miles west of the Chattahoochee and built Fort Hull (Owsley 2000:56). Shortly after, Floyd camped near Calabee Creek, and he was attacked just before dawn on January 27, 1814. The hostile Creeks crept from the swamps that surrounded the camp, shot the guards, and began an assault. The battle was hard fought until daylight gave the militia an advantage (Owsley 2000; Lossing 2001). At that

point, the militiamen charged the hostiles with their bayonets and forced them back in to the swamps (Halbert and Ball 2009). Floyd returned to Fort Hull after this battle, and on February 16, 1814, he "turned over the command of Fort Hull to Colonel Homer V. Milton" (Owsley 2000:59). Floyd left a small number of his men at Fort Hull and took the rest back to Fort Mitchell to be discharged (Lossing 2001). Milton's force was strengthened by troops sent from South Carolina, and he built Fort Bainbridge to the east of Fort Hull and to the west of Fort Mitchell to serve as a staging point in his supply line. He used Fort Mitchell as his main base of operations until Fort Bainbridge was completed; then he moved most of his men to forts Bainbridge and Hull. Later, Milton built Fort Decatur and used it as his base of operations (Owsley 2000).

Tennessee's Response

In late September, the Tennessee legislature arranged for a total of five thousand men and provisions to be sent to fight the Creeks. General Andrew Jackson sent Colonel John Coffee ahead to set up a camp in Huntsville, Alabama (Lossing 2001). By October fourth, he had established the camp at Huntsville, and he had assembled a force of thirteen hundred men (Lossing 2001). Jackson and his men met Colonel Coffee's men in Huntsville on October 12th (Lossing 2001). On October 15, Jackson sent Coffee and several hundred men to pillage food from "the Black Warrior Towns just south of the Tennessee River" (Owsley 2000:62). While Coffee was away, Jackson marched his remaining men south and built Fort Deposit. Jackson received intelligence that a force of hostile Indians meant to attack "friendly Creeks at Coweta and probably Talladega" (Owsley 2000:64). This body of hostile Indians was gathered in the vicinity of Ten Islands. Jackson marched his men there and sent Coffee to attack a large number of them

"at the nearby town of Tallushatchee" (Owsley 2000:64). Coffee and his men easily slaughtered all the men and a number of the Creek women and children in the town; they took some women and children as prisoners (Owsley 1981). After the battle at Tallushatchee, Jackson soon built Fort Strother, and it was from there that he marched out to the town of Talladega. Hostile Creeks were attacking the town and attempting to starve out the friendly Creeks inside the town's fortifications. With some effort Jackson's forces were successful, and they immediately marched back to Fort Strother (Owsley 2000). After the battle at Talladega, General Cocke marched and "destroyed the towns of Little Oakfusky and Genalga" despite the fact that Jackson had agreed to make peace with the people in those towns (Owsley 2000:66). Cocke's army soon joined with Jackson's, and after dealing with the loss of a number of men due to terms of enlistment running out, Jackson attacked a group of hostile Creeks at Emuckfau. Jackson abandoned the assault, but his men were pursued and attacked near Enitachopco Creek. Jackson's men managed to successfully defend their camp, and they soon returned to Fort Strother (Owsley 2000). Jackson was not able to capture the town, but his raid provided "a diversion for the advance of General Floyd's army from Georgia" (Owsley 2000:75). After Jackson bolstered his army and established discipline therein, he took his men to Three Islands and built Fort Williams to serve as a depot for supplies and as a base of attack on "the last major stronghold of the enemy" (Owsley 2000:78). Jackson's successful assault on the encampment at Horseshoe Bend was the last major battle fought by his army during The First Creek War, and it essentially broke the strength of the hostile Creeks. After the Battle of Horseshoe Bend, Jackson met the armies from Georgia, the Mississippi Territory, and the Carolinas at "the confluence of the Coosa and Tallapoosa rivers"

(Owsley 2000:83). The Treaty of Fort Jackson was signed at this place a few months later, and this essentially ended The First Creek War. The Creeks were forced to cede twenty million acres of land to the United States Government, and this left them physically cut off from Spanish Florida.

The Creek War of 1836

In 1832, the Treaty of Cusseta ended the Creeks' communal ownership of "all 5,200,000 acres of their tribal lands in Alabama" and granted portions of "2,187,000 acres of it to individual chiefs and heads of Creek households in severalty" (Ellisor 2010: 47). They could live on their land "and become citizens of Alabama" or sell it and move "west of the Mississippi River" (Valliere 1979:463). Between 1832 and 1835, many settlers wanted to acquire the Creeks' land in as timely a manner as possible, and generally, they did not care if they obtained it legally or not. Land speculators would let the federal certifying agents see them pay the Indians good prices for their land allotments, but after the agents were gone, they would often force the Indians to return most of the money. The dubious real estate practices of the land speculators inevitably drew the ire of the Creek Nation, and by May of 1835, the number of clashes between the settlers and the Creeks caused the settlers to seek aid from the Governor of Alabama (Valliere 1979).

In response to the plea, Governor John Gayle wrote to the Secretary of War Lewis Cass to request the help of the United States Army (Valliere 1979:463). "In May of 1835" Secretary Cass sent "former certifying agent John W. A. Sanford" to "Columbus to investigate the frauds" committed against the Creeks (Valliere 1979:465). The Creeks would not come to Columbus because they feared that "they would be arrested for

indebtedness" (Valliere 1979:465). Sanford used the Indians' absence as an opportunity to discredit their claims; he "sent Cass a misleading report" stating that he had been presented with no evidence to attest to the validity of the Indians' claims (Valliere 1979:465-466).

The Second Creek War broke out in December, 1835, and this fostered additional unrest among the settlers (Valliere 1979:466). In response to a report by John Hogan, the Superintendent of Creek Removal, Generals Daniel McDougald and Samuel Armstrong arranged a meeting at Fort Mitchell "with Neamathla and other chiefs of the Lower Creeks in January, 1836" (Valliere 1979:466). Neamathla was notably accommodating during this meeting. He and the other chiefs consented to help the United States government prevent criminal acts by the Creeks against the settlers as well as to hand back any looted property to representatives of the United States government at Fort Mitchell (Valliere 1979).

The election of C.C. Clay as governor of Alabama in November 1835 intensified the removal of the Creeks from the state (Valliere 1979:468). The state legislator would not accept his proposals for a more concise judicial process for dealing with Indians accused of depredations against whites, but he doubled his efforts after an altercation between 150 whites and 75 Creeks in Pike County. He urged the federal government to grant him "authorization to call up state troops, in which case the War Department would arm, equip, and pay the militiamen he intended to send into the Creek counties" (Ellisor 2010:164). General Winfield Scott was worried "that the Creeks would… join forces with the Seminoles," so "he gave Clay permission to raise a regiment of troops" (Ellisor 2010:164). Clay assembled parts of the Alabama militia at the federal arsenal at Mount

Vernon, but he was unable to have them mustered into the federal army and armed (Valliere 1979; Ellisor 2010).

Another encounter between the whites and the Creeks in Pike County caused Governor Clay to send Colonel Aaron Shannon to Mount Vernon to request muskets and to order the fifth and sixth divisions of the Alabama Militia to be ready for war. Secretary Cass refused to be rushed to war with the Creeks because he was already dealing with a war with the Seminoles in Florida, and the Jackson administration was very conscience of sensitivity of its Indian removal policy in the eyes of the public. Despite his persistence, Clay's many requests for federal involvement were denied (Valliere 1979).

On May 5, 1835, Jim Henry, Neamathla, and "between one and two thousand Creeks… attacked settlers and settlements south of the [Federal Road]" (Valliere 1979:470). The Creeks attack plantations, mail stages, and two steamboats on the Chattahoochee River (Valliere 1979). "On May15, they attacked Roanoak, Georgia," and they "massacred both whites and slaves, and burned the town" (Valliere 1979:470). A group of settlers confronted the Indians not long after this attack, but the settlers were overwhelmed and had to flee (Valliere 1979).

Alarm spread furiously throughout Alabama and Georgia after this attack. The Mayor of Columbus, John Fontaine, believed that the Creeks were planning to attack his town, so he implored Georgia Governor William Schley "to send troops and cannons" for its protection (Ellisor 2010:201). Schley and Governor Clay of Alabama took quick and active roles in organizing a response to the hostilities via the states' militias. Schley put John W.A. Sanford in command of the Georgia militia, and Clay put Benjamin Patterson in command of the Alabama Militia (Valliere 1979).

Clay was in a hurry to get the campaign against the hostile Creeks over with, but the settlers were not keen to go to war (Valliere 1979). Companies of volunteers from several counties joined the Clay's main host, and "he also ordered the commander of the 7th division to raise another battalion" (Valliere 1979:472). Clay sent Brigadier General John Moore and General Irwin along with their men to Irwinton in Barbour County, Alabama, where he thought the focal point of the conflict would be. He attempted to secure Governor Schley on board with his plans, and admonished the Creeks in the peaceful towns not aid the hostile Creeks but to aid the militias. He "met with Opothleyoholo and twelve other chiefs of the Upper towns of the Creek confederacy" to attempt to garner their help in dealing with the hostile lower Creeks (Valliere 1979:472). Opothleyoholo further produced "four hundred of his tribesmen" to aid Clay (Valliere 1979:474).

Initially, Secretary Cass sent Quartermaster General Thomas S. Jesup to take command of the Alabama militia; later, he put General Winfield Scott in charge of the overall operations against the Creeks (Valliere 1979). Both Scott and Jesup wished to "contain the hostilities" and "commence the removal of the Creeks" (Valliere 1979:475). Governor Schley, General Scott, and General Jesup all agreed upon a plan to force the Creeks to the Chattahoochee River. Jesup was to operate from a base in Irwinton and Scott's men would wait at the river to capture the Indians and prepare them for removal (Valliere 1979).

Governor Clay wanted to initiate this operation on the fifth of June, but lack of arms, means of subsistence, lack of transport, the scattered nature of the Georgia Militia, and the forces of nature delayed any action by Scott until the twentieth. The supply

situation was not any better for the Alabama Militia. General Jesup met with General Patterson in Tuskegee, and Paterson painted a very dim picture of the conditions they were experiencing (Valliere 1979). Supplies were all but non-existent, and the militia members "refused to be mustered into government service" out of fear of being "forced to serve in the Seminole War" (Valliere 1979:477). Governor Clay, General Jesup, and General Patterson assured them that they would not be sent to fight the Seminoles, and Clay soon commanded a sizable force of volunteers and Indians (Valliere 1979).

While Jesup prepared to take command of the militia, Major General William Irwin marched to Irwinton and found the village deserted; despite reports of murder and an impending attack, "there were no Indians anywhere in the vicinity" (Valliere 1979:477). Jesup was under orders not to act until the fifteenth of June, but the rumors of "troubles at Irwinton" convinced him to act on the twelfth (Valliere 1979:478). Over the next few days, he and his "troops captured Neamicco, his son, and thirty-five of his people…. They also captured and imprisoned Neamathla" (Valliere 1979:478).

After that, Jesup seized Neamathla's village and looted cattle and corn from it to restock his troops' supplies (Valliere 1979). Prior to this, Jesup had sent a letter to Scott reporting that he might have to go to Fort Mitchell for supplies; this "sent Scott into an immediate rage" (Valliere 1979:479). Scott tried to arrange a meeting with Jesup at Fort Mitchell, but Jesup showed up at Fort Mitchell the day after "Scott had returned to Columbus" (Ellisor 2010:253). Scott was angered by Jesup's insubordination, and Jesup was angered by Scott's criticism of him (Valliere 1979).

Jesup continued with his campaign by issuing "a public warning to the hostile Creeks to surrender or face grave consequences. Over three hundred warriors and five

hundred and fifty women and children" surrendered (Valliere 1979:481). Most of these Indians were taken back to Fort Mitchell to await removal. Jesup calmed Scott's wrath by convincing him that he disobeyed orders out of necessity. Jesup and Scott then focused on capturing Jim Henry. Henry had worked for one of the land speculators, but he joined Neamathla and helped him attack Roanoak. He was captured in one of the friendly Creeks' camps and was taken to Fort Mitchell to await removal (Valliere 1979:481-482). After capturing Henry, Scott and Jesup concerned themselves with preventing any of the remaining hostile Creeks from making their way to Florida (Valliere 1979). They stationed men along the Chattahoochee River and "established a line along the southern border of the Creek country" (Valliere 1979:482).

Upon their return to Roanoak, Generals Scott and Sanford discovered two paths left by Indians fleeing to Florida. Scott "immediately ordered Colonel Thomas Beall and Captain H.W. Jernigan of the Georgia militia to pursue the Indians and prevent their escape" (Valliere 1979:482). Beall and his host chased a contingent of Indians across Georgia and trapped them in Chickasahatchee Swamp. They spent weeks attempting to ferret out the hostiles. The ones that were captured were taken to stand trial in Georgia; the ones that escaped joined the Seminoles (Valliere 1979). Jernigan and his men chased another body of Creeks to a plantation owned by Reuben Jones. They attempted to attack the Indians' encampment there, but they were outnumbered and had to retreat. After they received reinforcements, they met the Indians again at Turkey Creek, but they were halted once again when the Indians fired on them. Jernigan then carefully repositioned his men around the Indians, attacked, and defeated them in a battle that lasted less than an hour. For the most part, this concluded fighting in the Second Creek war (Valliere 1979).

There were a few minor skirmishes that occurred as late as the early months of 1837 (Valliere 1979:484).

Southern Indian Removal

The greatest obstacle to the westward mobility of white settlers and the expansion of the United States in the early 1800s was the American Indian. In the southern part of the United States, there were "The Five Civilized Tribes," which included: "the Cherokee, Creek, Chickasaw, Choctaw, and Seminole" tribes (Foreman 1934:7). These tribes were considered superior to other tribes by the whites because they had adopted many of the mores of white society, and formed governmental bodies for their tribes that emulated that of the American states (Foreman 1934).

Thomas Jefferson basically gave the southern Indian tribes two choices; they could either fully become part of American society or they could leave. Some of the tribes chose the former, but others did not want to live like European farmers nor did they want to sell their lands (Hirsch 2009). During his presidency, he negotiated thirty "treaties with approximately a dozen tribes, who ceded some 200,000 square miles of land in nine states" (Hirsch 2009:57). Soon Jefferson abandoned the idea of assimilating the natives into American society, and he began to propose that the Indians exchange their lands east of the Mississippi river for land in the newly acquired Louisiana Territory. Jefferson was not able to establish treaty provisions for removal while he was president, but the foundations needed for the complete dispossession of the Indians of their lands east of the Mississippi River had been established (Hirsch 2009:58).

Andrew Jackson was the person that took Jefferson's idea of removal and made it into a formal national policy (Hirsch 2009:58). The Indian Removal Act was signed into

law on May 28, 1830 (Grinde Jr. 2001:379). This act gave President Jackson the legal authority to give land in the west to the Indians in exchange for their land east of the Mississippi River. Jackson negotiated a number of treaties and finally forced all southern Indians into removal (Grinde Jr. 2001).

CHAPTER 3: HISTORY OF THE FORT MITCHELL SITE

The First Fort

Two forts stood on the Fort Mitchell site at two distinct time periods. The first fort was constructed "in the autumn or early winter of 1813 by General John Floyd" (Chase 1974:3). General Floyd and a number of Georgia militia members marched to Alabama from Fort Hawkins in Macon, Georgia to respond to a number of violent acts carried out on the Alabama settlers by hostile members of the Creek nation (Chase 1974). General Floyd established a camp on the west side of the Chattahoochee River; that became Fort Mitchell. This fort was built to serve as the base for General Floyd's attack on the hostile Creeks, but it was also built to ensure the safe transportation of supplies coming down both the Chattahoochee River and along the Federal Road from the state of Georgia (Cremer 2004:27). Owsley (2000) argues that several factors caused the Creek War of 1813: demand for Creek land by United States citizens, attempted subversion of traditional Creek culture by representatives of the United States, agents of revitalization within the Creek nation, and incentives offered by European colonial powers with vested interests in the Southeast. The war started out as a conflict within the Creek nation, but it soon transformed into a war with the United States. After the carnage at Fort Mims, the people of Tennessee, Georgia, and the Mississippi Territory launched a collaborative effort to subdue the Creeks (Hickey 1990; Halbert and Ball 2009). Fort Mitchell was built by the Georgia militia, and it served as headquarters for them during the battles of Autossee, Calabee Creek, Tallassee, and Nuyaka. The militia won the battles at Autossee,

Tallassee, and Nuyaka, but General John Floyd's men suffered defeat at Calabee Creek (Owsley 2000; Cottier and Waselkov1985). Floyd and the Georgia militia were soon replaced by militiamen and regular army soldiers from South Carolina. The forces from the Mississippi Territory suffered a terrible defeat at the Battle of Fort Mims; they won a significant victory at the town of Holy Ground, and more importantly, prevented effective communication between the hostile Creeks in that area and Pensacola (Owsley 2000:48). Tennessee's forces won battles at Tallushatchee, Talladega, Little Oakfusky, Emuckfau, Enitachopco, and Horseshoe Bend (Owsley 2000). After the battle of Horseshoe Bend, the forces from Tennessee, Mississippi, Georgia, and South Carolina met at the convergence the Coosa and Tallapoosa rivers and forced the Creeks to sign the treaty of Fort Jackson. This effectively ended the war and secured a large portion of Creek land for the United States (Owsley 2000).

The Factory System

The Factory system began in March of 1795 when the United States Congress "appropriated $50,000 to purchase goods for sale to the Indians in the United States" (Chambers 1960:15). Immediately after these funds were appropriated, two such factories were established: one "to serve the Cherokees" and the other "to serve the Creeks" (Chambers 1960:15). The former was located "on the north bank of the Little Tennessee River at the confluence of Nine Mile Creek in Monroe County, Tennessee," and it was known as the Tellico Block House (Polhemus 1997:1). Initially, the latter was located "approximately twenty miles above the town of St. Mary's on the St. Mary's River" (Chambers 1960:19). This place was known as Colerain, and this factory came to be known as the Georgia Factory (Chambers 1960:19). Each factory "was operated by a

federal employee called a factor" (Chase1974:4). The first factor for the Georgia Factory was Edward Price. He and James Byers Jr. who was the factor for the Tellico Block house were provided a standardized list of instructions from the current Secretary of War Timothy Pickering (Chambers 1960). These instructions stated that the main idea behind the concept of these factories was to foster peaceful relations between the United States Government and the Native American nations by providing trade goods to these people at a low cost (Chambers 1960).

The Georgia Factory

As "the frontier was pushed westward" the factory was moved from Colerain to Fort Wilkinson to Fort Hawkins, and then in 1817, to Fort Mitchell (Chambers 1960:15). Major Daniel Hughes was "the newly appointed Creek Indian Factor", and it was under him that the factory at fort Mitchell was established (Cottier 2004:9). In 1816, this factory was just a sub-agency of the factory system, but by 1817, it became "the principle Indian factory for the Creeks" (Cottier 2004:9). Fort Mitchell had previously been a meeting place for Indian chiefs as well as Military leaders; that coupled with the fact that Fort Mitchell was located on the Federal Road made it a prime location to attract Indian trade (Chambers 1960). Major Hughes operated the factory at Fort Mitchell until he received a letter from the Superintendent of Indian trade in August of 1819 ordering him "to sell out the whole establishment-merchandise, debts due from individuals, debts due from the Indian Department and Creek Annuity, the contingent articles, and the buildings, to the highest bidder, with the minimum price to be accepted to e the cost of the above, the sale terms to be cash" (Chambers 1960:40). The government ordered the sale of the buildings, but it did not allow the sale of the land that they sat on because the government wanted to

retain the right to abolish the trading house if it in any way became bothersome to Fort Mitchell (Chambers 1960). The buildings were sold to the Creek Nation in 1820 for $4,000 (Cottier 2004:11).

Operation of the Factory at Fort Mitchell

During the operation of the trading house at Fort Mitchell, the issuing of credit was discouraged, but it did happen. Credit was issued mainly to Indian chiefs and others that were eligible for annuities from the federal government. This was a continual problem for the trading house, and it was due largely in part to the government's delays in sending stipends to the Creek Nation or to the Creek chiefs (Chambers 1960:23). This resulted in a total debt of the Creeks and whites living among the Creeks to the trading house of $10,000 which the government agreed to pay off when they signed the Treaty of 1802 (Chambers 1960). The treaty that the Creeks signed in 1802 promised them "$25,000 in cash and $3,000 annually, plus '2 sets of blacksmith's tools and 2 blacksmiths for a term of 3 years,' and in addition, each chief was to receive $1000.00 annually for ten years…The Treaty of 1805 added $23,000 plus more blacksmiths and tools" (Chambers 1960:23). In addition to the money, tools, and blacksmiths, the Treaty of 1802 also gave the Creeks a number of goods. This did nothing to help trade at the factory, and a stipend order was placed by Col. Benjamin Hawkins for the amounts that were owed to the chiefs. The orders were traded at the factory in the place of cash with the belief that the federal government would reimburse the factory the money that was spent using these orders. In part, the lack of success of the factory system was the fault of both the government and the factors. The government was negligent in its concerns with paying annuities to the Creeks, and the factors often extended too much credit to the

Indians and white settlers who lived amongst the Creeks. This coupled with the high maintenance of the trade factories eventually led to the collapse of the factory system (Chase 1974). The United States Congress repealed the Indian factory system in 1822 (Cottier 2004).

Goods Traded

Articles requisitioned for sale in the factories varied, and supplies often ran short because the demand for certain goods was greater than the speed at which the government sent supplies to the factories. "The following list of articles is typical of the goods requisitioned for the factory" at Fort Mitchell; this list was originally an order sent from the factory at Fort Hawkins in July 1810 (Chambers 1960:21).

1 — bale best London duffle blanket
25 — pc. blue shrouds
2 — pc. scarlet cloth to cost from 2.50 to 3.00 per yd.
40 — groce saxon blue binding)
10 — groce yellow) no other colors will answer
10 — groce green)
10 — groce red)
50 — pcs. calico assorted of a good quality and fashionable.
Baltimore prints does not answer well.
30 — pcs. calico India wide
10 — linen to cost from 4 to $7 ½ per yd.
4 — bandano handkerchiefs
6 — doz. black silk handkerchiefs
20 — doz. white thread from nos. 8 to 20
10 — colored asst.
6 — doz. broad and narrow tape
4 — doz. brass bells suitable for horse bells
3 — doz. large scissors
3 — doz. small knives
3 — doz. pocket knives
18 — doz. looking glasses to cost from 100 ct. to 150 ct. per doz.
3 — doz. double bolted pad locks
3 — doz. single pad locks
2 — doz. rifle locks
6 — doz. knives and forks asstd.

2 — cask of nails wrought
6 — doz. iron or tin table spoons
4000 — needles asstd.
5000 — rifles flints
300 — rifle powder
4 — doz. cotton cards
3 — doz. stock locks asstd and doz. woman's saddles
2 — doz. rifles silver star and thumb piece to cost 11 dollars each
1 — rifle 3 feet 10 inches in the barrels to carry 80 or 90 balls to the pound, lock of the first quality gold, touch hold one inch longer in the breach than usual, trigger mounted with stal sights fine, the barrel larger near the muzzle and breach pin than in the middle
1— do of the same length to carry 50 balls to the pound, gold touch hold waterlock, of the best quality plain steel mounting the sight to be coarse to suit an old man of moderate weight, double trigger engraved at the barrel F. Carter

(List reproduced from Chambers 1960:21-22).

This list exemplifies what was in demand for trade during the time of the federal factory system. By looking at this list, one can see that firearms and the materials related to the use of firearms were a fairly significant in terms of demand from customers. Also significant to this study, were the listing of wrought nails.

Nails

Wrought nails made it on the list of goods requisitioned to supply the factory at Fort Mitchell. At this point, a brief discussion of the history of nails is necessary. Nails were a staple in the so-called architectural diet of the nineteenth century, but the earliest forms of nails date back to 3000 B.C. (Tremont Nail Co. 2006). Nails were the single most common artifact recovered from the excavations of the Fort Mitchell site (Cottier 2004). They are a good indicator of architecture because they "were, and still are, indispensable items in almost every kind of construction" (Frurip et. al.1983:2). Another reason that they are a good indicator of architecture is that they survive in the archaeological record better than wood or other building materials. Nails were used extensively to fasten wood, metal and other building material together. Nails made by

both hand and machine were recovered (see Figures 11 and 38), but generally, their condition made it difficult to distinguish between the two (Cottier 2004).

Machines that made nails were perfected in the late eighteenth century, but these machines did not replace the blacksmith until much later because of the limited varieties of nails they produced (Bealer 1995). Hand wrought nails were of higher quality than the nails produced by machines. "The hand wrought nail trade flourished well into the late nineteenth century and hand wrought nails were still offered for sale in Pennsylvania during the twentieth century….The major reason is that early cut nails simply were inferior to wrought nails, at least well into the 1830s" (Frurip et. al.1983:45). The superior quality of the hand wrought nails was due to the fact the slag stringers [fibers of metal] ran parallel to the length of the nails providing an extra measure of resistance to breakage (see Figure 2); in machine cut nails, these fibers ran perpendicular to the length of the nails which made them much easier to break than their hand made counterparts. Once a means of machine producing nails with the slag stringers running parallel to the length of the nails was perfected, the end of the handmade nail occurred (Frurip et. al.1983).

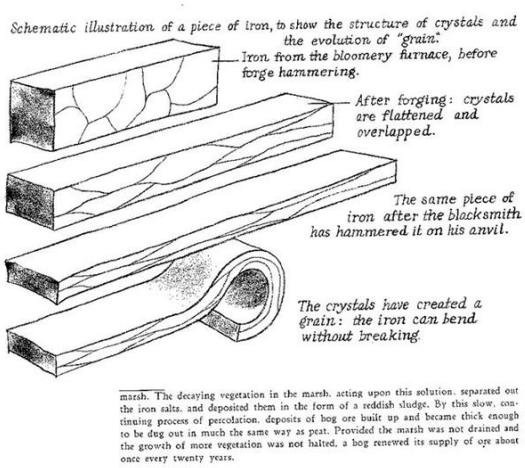

Figure 2: Crystalline Substructure of Iron (Watson 2000:16).

Trade Guns

The so called "Northwest gun" was manufactured by several different companies, such as Ketland of Birmingham (Hanson 1982). These guns and various parts of these guns were "very highly regarded in America" (Hanson 1982:107). In 1808, "the Superintendent of the U.S. Office of Indian Trade… had imported 25 dozen Ketland locks for the use of American riflesmiths making guns for sale to the Indians" (Hanson 1982:107). The Northwest gun does not get its name from the Northwest Company, and they have also been referred to as Mackinaw guns, Hudson Bay Fukes, and London fusils (Russell 1979). The Northwest guns were first produced by English manufacturers located in London for the most part. Later, they were produced in Birmingham, England. "The United States office of Indian trade" traded guns to the Native Americans since its beginnings (Russell 1979:68). To begin with, it traded Europeans guns to the natives, but later it signed a contract with Leman of Lancaster, Pennsylvania, Deringer of Philadelphia, and George W. and Edward K. Tryon, Philadelphia to make an American version of the Northwest trade gun. Of these, H.E. Lemans was the best known; he successfully imitated the English Northwest gun (see Figure 3) (Russell 1979).

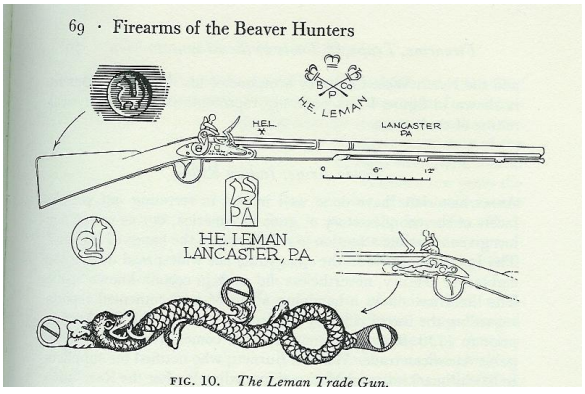

Figure 3: The Lemans Trade Gun Reproduced from Russell 1970:69

Northwest guns were smooth bore guns which means that the bores did not contain any rifling [spiral grooves milled into the bore of a fire arm that make its projectile spin to increase accuracy and range], but the United States government also traded a number of rifled guns or rifles to the Native Americans. These arms were traded to the natives so that they would have a means of obtaining meat, but the probability that they played a role in combat both inter-tribal and interracial is very high. Records demonstrate that these rifles were used in the Creek War of 1812, which has a direct relationship to the Fort Mitchell site, and "rifles were prominent in the merchandise offered at the treaty grounds, in the trading posts, and by itinerant traders" (Russell 1979:71). The trade rifles from 1800-1820, "were plain, sturdy Kentucky rifles with flintlock mechanism, 48-inch barrels, .38 to .52 caliber, and brought the gunsmiths about 12.50 each" (Russell 1979:73).

Panton, Leslie, and Company

The federal factory system was not the only source of goods for the Native Americans of the southeastern United States. There were two other major companies that competed for the native trade. These companies were the Panton, Leslie, and Company, and its successor the John Forbes Company (Coker and Watson 1986). In the second half of the eighteenth century, the Panton, Leslie and company was formed by "William Panton, John Leslie, Thomas Forbes, Charles McLatchy, and William Alexander, and their associates, friends, and relatives in both Scotland and America" (Coker and Watson 1986:15). William Panton began an apprenticeship with John Gordon and Company in 1765; during this apprenticeship, he served as a clerk for the company until 1772. On the first of June 1772, Panton and a man named Thomas Netherclift were appointed as the

attorneys of John Gordon (Coker and Watson 1986). It was the experience that Panton gained during his employment by Gordon that provided him his start as a merchant and adventurer (Coker and Watson 1986).

In 1774, Panton made his debut as a merchant when he "and Philip Moore offered to sell a newly arrived cargo of sixty-five Negroes" (Coker and Watson 1986:24). Panton and Moore formed a company in Savannah, Georgia that sold a myriad of things such as "dry goods…, slaves, horses, wine, butter, and even a brigantine of '600 barrels burthen, completely fitted for sea'" (Coker and Watson 1986:24). Panton and Moore's partnership ended formally in 1777 not long after Moore had been threatened to be arrested for withholding indigo that belonged to the public (Coker and Watson 1986).

From the beginning, the Panton, Leslie, and Company was a political influence. Its members were continually playing at political agendas. For example, in 1783, the British gave the eastern part of Florida back to Spain, and a mass migration of British citizens left the area. Instead of leaving with the rest of the British citizens, William Panton and John Leslie tried to convince the Spanish government to let them continue operating in the area by telling the Spanish officials that the presence of the Panton, Leslie, and Company would prevent the Indians "from trading with the United States " (Coker and Watson 1986:51). They also sent representatives to Spain to plead their case and to make the Spanish believe that the only way that they could maintain inclusive trade with the Indian was to handle trade with them in the same manner as the British had (Coker and Watson 1986). William Panton himself played at the needs of people. He was an opportunist that took every chance that he had to promote his business. In 1783, Alexander McGillivray [then the head warrior of the Creeks] was informed that the

British were moving out of East Florida and that he should ask the Spanish officials in Pensacola for help in fighting off the land—hungry United States (Coker and Watson 1986). Panton saw this as an opportunity to promote his business, and he advised McGillivray to do as the British had recommended and seek aid from the Spanish, and Panton wanted McGillivray to "also promote Panton, Leslie, and Company's interest in the Indian trade" to "assure the Creek of adequate trade goods, thereby eliminating dependence upon American supply sources" (Coker and Watson 1986: 54).

The Second Fort

A new fort was constructed "during the summer of 1825" and was built by "a small detachment of the 4th United States Infantry under Major Donahoe" (Cottier 2004:11). This fort was less than half the size of General Floyd's fort of 1813 and housed only a small number of troops the entire time it was used as a military post (Cottier 2004). This fort was built due to land disputes that were prevalent at the time between the Creek Nation and the state of Georgia. These disputes were the result of a deceptive treaty signed by a small fraction of the Creek nation for the sale of land owned by the entire tribe. The state of Georgia was increasingly encroaching on land that was property of the Creek Nation, and this fort was built to deal with the problems that resulted from this encroachment (Cottier 2004). The United States Government shortly ceased to recognize the Creek nation in the area of Alabama and Georgia; the removal of the natives to the territories in the western part of the country began with the Treaty of 1832. Fort Mitchell served as concentration point for the removal of the natives to the western territories (Cottier 2004). "From 1838 until 1840, a small military garrison was maintained at the fort, at which time the property of the Fort Mitchell military reservation

was purchased by John and Thomas Crowell" (Cottier 2004:16). This was essentially the end of the last fort at Fort Mitchell.

Iron in Early Alabama and Georgia

Fort Mitchell was located near the Georgia-Alabama border, and iron was used in the construction and operation of both forts as well as the Indian factory. Georgia and Alabama did not develop iron production capabilities until after 1800, but some existed just prior to and during the occupation period of the Fort Mitchell site. Georgia had "a bloomary…, a forge…, and a nailery" in 1810, but they were likely built almost 20 years earlier (Swank 1892:279). There were a number of other iron-making facilities in Georgia between the late from 1830s and the late 1840s, but they were all abandoned by the mid-1850s (Swank 1892). Georgia's initial iron furnace was built in the 1830s, and additional furnaces were built in the 1840s (Swank 1892:280). Rolling mills were not present until 1849. Alabama's earliest furnace was built in approximately 1818 but was deserted by 1827. There was no other furnace in the state until 1843; a few more were built in the 1840s and 1850s. The earliest bloomery forge mentioned in Alabama already existed in 1825, but several more were built in the next two and a half decades. The iron industry did not become a significant fixture in Alabama until after the Civil War (Swank 1892).

Forts in Nineteenth Century America

During the nineteenth century, most Americans thought of "a standing army as a danger to liberty" (Prucha 1966:V). Forts were built by the military and militia to protect colonizers and land settlers as well as built by private trading companies to protect their investments (Haas 1979). Forts were built mainly in frontier settings and along the coasts

(Prucha1966). The territory of the United States spread immensely during the nineteenth century, so that by the turn of the century, the area that included forts built by the United States ranged from Maine to San Diego and from Texas to the Canadian border (Prucha 1966:V). "They located the forts strategically on Harbors, on rough interior highways, at the mouths of rivers, and in most early land claims" (Haas 1979:preface).

Forts were built "to maintain American authority against the infiltrating influence of the British and Spanish or against the Indian tribes" (Prucha 1966:V). Forts were places of refuge for settlers, permanent settlements, trading posts, staging areas for exploration and fighting, Pony Express stops, stagecoach stops, jails, justice centers, and rest stops for wagon trains moving west (Haas 1979). Forts also served as lines of communication between the United States government and its outlying territories (Scruggs n.d.)

Forts varied in design, and they were built of whatever building material the area in which they were located had to offer. They were built fast and as cheaply as possible, and most permanent forts included: walls, moats, block houses, storehouses, bastions, parapets, magazines, storehouses, and ramparts. In addition, there were in some instances: schools, libraries, reading rooms, chapels, gardens, kitchens, drinking wells, mess halls, and hospitals included on the forts' premises (Haas 1979; Peterson 1964). Some of the various designs of the more transient forts include: "fortified houses and missions, converted barns, factories or other buildings, and temporary field fortifications" (Peterson 1964:5). Forts were built of material that was not brittle and would more readily absorb the energy of projectiles from cannons than the stone walls of castles that predated them. Most fort walls included a platform for solders to fire weapons outward

over the wall as well as bastions to provide protection along the sides of the walls (Peterson 1964). Forts were produced mainly by necessity. Without forts, early white settlers would not have easily lived in the inhospitable environs of the American frontier.

CHAPTER 4: SITE DESCRIPTION AND LOCATION OF THE FORTS

Geographic Location

The Fort Mitchell site "is located in Range 30 E Township 16 Section 27 of the Fort Mitchell U.S.G.S. Quadrangle (United States Geological Survey, 15 Minute Series)" (see Figure 8) (Chase 1974:1). The actual forts were located in the northern portion of "the middle Chattahoochee River valley" nine miles south of the physiographic section of the Fall Line hills and the Piedmont Plateau (see Figure 4) (Cottier 2004:2). The Dougherty Plain and the Southern Red Hills portions of the East Gulf Coastal Plain section lie to the south of the site (Cottier 2004).

Site Description

In 1813, the American frontier included everything west of the Chattahoochee River. Fort Mitchell was just west of the Chattahoochee River on a hill in what is now Russell County, Alabama (Chase 1974:1). There are no detailed plans of the of the first fort, but based on the excavations, the area contained within the curtain walls would have been approximately seventy meters long by forty meters wide (see Figure 170). The best contemporary description of the fort was detailed in an unpublished letter book of General Joseph Graham. The writer states that Fort Mitchell was "built on the plan of Ft. Lawrence, is 100 yards square, has pickets of round logs 14 feet above ground has 3 Gates & 2 Blockhouses of round logs 30 feet square" (Unpublished Letter Book, General Joseph Graham, North Carolina Department of Archives and History). The blockhouses

were located on the northeast and southwest corners of the curtain walls (see Figure 170) (Cottier 2004). There were indications that a structure was built "directly over the north wall of the first fort" during the time of the Indian factory, but there are no descriptions of the structures related to the Indian factory (Cottier 2004:10). There are no detailed plans of the second fort, but it was described as a "square formed by pickets 12 feet high with a blockhouse at diagonal corners" (Motte 1953:6). The second "fort was less than half the size of the earlier fort" (Cottier 2004:12). From the excavation map, we can estimate that the area within the curtain walls was approximately twenty to twenty five meters long by ten to fifteen meters wide and the blockhouses were on the northeast and southwest corners (see Figure 170). The site is now the Fort Mitchell Park and a national cemetery is located on the property (Cottier 2004). A modern community named after Fort Mitchell lies southwest of the forts' location in the east-central portion of Russell County.

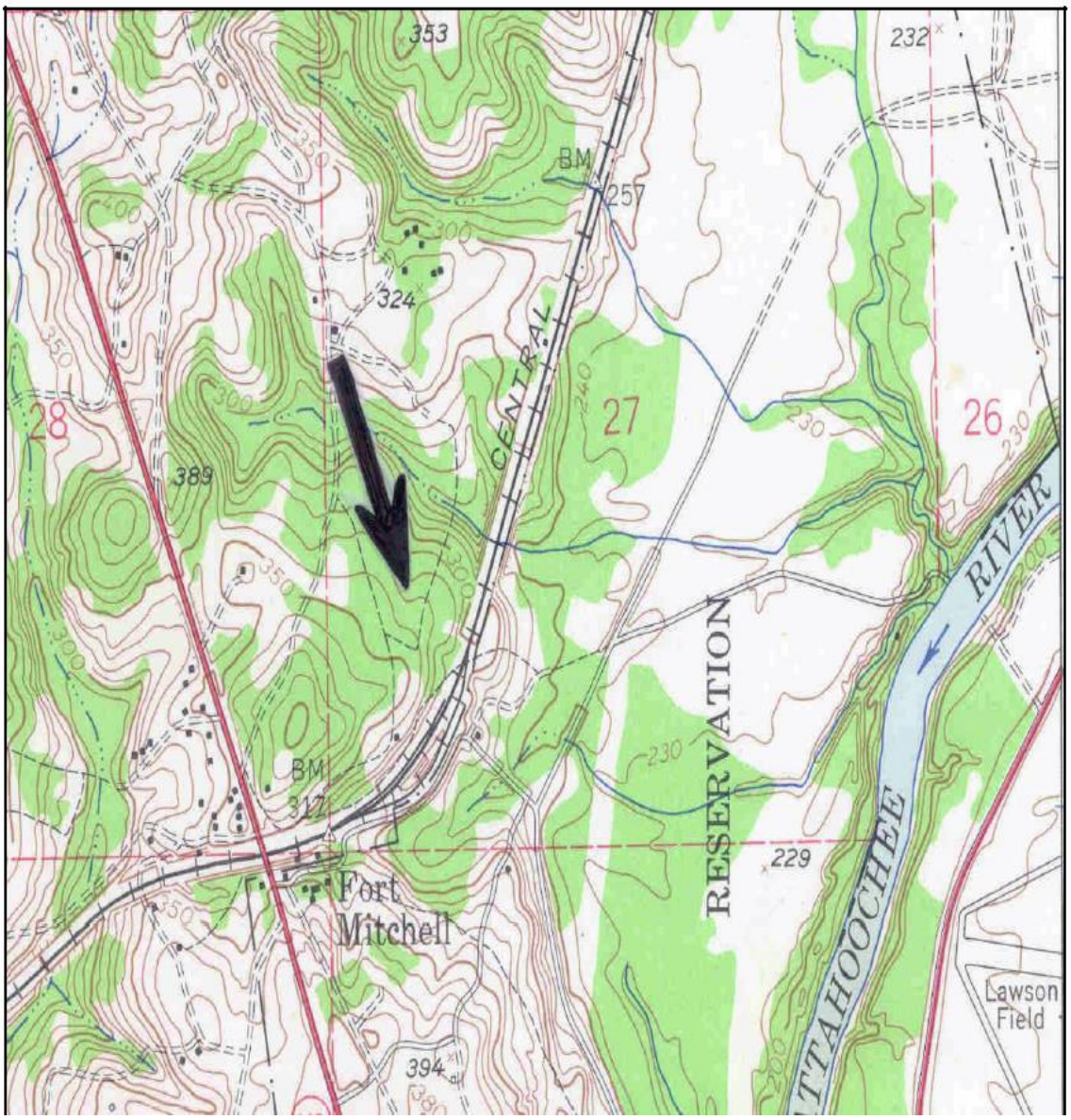

Figure 4: Site Location: Section 27, Township 16 North, Range 30 East. Arrow indicates location after United States Survey 1968 (Stickler 2004:16).

CHAPTER 5: METHODOLOGY

Field Methods

Data used for this study consisted of collected artifacts from two separate systematic excavations of the actual fort site. The first of these was conducted by David Chase for the Russell County Historical Commission. Mr. Chase used a grid system "as a means of locating important points exposed during the actual excavation"; he laid the site "out on a north-south base line (actual bearing was 9 degrees ENE)" (Chase 1974:2). The excavations began with the opening of a ten by ten foot square; this was done "to acquaint the crew with excavation techniques and procedures expected of them" (Chase 1974:9). This was followed by the opening of five more ten foot by five foot trenches to confirm the locations and respective depths of the palisade's footing ditches. During the excavation of these trenches, a ruin of a chimney was found along the south wall, but the brick that composed the chimney were left in place for future excavations because the character of this excavation ruled out the possibility of completely tracing this whole ruin (Chase 1974). Other artifacts recovered included "bricks, window pane glass, bottle and porcelain sherds, many nails, and a great amount of Indian pottery" (Chase 1974:9).

After the first of August and the arrival of David Chase's assistant, the crew was split into two teams, and each worked on separate features. One team worked on a feature located close to the east wall, and the other team worked on the south wall. The Girl Scouts of Columbus helped by washing artifacts on the site (Chase 1974). Located in the bastion area were a very large brick ruin and a row of slab stones of which nearly all were

local hematite and sandstone. The brick ruin was interpreted as a possible kitchen because of the numbers of beef bones exhibiting cut marks that were found with the brick, and the row of slab stones was interpreted as a footing for a structure wall (Chase 1974). This structure was interpreted as "the blockhouse since the ultimate rock wall remnant formed a rectangle roughly twenty by thirty feet" (Chase 1974:10). A number of artifacts were recovered from the block house area, and they included "a large number of musket and pistol balls of lead, gunflints which were mostly of French origin and buckshot. Some iron grapeshot was also recovered indicating the use of the blockhouse as a possible arsenal" (Chase 1974:10). A bayonet and two bottles were recovered from the blockhouse along with burned logs and a number of fire damaged artifacts which suggested that the structure's final demise was a result of being burned (Chase 1974).

A powder magazine "was found outside the east wall of the 1825 fort" (Chase 1974:11). The powder magazine was evident by a large and deep indentation in the ground. An exploratory trench running from east to west was dug across this feature; it was 20 feet long by three feet wide. This trench contained a high concentration of artifacts in the upper layer which consisted of very black dirt. This dark upper layer was underlain by a band of black sand that ranged from two to four inches thick; this was underlain by dark brown sand, then dark gray sand, then sand and gravel, and finally a red clay floor. The final depth of this trench was four feet. The powder magazine was completely excavated (Chase 1974).

By this time, Mr. Chase suspected that there were actually two palisades present at the site, and to confirm this he employed the technique of slot trenching (Chase 1974). "A slot trench is a narrow, usually two or three foot wide trench extended long enough to

intercept a ditch or wall" (Chase 1974:13-14). These trenches were dug in alignment with the locations of previously established ditches; using this technique, the remaining wall trenches were traced, and Mr. Chase and his crew had completely outlined the walls of the large fort by the end of that September (Chase 1974). The last features that Mr. Chase wanted to identify during his excavations were the forts' blockhouses. The search for these began in the northeast corner of the early fort, but no certain outline for the structure could be established (Chase 1974).

The second phase of data collection was carried out by Dr. John Cottier for Auburn University from 2000 to 2002. Cottier established a new grid system for his excavations as the original datum was no longer present. This new grid system was based on the metric system whereas the previous one had been measured in feet (see Figure 170) (Cottier 2004). The area south of where the fort was suspected to be located was subjected to an intense metal detection survey to establish an area to dump the spoil dirt from the excavation. The area where the spoil for the earlier excavations was deposited was located and flagged to avoid its use as a spoil deposit area for the new excavations. A new spoil area for Cottier's excavations was located and flagged for use (Cottier 2004).

Excavations were conducted on one meter by one meter excavation units that were based on a projected ten meter grid established across the site with a total instrument station (Cottier 2004:29). Each unit was designated by the coordinates of its southeast corner, and they were excavated in ten centimeter levels varying with conditions of the soil. The majority of the soil in the project area was extremely sandy, and only portions of the project area where clay had been deposited displayed any stratification (Cottier 2004). There was enough stratification to provide "a secure context

between the two occupations in a selected area of the forts. All levels were given a separate field specimen (FS) number" (Cottier 2004:29-30). All the features and the significant divisions therein where given separate FS numbers as well (Cottier 2004).

Cottier's excavation began with "a one meter wide trench that started in a location that was considered well south of the first fort, and in a spot that would not directly overlap with any of the Chase excavation units" (Cottier 2004:30). The majority of the material from this trench was dry sifted through a quarter inch screen. This trench extended north until it intersected the southern wall trench of the earlier fort, which allowed the identification of some of the Chase excavation units. This also enabled a correlation of the old and the new grid systems. The excavations followed the southern wall and eventually located the southeast bastion, the northeast corner, and what remained of the entire first fort (Cottier 2004).

Very little water screening was conducted for this project; dry screening was mostly used with quarter inch screens made of galvanized hardware cloth. The bulk of the area associated with the first fort was excavated excepted where obstacles such as trees prevented digging (Cottier 2004). The entire excavation site was plotted on scale maps that each represented a ten by ten meter area (see Figure 170) (Cottier 2004). All associations that demonstrated evidence of human alteration were assigned feature numbers, which were recorded in a feature log, identified by their respective numbers on the excavation maps, recorded on a standardized feature form, and photographed (Cottier 2004).

Laboratory Methods

After recording the features, the removed material was taken to Auburn University for analysis. Analysis for the current project consisted of cleaning the artifacts, which were then classified, weighed, numbered, and recorded in a data base built for this site. This work was done by me, several paid laboratory employees, and a number of Dr. Cottier's students. Select samples of plant and non-human animal remains were removed for others to analyze (Cottier 2004). The analysis of the material removed from the larger features such as washes, fort walls, stone footings, powder magazines, wells, and other features of considerable size, often consisted of an examination of a sample of the material only due to the size of the sample and the context (Cottier 2004). Cultural remains from the Fort Mitchell investigations are curated in the Archaeological Laboratory facilities at Auburn University.

Due to pressure from the Russell County Historical Commission, excavations closed on May 29, 2002 leaving some of the features related to the two forts partially unexcavated (Cottier 2004). Grid markers were placed outside the fort site to ensure that future excavations would have a reliable grid system to base their excavations on and for future archaeologists to use to locate points that were reported in this project (Cottier 2004). In addition, data from the field maps was summarized to provide a reconstruction 'plan' from the archaeological data (Cottier 2004:31).

For this project, I began by classifying the artifacts by material. I decided to examine only the artifacts made of iron, so I compared the information listed on all of the analysis sheets for the iron artifacts to the entries in the database. I made additional entries and corrections for lost data that resulted from software issues. Then, I divided

them into Stanley South's functional groups. I added columns in the database to designate to which of Stanley South's functional groups and classes each artifact belonged. These categories are a means of providing insight into the use the iron at Fort Mitchell by grouping artifacts based on their intended use. They allow for pattern recognition through the presence or absence of artifacts used for various things. Concentrations may indicate areas of activities and may indicate patterned behavior expected on similar sites.

The groups used in this study were: the Kitchen, Activities, Architecture, Arms, Clothing, Furniture, Miscellaneous, and Personal groups. The Kitchen group is defined as the group that consists of artifacts related to the procurement, preparation, and serving of food. The Activities group is defined as the group that consists of artifacts that reflect specialized actions, labors, or pursuits (South 1977). The Architecture group is defined as the group that consists of artifacts "directly related to the architecture on a site" (South 1977:100). The Arms group is defined as the group that consists of artifacts that specifically related to the use, maintenance, and repair of weapons (South 1977). The Clothing group is defined as the group that consists of artifacts that relate "to the manufacture and use of clothing" (South 1977:101). The Furniture group is defined as the group that consists of artifacts that represent the remains of various types of furniture (South 1977). The Miscellaneous group is defined as the group that consists of artifacts of an undetermined function. The Personal group is defined as the group that consists of artifacts either carried on one's person or designated for use by individual people (South 1997). These groups and their constituent classes were used because "it is expected that broader cultural processes will likely be revealed at the group level of generalization due to the functional relationship between the group and generalized behavioral activity in the

cultural system" (South 1977:93). Finally, I carefully examined selected artifacts to ensure correct identification, to look for signs of tool marks, and to look for modifications of any sort that would indicate the work of a blacksmith.

Limitations

The deteriorated condition of the iron artifacts sometimes made identification difficult or impossible. The number of nails recovered made analysis time consuming. The logistics of keeping track of such a large number of analysis sheets, made copying and data entry a lengthy process. The artifacts and all the data were relocated several times during the process of analysis, creating the need for a careful reexamination of the data to ensure that none had been lost or damaged. The software program Microsoft Excel went through several upgrades in the course of analysis, creating the need for careful examination and corrections to the data as the spreadsheet file evolved from earlier to later versions. In some instances, this was very time consuming and tedious, because computer glitches caused loss of some aspects of the data which had to be repaired. The nature of the site itself posed problems in analysis. The site was occupied at three separate but chronologically close periods of time in a relatively small physical space. This made dating the majority of the artifacts difficult as they were all deposited in a small space, and the short length of time spanned by the history of the site left little in the way of stratigraphy. One drawback to using South's categories "is that many types and some classes can well function in different contexts" (South 1977:94). This creates a degree of difficulty in placing artifacts in categories. This method also concentrates more on the description of cultural processes and less on the rebuilding of cultural history and life-ways of individual sites (South 1977:31).

CHAPTER 6: DESCRIPTION OF THE FEATURES AND THE IRON ARTIFACTS THEY CONTAINED

David Chase identified 22 features during his excavations in 1971, and John Cottier identified 163 during the course of the excavations conducted from spring 2000 until summer 2002 (Cottier 2004:1). This chapter presents a description of all of these features and the iron artifacts recovered from each of them. For the purposes of this study, features were defined as "nonportable human-made remains that cannot be removed from their place of discovery without altering or destroying their original form" (Ashmore and Sharer 2000:56).

Unused Feature Numbers

David Chase's excavations utilized feature numbers 1 through 22. Cottier's use of feature numbers for his excavations began with feature number 25 (Chase 1974; Cottier 2004). The feature numbers that Cottier did not use included features 23, 24, and 27.

Temporal Placement

Both Cottier and Chase attempted to determine the temporal placement of each feature identified at Fort Mitchell by relating them to "three major occupations" which included "the first fort (1813-1817), the Indian Factory/Indian Agency (1816-1820), and the second fort (1825-1840)" (Cottier 2004:33). Unfortunately, finding diagnostic artifacts in a site with occupations that are so close chronologically is not often easily accomplished. Military buttons serve as one of the most precise indicator available for the Fort Mitchell site. The categories of buttons from the time of the first and second forts

are mutually exclusive as a result of major uniform changes (Cottier 2004). Between the time of the first fort and the time of the second fort, whiteware ceramics also supplanted pearlware ceramics as the dominant earthenware type, so the presence of more of one type than the other in certain contexts served as another temporal indicator (Cottier 2004). European glass beads were also used in a similar manner as the green, blue, and clear faceted so-called Russian types were "only found after the First Creek War" (Cottier 2004:33). This would exclude them from being associated with the first fort; however, few glass beads were recovered from the features, so they are of limited use as temporal indicators. Dated coins were also used in some incidences as temporal markers (Cottier 2004). The problem with using coins for this purpose is that the date on the coin only provides the *terminus post quem* and proves that it could not have been used prior to the indicated date. It would reveal nothing in the way of a terminal date of usage (Cottier 2004:33). Due to the problematic nature of the available temporal indicators, "it was not always possible to provide secure dated associations" for all of the features (Cottier 2004:33).

Features Associated with the First Fort

A total of 54 features (6, 7, 10, 16, 18, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 40, 51, 52, 69, 72, 75, 76, 79, 90, 93, 95, 101, 103, 106, 107, 109, 124, 125, 126, 133, 134, 135, 136, 137, 139, 140, 141, 142, 145, 146, 147, 151, 172, 175, 179, 181, and 185) were considered as associated with the occupation period of the first fort (Cottier 2004). These include features from both Chase's and Cottier's features. Feature 6 was interpreted by Chase as a powder magazine. It was "a heavy log structure, walled up on all four sides with from eight to ten inch logs" (Chase 1974:12). It was 12 feet square,

and it was held up by 17 substantial timbers (Chase 1974:12). Some of the support timbers measured approximately 15 inches in diameter, but others were smaller and often "adze-hewn or squared on four faces" (Chase 1974:12). The heavy duty nature of this structure led Chase to the conclusion that it was a powder magazine. Powder magazines needed to be as impervious to fire as possible, and they needed to be able to contain an explosion in the event that their contents caught fire. Iron artifacts recovered from this feature included "several badly rusted iron balls measuring from one inch to an inch and a quarter in diameter," and 237 nails (Chase 1974:12; Cottier 2004). Cottier also stated that nine iron canister shot and a sword blade were recovered from this feature (Cottier 2004:73-74). The canister shot were most likely the iron balls that Chase described in his report (Chase 1974). Feature 7 was "a cluster of three large posts inside the southwest bastion" (Chase 1974:18). Chase was not able to clearly interpret this feature. Iron artifacts recovered from this feature included 22 nails. Feature 10 was interpreted as a hearth or fireplace (Chase 1974:19). Iron artifacts recovered from this feature included "a large 18th century type English hoe" (Chase 1974:19). Feature 16 was interpreted as a "pitfall dug at time of 1813 fort", and there were no iron artifacts recovered from it (Chase 1974:20). Feature 18 was interpreted as a "trash filled in footing ditch", and iron artifacts recovered from this feature included 94 nails (Chase 1974:21). Features 25 and 26 were interpreted as portions of the trenches for the south wall of the first fort (Cottier 2004). These were hand dug, and they exhibited signs of flat and pointed shovel blade marks in their bases (Cottier 2004:34). They were dug in sandy soil, and they varied in width from 18 inches to more than 30 inches (Cottier 2004:34). They ranged in depth from approximately 30 inches to over 47 inches (Cottier 2004:34). There were logs that

stood in these trenches, and they "were at least 16 to 18 feet in length" (Cottier 2004:35). Cottier further states that artifacts were not commonly found within the matrix of these trenches, and that the few that were found within this context should be "considered to represent a sealed sample in that the majority of the wall artifacts would have been directly associated with the actual construction of the first fort" (Cottier 2004:35). The iron recovered from feature 25 is presented in tabular form in Table 1, and the iron recovered from feature 26 is reported in tabular form in Table 2.

Feature 28 was interpreted as a square shovel dug post hole, and one cut nail fragment was the only iron artifact recovered from it (Table 3). Feature 29 represented a portion of the trench for the north wall of the first fort. The iron recovered from feature 29 is reported in tabular form in Table 4. Feature 30 was interpreted as a fire pit, and there were no iron artifacts recovered from it. Feature 31 was a one by one meter cross section unit located in the area of the southwest bastion of the first fort. The iron artifacts recovered from this feature are listed in tabular form in Table 5. Feature 32 was interpreted as the south ditch of the first fort. The iron recovered from feature 32 is reported in tabular form in Table 6. Feature 33 was also interpreted as the south ditch of the first fort. The iron recovered from feature 33 is reported in tabular form in Table 7.

Feature 34 was interpreted as a fire pit, and two cut nail fragments were the only iron artifacts recovered from it (see Table 8). Feature 35 was interpreted as "a rotten tree taproot hole" that had been "filled with a wide range of first fort material" (Cottier 2004:45). The iron artifacts recovered from feature 35 are reported in tabular form in Table 9. Feature 36 was interpreted as a portion of the west ditch of the first fort, and 4 cut nail fragments were the only iron artifacts recovered from it (Table 10). Feature 38

was interpreted as a small pit, and 2 cut nail fragments were the only iron artifacts recovered from it (see Table 11). Feature 40 was interpreted as a small pit, and 1 cut nail fragment was the only iron artifact recovered from it (see Table 12). Feature 51 was interpreted by Cottier as a large pit; the iron artifacts from this feature are reported in Table 13. Feature 52 was interpreted as a well, and the iron artifacts recovered from it are reported in tabular form in Table 14. Feature 69 was interpreted as a large pit, and there were no iron artifacts recovered from it. Feature 72 was interpreted as the west wall of the first fort, and the iron artifacts recovered from it are reported in Table 15. Feature 75 was interpreted as small pit, and the iron artifacts recovered from it are reported in Table 16. Feature 76 was interpreted as a small pit, and the iron artifacts recovered from it are reported in Table 17. Feature 79 was interpreted as a well, and a single cut nail fragment was the only iron artifact recovered from it. It should be noted that due to time constraints, this feature was not fully excavated; it was only cross sectioned to rule out the possibility that it was merely a surface stain (Cottier 2004). Feature 90, he interpreted as a small pit, and there were no iron artifacts recovered from it. Feature 93 was interpreted as a large pit, and the iron artifacts recovered from it are listed in Table 18. Feature 95 was interpreted as a small pit, and no iron artifacts were recovered from it. Feature 101 was interpreted as the east wall of the first fort, and the iron artifacts recovered from it are reported in Table 19. Feature 103 was interpreted as the north ditch of the first fort, and the iron artifacts recovered from it are listed in Table 20.

Feature 106 was interpreted by Cottier as a medium sized pit, and the iron artifacts recovered from it are reported in Table 21. Feature 107 was interpreted as a square shovel dug post hole, and a single un-cinched cut nail fragment was the only iron

artifact recovered from it (see Table 22). Feature 109, he interpreted as a small pit, and single whole un-cinched cut nail that ranged from fifty one hundredths of an inch to one inch in length was the only iron artifact recovered from it (see Table 23). Feature 124 was interpreted as a shallow lens, and a single un-cinched cut nail fragment was the only iron artifact recovered from it (Table 24). Feature 125 was interpreted as a large pit, and the iron artifacts recovered from it are listed in Table 25. Feature 126 was interpreted as a shallow lens, and the iron artifacts recovered form it are reported in Table 26. Feature 133 was interpreted as a possible powder magazine. The iron artifacts recovered from this feature are reported in Table 27. Feature 134 was interpreted as a shallow lens. The iron artifacts recovered from this feature are reported in Table 28. Feature 135 was interpreted as a square post hole, and there were no iron artifacts recovered from it. Feature 136 was interpreted as the north ditch for the first fort, and the iron artifacts recovered from it are reported in Table 29. Feature 137 was interpreted as a small pit, and the iron artifacts recovered from are reported in Table 30. Feature 139 was interpreted as a large pit, and the recovered iron artifacts are listed in Table 31.

Feature 140, Cottier interpreted as a small pit, and the recovered iron artifacts are listed in Table 32. Feature 141 was interpreted as a large square post pit, and one un-cinched cut nail fragment was the only iron artifact recovered (Table 33). Feature 142 was interpreted as a shallow lens, and the recovered iron artifacts are listed in Table 34. Feature 145 was interpreted as a small pit. Recovered iron artifacts are presented in Table 35. Feature 146 was interpreted as the north wall of the first fort. The only iron artifacts recorded for this feature were two un-cinched cut nail fragments. It should be noted that this feature represented a sample only; it did not represent the contents of this wall in its

entirety (see Table 36). Feature 147 was interpreted as the east wall of the first fort. The iron artifacts recovered from this feature are presented in Table 37. Feature 151 was interpreted as a large pit. The iron artifacts recovered from this feature are presented in Table 38.

Feature 172 was interpreted as a small trench that "may have originally served as a necessary or privy area" (Cottier 2004:40). A single whole un-cinched cut nail that ranged from one and fifty one hundredths of an inch to two inches in length was the only iron artifact recovered from it (see Table 39). Feature 175 was interpreted as a shallow ditch that "may have originally served as a necessary or privy area" (Cottier 2004:40). There were three whole un-cinched cut nails recovered from this feature. Of these, two ranged from one and one hundredths of an inch to one and one half inch in length, and one ranged from two and fifty one hundredths of an inch to three inches in length. In addition, there was one un-cinched cut nail fragment recovered from this feature (Table 40). Feature 179 was interpreted as a brick foundation that was located inside the southwest bastion of the first fort and "was composed of only non-vitrified brick" (Cottier 2004:40). The iron artifacts recovered from this feature are reported in Table 41. Feature 181 was interpreted as a portion of one of the walls of the first fort. The iron artifacts recovered from this feature are reported in Table 42. Feature 185 was interpreted as a large pit, and the recovered iron artifacts from it are reported in Table 43.

Features Associated with the Indian Factory

A total of 23 features (2, 3, 12, 15, 19, 20, 37, 47, 49, 56, 57, 67, 70, 71, 98, 100, 108, 118, 119, 121, 128, 183, and 184) have all been identified as associated with the occupation period of "the Indian Factory/Indian Agency (1816-1820)" (Cottier 2004:33).

Feature 2 was interpreted as an Indian trash pit. The iron artifacts recovered from this feature included eight nails (Cottier 2004). Feature 3 was interpreted as "an Indian fire pit dating to Trading Factory period or later" (Chase 1974:17). The iron artifacts recovered from this feature included three nails (Chase 1974; Cottier 2004). Feature 12 was interpreted as an "Indian cooking pit" (Chase 1974:19). This feature contained no iron artifacts (Chase 1974). Feature 15 was interpreted a trash pit that was possibly dug by Native Americans (Chase 1974). Iron artifacts recovered from this feature included: "a sear spring (musket), a fork handle, a side plate (musket), an iron mess cup, a snuff can fragment, one canister or grape shot of iron, a mess pan,… and a perforated musket side plate" (Chase 1974:20). In addition, Dr. Cottier lists 233 nails from this feature (Cottier 2004). Feature 19 was interpreted as a ruin of a brick structure (Cottier 2004; Chase 1974). Iron artifacts recovered from this feature included 536 nails and "an iron mess cup with handle" (Chase 1974:21). Feature number 20 was interpreted by Cottier as an Indian pit (Chase 1974:21). Iron artifacts recovered from this feature included part of a kettle and two nails (Chase 1974:21). Features 37 and 47 were interpreted as small pits, and there were no iron artifacts recovered from them.

Feature 49, Cottier interpreted as a large pit; recovered iron artifacts are listed in Table 44. Feature 56 was interpreted as a trash filled wash. The Iron artifacts recovered from this feature are tabulated in Table 45. It should be noted that this feature contained materials associated with both the Indian Factory and the second fort (Cottier 2004:42). Feature 57 was interpreted as a large clay lens, and there were no iron artifacts recovered from it. Feature 67 was interpreted as a trash filled wash. Recovered iron artifacts are listed in Table 46. It should be noted that this feature contained materials also associated

with the Indian Factory and the second fort (Cottier 2004:42). Feature 70 was interpreted as a shallow lens, and the recovered iron artifacts are listed in Table 47. It should be noted that this feature is suspected of having some relation to the first fort occupation period as well. Feature 71 was interpreted as a stone foundation. The iron artifacts recovered from this feature are listed in Table 48. Feature 98 was interpreted as a clay concentration, and two un-cinched cut nail fragments were the only iron artifacts recovered from it (see Table 49). Feature 100 was interpreted as a corncob pit, and there were no iron artifacts recorded for it.

Feature 108, Cottier interpreted as a small pit. The iron artifacts recovered from this feature are listed in Table 50. The awl from this feature was likely a scratch awl or what is known as a scribe. A scribe is "a sharp-pointed steel marking pin used to scratch a line onto a work-piece" (Weygers 1997:299). Feature 118 was interpreted as a large pit, and the iron artifacts recovered from it are reported in Table 51. Feature 119 was interpreted as a large pit, and five un-cinched cut nail fragments were the only iron artifacts recovered from it (Table 52). Feature 121 was interpreted as a corncob pit, and there were no iron artifacts recovered from it. Feature 128 was interpreted as a shallow lens, and a single un-cinched cut nail fragment that weighed nine tenths of a gram was the only iron artifact recovered from it (see Table 53). Feature 183 was interpreted as an Indian Burial. It contained "the remains of a child of approximately five years of age…; only skull fragments, teeth, a fragmentary mandible, and a possible fragment of a long bone" were recovered from this feature (Cottier 2004:41). This feature was disturbed by the construction of a wall of the second fort (1825) (Cottier 2004). Feature 184 was

interpreted as a rock wall foundation. The iron artifacts recovered from this feature are reported in Table 54.

Features Associated with the Second Fort

A total of 45 features (1, 4, 5, 8, 9, 13, 14, 17, 39, 43, 58, 60, 61, 62, 64, 65, 92, 94, 99, 102, 110, 111, 113, 115, 116, 117, 123, 127, 129, 149, 154, 155, 158, 161, 162, 164,165, 166, 167, 168, 170, 176, 177, 178, and 179) were all associated with the occupation period of the second fort (1825-1840) (Cottier 2004:33). This includes both Chase's and Cottier's features. Feature 1 was "described as a fallen brick pile partially embedded in dried clay", which was interpreted to be a ruin of "a chimney (partly 'run up with sticks and clay' as most structure chimneys were in the 1820s and 1830s)" (Chase 1974:16). The iron artifacts recovered from this feature included: "a bolt six inches in length; a large locknut; a back of a pad lock;… and 36 nails of five known types in use at the time" (Chase 1974:16). David Chase deduced that this feature was built outside the walls of the second fort sometime between 1825 and 1830 (Chase 1974). Feature 4 was interpreted as a fire pit, and the iron artifacts recovered from this feature included two nails (Chase 1974; Cottier 2004). Feature 5 was a brick structure interpreted by David Chase as "possibly a cookhouse or storage room" (Chase 1974:17). Iron artifacts recovered from this feature included: "a large harness ring; a "Y" shaped iron hook,… an iron knife blade; a kettle fragment;" and "47 nails of all sizes" (Chase 1974: 17). Cottier states that this feature is most likely the same as Feature 164 from his excavations (Cottier 2004). Feature 8 was a brick ruin that was interpreted as a "chimney of house dating to about 1830" (Chase 1974:18). Iron artifacts recovered from this feature included 17 nails. Feature 9 was "a cluster of artifacts" with "no discernible feature

outline" (Chase 1974:18). It was interpreted as a trash pit. Iron artifacts recovered from this feature included: 20 hand wrought nails and one iron knife blade (Chase 1974:18). Feature 13 was interpreted as a trash pit. Iron artifacts recovered from this feature included: 16 nails, a door hinge, and a keg hoop (Chase 1974: 19). In addition, Dr. Cottier states that "two… iron canister shot" and "two iron canister cans were recovered by Chase from Feature 13" (Cottier 2004:73).

Feature 14 was interpreted by Cottier as a trash pit. Iron artifacts recovered from this feature included: "a door pintle,… an iron key, a horseshoe,… and a musket bayonet, Model of 1812" (Chase 1974:19). Dr. Cottier also lists 264 nails for this feature (Cottier 2004). There were additional iron artifacts listed in the database upon completion of analysis; these are listed in Table 55. Feature 17 was interpreted as a "footing for [a] house corner" (Chase 1974:21). Iron artifacts recovered from this feature included six nails (Cottier 2004:69). Feature 39 was interpreted as a medium sized pit. The iron artifacts recovered from this feature are listed in Table 56. Feature 43 was interpreted as a "sheet midden… created… by the placement of debris from the destruction of the first fort at the time of the second fort construction" (Cottier 2004:35). Iron artifacts recovered from this feature are listed in Table 57. Feature 58 was interpreted as a small pit, and the iron artifacts recovered from this feature are listed in Table 58. Feature 60 was interpreted as a building footing, and there were no iron artifacts recovered from it. Feature 61 was interpreted as shallow lens, and there were no iron artifacts recovered from it. It should be noted that Feature 61 may have been associated with the Indian Factory occupation. Feature 62 was interpreted as a small pit, and four un-cinched cut nail fragments were the only iron artifacts recovered from it (Table 59). Feature 64 was

interpreted as a shovel dug hole/disturbance from the time of the second fort, and there were no iron artifacts recovered from it. Feature 65 was interpreted as a shallow lens, and there were no iron artifacts recovered from it. Feature 92 was interpreted as the north wall of the second fort. The iron artifacts recovered from this feature are listed in Table 60. Feature 94 was interpreted as a lead concentration, and no iron artifacts were recovered from it. Feature 99 was interpreted as a concentration of iron spikes that "were pulled into the wall trench by the decay of the curtain posts" (Cottier 2004:38). Two whole un-cinched cut spikes were the only iron artifacts recovered from this feature. Of these, one ranged from four and one hundredths of an inch to four and one half inch in length, and the other ranged from five and fifty one hundredths of an inch to six inches in length (see Table 61).

Feature 102 was interpreted as a large pit, and the iron artifacts recovered from it are listed in Table 62. Feature 110 was interpreted as brick concentration that was "used to fill over a portion of the southwest bastion of the first fort" (Cottier 2004:44). The iron artifacts recovered from this feature are listed in Table 63. Feature 111 was interpreted as a large pit, and a single un-cinched cut nail fragment was the only iron artifact recovered from it (see Table 64). Feature 113 was interpreted as a shallow lens. One whole un-cinched cut nail that ranged from one and one hundredths of an inch to one and one half inch in length and three un-cinched cut nail fragments were the only iron artifacts recovered from it (see Table 65). Feature 115 was interpreted as a shallow lens, and there were no iron artifacts recovered from it. Feature 116 was interpreted as the east wall of the second fort, and the iron artifacts recovered from this feature are listed in Table 66. Feature 117 was interpreted by Cottier as the north wall of the second fort. The iron

artifacts recovered from this feature are listed in Table 67. Feature 123 was interpreted as a chimney mound made up of "a single non-vitrified brick and local sandstone… just north of the second fort northeast bastion" (Cottier 2004:44). The iron artifacts recovered from this feature are listed in Table 68. Feature 127 was interpreted as a rock/brick concentration. The iron artifacts recovered from this feature are listed in Table 69. Feature 129 was interpreted as the west wall of the second fort. The iron artifacts recovered from this feature are listed in Table 70. Feature 149 was interpreted as a shallow lens, and there were no iron artifacts recovered from it. Feature 154 was interpreted as brick/sandstone footing, and no iron artifacts were recovered from it. Feature 155 was interpreted as a brick/sandstone footing, and no iron artifacts were recovered from it. Feature 158 was interpreted as a brick concentration, and no iron artifacts were recovered from it.

Feature 161 was interpreted by Cottier as a brick/stone footing. There were two whole un-cinched cut nails recovered from this feature, and they both ranged from one and one hundredths of an inch to one and one half inch in length. There was one whole cinched cut nail recovered from this feature, and it ranged from one and one hundredths of an inch to one and one half inch in length. The length between the head and the cinch was fifty two hundredths of an inch. In addition, there were three un-cinched cut nail fragments recovered from this feature (see Table 71). Feature 162 was interpreted as a brick concentration. From this feature, five whole un-cinched cut nails were recovered. Of these, one ranged from one and one hundredths of an inch to one and one half inch in length, two ranged from one and fifty one hundredths of an inch to two inches in length, and two ranged from two and one hundredths of an inch to two and one half inch in

length. In addition, seven un-cinched cut nail fragments were recovered from this feature (see Table 72).

Feature 164 was interpreted as brick/stone concentration. It should be noted that this feature was divided into three other features: 165, 166, and 167. From Feature 164, 36 whole un-cinched cut nails were recovered. Of these, two ranged from fifty one hundredths of an inch to one inch in length, eleven ranged from one and one hundredths of an inch to one and one half inch in length, sixteen ranged from one and fifty one hundredths of an inch to two inches in length, five ranged from two and one hundredths of an inch to two and one half inch in length, and two ranged from two and fifty one hundredths of an inch to three inches in length. One whole cinched cut nail was recovered from this feature, and it ranged from two and fifty one hundredths of an in inch to three inches in length. The length between the head and the cinch was one and one hundred, five thousandths of an inch. In addition, there were 46 un-cinched cut nail fragments, nine miscellaneous iron fragments that weighed a total of 44.3 grams, one grapeshot ball that weighed 36.9 grams, and one iron wire fragment that weighed four and two tenths of a gram recovered from this feature (see Table 73). Feature 165 was interpreted as the initial portion of Feature 164, and it consisted of a sandstone/brick concentration. There was one whole un-cinched cut nail recovered from this feature, and it ranged from one and one hundredths of an inch to one and one half inch in length. In addition, there were four un-cinched cut nail fragments, and one unidentified iron object that weighed seventeen and two tenths of a gram recovered from this feature (see Table 74). Feature 166 was interpreted as a portion of Feature 164 that was subsequent to the portion that comprised Feature 165. From this feature, eight whole un-cinched cut nails were

recovered. Of these, one ranged from one and one hundredths of an inch to one and one half inch in length, five ranged from one and fifty one hundredths of an inch to two inches in length, and two ranged from two and one hundredths of an inch to two and one half inch in length. There were also two un-cinched cut nail fragments recovered from this feature (see Table 75). Feature 167 represented as a tertiary portion of Feature 164; this portion was interpreted as a brick/sandstone concentration. No iron artifacts were recovered from this feature. Feature 168 was interpreted as small pit/shovel disturbance, and one whole un-cinched cut nail that ranged from one and one hundredths of an inch to one and one half inch in length was the only iron artifact recovered from it (see Table 76). Feature 170 was interpreted as a small pit. The iron artifacts recovered from this feature are listed in Table 77.

Feature 176 was interpreted as a portion of the second fort's urinal. This feature was the portion that was outside of the fort wall; it was a trench through which the excrement drained down the slope away from the fort wall. There were no iron artifacts recovered from this feature. Feature 177 was interpreted as a charcoal log. There were three whole un-cinched cut nails recovered from this feature. Of these, one ranged from one and one hundredths of an inch to one and one half inch in length, and two ranged from two and fifty one hundredths of an inch to three inches in length. One whole cinched cut nail was recovered from this feature, and it ranged from fifty one hundredths of an inch to one inch in length. The length between the head and the cinch was sixty one hundredths of an inch. In addition, there were seven un-cinched cut nail fragments recovered from this feature (see Table 78). Feature 178 was interpreted as the portion of the second fort's urinal that was located inside the fort wall. This is the probable location

where the soldiers urinated on the fort wall under which the excrement drained down the hill outside of the fort via a trench (Feature 176). The only iron artifact recovered from this feature was a whole un-cinched cut nail, and it ranged from two and one hundredths of an inch to two and one half inch in length (see Table 79).

Feature Associated with Both the First Fort and the Second fort

Feature 182 was interpreted by Cottier as a powder magazine, and it consisted of components from both the first and the second fort. The pit which comprised the magazine was associated with the first fort, and a clay area over this pit was associated with the second fort. The iron artifacts recovered from this feature are listed in Table 80.

Features with an Undetermined Temporal Association

A total of 55 features (11, 22, 41, 42, 44, 45, 46, 48, 50, 53, 54, 55, 59, 63, 66, 68, 73, 74, 77, 78, 80, 81, 82, 83, 84, 87, 88, 89, 91, 96, 97, 104, 114, 120, 122, 130, 131, 132, 138, 143, 144, 148, 150, 152, 153, 156, 157, 159, 160, 163, 169, 171, 173, 174, and 180) were all features whose associations to the occupations of the Fort Mitchell site were undetermined. Feature 11 was a pit with an indiscernible purpose. This feature contained no artifacts, and it was located beneath Feature 5 (Chase 1974). Feature 22 was interpreted as a trash pit, and the iron artifacts recovered from it included “a portion of a large iron cooking pot” (Chase 1974:22). A definitive date for this feature was never established, but David Chase suspected it to be related to the first fort due to “its nearness to the northeast bastion of” that fort (Chase 1974:22).

Feature 41 was interpreted by Cottier as a small pit, and the iron artifacts recovered from it are listed in Table 81. Feature 42 was interpreted as a shallow lens, and the iron artifacts recovered from it are listed in Table 82. Feature 44 was interpreted as a

fire pit, and four barrel band fragments were the only iron artifacts recovered from it (see Table 83). Feature 45 was interpreted as a shallow lens/clay concentration, and no artifacts were recovered from it. Feature 46 was interpreted as a fire pit. One whole un-cinched cut nail that ranged from one and one hundredths of an inch to one and one half inch in length was the only iron artifact recovered from it (see Table 84). Feature 48 was interpreted as a clay concentration, and no iron artifacts were recovered from it. Feature 50 was interpreted as a small pit. Two cut nail fragments were the only iron artifacts recovered from it (see Table 85) (Cottier 2004).

Feature 53 was interpreted by Cottier as a medium sized pit. There were four whole un-cinched cut nails recovered from this feature. Of these, two ranged from one and fifty one hundredths of an inch to two inches in length, and the other two ranged from two and fifty one hundredths of an inch to three inches in length. In addition, there were: four cut nail fragments, one iron mass that weighed ten and six tenths of a gram, and one iron grape shot ball that weighed 31.6 grams recovered from this feature (see Table 86). Feature 54 was interpreted as a stone footing, and three cut nail fragments that weighed five and eight tenths of a gram were the only iron artifacts recovered from it (see Table 87) (Cottier 2004).

Features 55 and 59 were interpreted by Cottier as small pits, and there were no iron artifacts recovered from them. Features 63 and 66 were interpreted as shallow lenses, and there were no iron artifacts recovered from them. Feature 68 was interpreted as a small pit/ shovel disturbance, and there were no iron artifacts recovered from it. Feature 73 was interpreted as a rock hearth, and there were no iron artifacts recovered from it. Feature 74 was interpreted as a small pit. There was one whole un-cinched cut nail

recovered from this feature, and it ranged from two and fifty one hundredths of an inch to three inches in length. In addition, there was one split spike/nail that weighed 28.7 grams recovered from this feature (see Table 88). Feature 77 was interpreted as a shallow lens, and there were no iron artifacts recovered from it (Cottier 2004).

Feature 78 was interpreted by Cottier as a shallow lens. There was one whole cinched cut nail recovered from this feature, and it ranged from one and one hundredths of an inch to one and one half inch in length. The length between the head and the cinch was fifty six hundredths of an inch. In addition, there was one un-cinched cut nail fragment that weighed two and three tenths of a gram recovered from this feature (see Table 89). Feature 80 was interpreted as a shallow lens, and there were no iron artifacts recovered from it. Feature 81 was interpreted as a small pit/shovel disturbance, and no iron artifacts were recovered from it. Features 82, 83, 84, 87, 88, and 89 were interpreted as stone footings, and there were no iron artifacts recovered from them. Feature 91 was interpreted as a pit from a large square post; one whole un-cinched cut nail that ranged from one and one hundredths of an inch to one and one half inch in length was the only iron artifact recovered from it (see Table 90). Feature 96 was interpreted as a shallow lens. The iron artifacts recovered from this feature included nails, and they are listed in Table 91(Cottier 2004).

Feature 97 was interpreted by Cottier as a stone footing, and a single whole un-cinched cut nail that ranged from two and fifty one hundredths of an inch to three inches in length was the only iron artifact recovered from it (see Table 92). Feature 104 was interpreted as a small pit, and the only iron artifact recovered from it was a single cut nail fragment that weighed one and eight tenths of a gram (see Table 93). Feature 114 was

interpreted as a shallow lens, and two un-cinched cut nail fragments were the only iron artifacts recovered from it (see Table 94). Feature 120 was interpreted as a small pit/shovel disturbance, and no iron artifacts were recovered from it. Feature 122 was interpreted as a shallow lens, and there were no iron artifacts recovered from it. Feature 130 was interpreted as a medium sized shovel dug pit/disturbance. There were four whole un-cinched cut nails recovered from this feature. Of these, three ranged from one and one hundredths of an inch to one and one half inch in length, and one ranged from one and fifty one hundredths of an inch to two inches in length. In addition, there were two un-cinched cut nail fragments recovered from this feature (see Table 95) (Cottier 2004).

Feature 131 was interpreted by Cottier as a stone footing, and two un-cinched cut nail fragments were the only iron artifacts recovered from it (see Table 96). Feature 132 was interpreted as a stone footing, and one un-cinched cut nail fragment was the only iron artifact recovered from it (see Table 97). Feature 138 was interpreted as a small pit, and there were no iron artifacts recovered from it. Feature 143 was interpreted as a small pit/shovel disturbance. There were two whole un-cinched cut nails recovered from this feature, and they both ranged from two and one hundredths of an inch to two and one half inch in length. In addition, there was one un-cinched cut nail fragment and thirteen wire fragments that weighed a total of five and seven tenths of a gram recovered from this feature (see Table 98). Feature 144 was interpreted as a small pit. There were two whole un-cinched cut nails recovered from this feature. Of these, one ranged from one and fifty one hundredths of an inch to two inches in length and one ranged from two and one hundredths of an inch to two and one half inch in length (see Table 99) (Cottier 2004).

Feature 148 was interpreted by Cottier as a shallow lens. There were two un-cinched cut nails recovered from this feature. Of these, one ranged from one and one hundredths of an inch to one and one half inch in length, and the other one ranged from one and fifty one hundredths of an inch to two inches in length. In addition, there were nine un-cinched cut nail fragments and one possible knife blade that weighed twelve and six tenths of a gram recovered from this feature (see Table 100). Features 150 and 152 were interpreted as large pits, and there were no iron artifacts recovered from them. Features 153, 156, and 157, were interpreted as stone footings, and no iron artifacts were recovered from them. Feature 159 was interpreted as a stone footing. There were four whole un-cinched cut nails recovered from this feature. Of these, one ranged from one and fifty one hundredths of an inch to two inches in length, and three ranged from two and one hundredths of an inch to two and one half inch in length. In addition, there were three un-cinched cut nail fragments recovered from this feature (see Table 101) (Cottier 2004).

Feature 160 was interpreted by Cottier as a large pit, and no iron artifacts were recovered from it. Feature 163 was interpreted as a clay concentration. There were two whole un-cinched cut nails recovered from this feature, and they both ranged from one and one hundredths of an inch to one and one half inch in length. In addition, there were: two un-cinched cut nail fragments, seven miscellaneous iron fragments that weighed a total of two and six tenths of a gram, and two sheet iron fragments that weighed a total of four and one tenths of a gram recovered from this feature (see Table 102). Features 169 and 171 were interpreted as small pits, and no iron artifacts were recovered from them. Feature 173 was interpreted as a large pit/shovel disturbance, and there were no iron

artifacts recovered from it. Feature 174 was interpreted as small pit/shovel disturbance, and no iron artifacts were recovered from it (Cottier 2004).

Feature 180 was interpreted by Cottier as a small pit. There was a total of three whole un-cinched cut nails recovered from this feature. Of these, one ranged from one and fifty one hundredths of an inch to two inches in length, and two ranged from two and one hundreds of an inch to two and one half inch in length. There was one whole cinched cut nail recovered from this feature, and it ranged from two and fifty one hundredths of an inch to three inches in length. The length between the head and the cinch was one and twenty eight hundredths of an inch. In addition, there were two un-cinched cut nail fragments recovered from this feature (see Table103) (Cottier 2004).

Feature Associated with Neither the Forts Nor the Indian Factory

Feature 21 was interpreted as "quite a small pit" (Chase 1974:22). There were no iron artifacts recovered from it (Chase 1974). Cottier later identified this feature as an Archaic Period Native American hearth (Cottier 2004).

Features Associated with the Indian Factory and the Second Fort

There were two features that were associated "perhaps with both the Indian Factory and also the second fort (Features 85 and 105)" (Cottier 2004:43). Feature 85 was interpreted as a large pit. The iron artifacts recovered from this feature are listed in Table 104. Feature 105 was interpreted as a large pit, and the iron artifacts recovered from it are listed in Table 105. These pits were large enough that artifacts were likely deposited in them beginning in the Factory period through the beginning of the second fort period.

Modern Features

There were two features (86 and 112) recorded for the Fort Mitchell site that were created by modern activities. Feature 86 was the result of a training exercise conducted by David Chase prior to the commencement of his excavations and for the purpose of teaching his crew members excavation techniques. This feature was an archaeological unit that measured ten feet by ten feet (Cottier 2004). The iron artifacts recovered from this feature are listed in Table 106. Feature 112 was interpreted as "a sizable 'looters pit' excavated in the area of the northeast bastion of the second fort" (Cottier 2004:45). The base of this feature was filled with a mixture of garbage such as plastic bags, beer cans, coat hangers, tin cans, and plastic food wrappers of various types. There were a few artifacts related to the fort occupations reported for this feature, and they include nails, pottery, and pane glass. None of this material was analyzed at the time of this study, and no quantities are reported.

CHAPTER 7: DATA DESCRIPTION

The purpose of this chapter is to take the data that represent all the iron artifacts recovered from the Fort Mitchell site and examine it for patterns. Analysis of these artifacts was guided by the functional categories suggested by Stanley South. "These functional categories provide a useful mode of analysis, and often suggest cultural patterns not readily evident" from inventorying the artifacts alone (Cottier et al. 2008:7). This chapter takes into account both the artifacts from the features and the artifacts recovered from the general excavation. The South functional groups represented by the artifacts from this site are: Kitchen, Architecture, Furniture, Arms, Clothing, Personal, and Activities. A Miscellaneous group has been added to this study for artifacts that are not easily placed into a particular group (Cottier et al. 2008). In this chapter, I discuss the functional groups in terms of the overall iron artifact count from the site. I will discuss the functional groups by their association to the three principle occupation periods at Fort Mitchell in Chapter 8.

Kitchen Group

The Kitchen group consisted of a total of 1,089 artifacts from three artifact classes of this grouping. The classes that are represented in the Kitchen group include tableware and kitchenware. The tableware class of iron artifacts consisted of a total of 22 artifacts. Of these, there were: two fork handles, 14 two tine fork fragments (see Figures 70-80), three whole two tine forks, one two tine fork made of twisted wire (see Figure 169), one whole spoon (see Figure 16), and one table knife blade (see Figure168) (Table 107).

The kitchenware class exhibited a high degree of diversity. This class consisted of a total count of 1,067 artifacts. There were 127 fragments of iron bowls, and of these, 103 were body shards and 24 were rim shards. There were two iron bucket fragments recovered. Of these, one was a folded rim, and one was a wire handle. There were 69 cut iron fragments that may have once been kettle fragments (cut iron/kettle) recovered. There were six Dutch Oven fragments and one fragment of a Dutch Oven lid recovered (see Figure 62). There were a total of 788 cast iron kettle fragments recovered. Of these, 16 were kettle feet, one was a noticeably small kettle foot (see Figure 92), 769 were miscellaneous kettle fragments, one was a rim shard with a handle present that weighed 175 grams (see Figures 93 and 94), and one rim fragment. There was a fragment recovered that was part of either a kettle or a Dutch Oven, but it was not sufficient in size to be diagnostic. There was one fragment recovered that was either part of a pot or a kettle, but there was not enough to be diagnostic. There was one handle recovered from what was possibly a bucket, and 65 sheet iron fragments that were possibly from kettles. There were six utensil fragments recovered from the excavations. Of these, there was one intact handle, two handle fragments (see Figure 122), one whole handle with slabs (see Figure 123), and two handles from possible utensils (see Table 108).

Architecture Group

The Architecture group contained the highest artifact count of all the groups represented in the data. A higher Architecture group to Kitchen group ratio would be expected on frontier sites given the limited purpose of many frontier sites (South 1977:149). The Architecture group consisted of a total of 48744 artifacts from three

distinct classes. The classes that are represented in the architectural group are: class eleven: nails, class twelve: spikes, and class thirteen: construction hardware.

The nails class consisted of the highest artifact count. There were 47,612 artifacts in this class, and they are presented in tabular form in Table 109. There were twelve whole modern round (wire) nails recovered; these are also reported in Table 109. The invention of the round (wire) nail post-dates the occupation periods considered by this study. "The round-headed, fully machine-made wire nail we know today only dates to the 1850's" (Orser 2004:102). In addition, there was: one coiled nail (see Figure 56 and 57), one hand wrought cinched nail that ranged in length from one and fifty one hundredths of an inch to two inches (see Figure 17), one large nail fragment that consisted of the head and a portion of the shank, one fragment of a possible cut nail, three whole hooked cut nails, 43 whole un-cinched cut tacks, three whole cinched cut tacks, six cut tack fragments, and one small tack that had two prongs (shanks) and a hole through the head (see Figure 120) recovered from the excavations (see Table 109).

The spikes class consisted of a total count of 1,048 artifacts. For the purposes of this study a spike will be defined as "a very large nail; *specif*: one three or more inches long and often of square section (as a barge spike)" (Webster's Third New International Dictionary). There were 772 whole un-cinched cut spikes recovered. These are reported in Table 110. There was one whole un-cinched hand wrought rose head spike recovered; it ranged from four and fifty one hundredths of an inch to five inches in length (see Figure 145). A rose head "generally had five hammered facets spreading out and down from a central point" (Hume 1970:252). There were 193 whole cinched cut spikes

recovered. These are listed in Table 111. Selected specimens are illustrated on Figure 121.

The construction hardware class consisted of a total artifact count of 84. There was one meat hook recovered; it weighed 41.9 grams (see Figure 18). There was one bracket fragment recovered. There was one cut and possibly folded iron strip with what was likely a spike head, but it was too corroded to positively identify. This weighed 33 grams. There were four large eye hooks recovered, and they weighed: one and four tenths of a gram, seven tenths of a gram, one half gram, and one and two tenths of a gram. There was one whole hinge recovered, and it weighed 35.4 grams (see Figure 133). There was one hinge pintle fragment recovered; it weighed 110.7 grams (see Figures 40 and 41). There were eight whole hinge pintles recovered; the total weight for these was not determined (see Figures 32, 33, 148, 149, 150 and 151). There was one hook fragment recovered, and it weighed eight and one tenths of a gram. There were three whole hooks recovered; they weighed a total of 122.9 grams. There were two door/gate latch hooks recovered; they weighed a total of 57.2 grams (see Figures 58 and 59). There was one latch arm recovered, and it weighed 22.9 grams. There was one padlock latch recovered; it weighed 23.1 grams (see Figure 110). There was one nail hook recovered, and it weighed two and one half gram. There were four padlock fragments recovered; they weighed a total of 244.4 grams (see Figures 43, 109, 111 and 142). There was one pad lock hinge recovered, and it weighed 35.2 grams. There was one whole padlock recovered; it weighed a total of 71.7 grams. There were two whole padlocks that had brass covers over the key holes recovered; they weighed a total of 303.5 grams (see Figure 45). These padlocks appear to be British made. The locks that have legible marks

on the keyhole covers exhibit the royal cypher GR under a crown, but the company names are not legible on any of them. There was one fragment of what may have been a rod or spike recovered, and it weighed seven and seven tenths of a gram. There was one "S" hook recovered; it weighed seven tenths of a gram (see Figure117). There were four large staples recovered; the total weight for these was not determined (see Figures 61, 107, and 108). There was one long staple recovered, and it weighed 96.9 grams. There was one medium staple recovered; the weight for it was not determined. There were 24 staples recovered that were not assigned a sub-type value, and the weight of these was not recorded. There was one short staple recovered, and it weighed 50.4 grams. There were fifteen small staples recovered; the total weight for them was not recorded. One of these small staples was most likely used with hook as part of a door latch (see Figures 58-60). There was one whole strap hinge recovered; the weight for it was not determined (see Figures 30 and 31). There was one whole wall hook recovered (see Figures 36 and 37); it weighed 103.9 grams (see Table 111).

Furniture Group

The Furniture group consisted of four artifacts, and the only class represented was furniture hardware. There was one cotter pin hinge that may have once been part of a small box recovered, and it weighed nine and nine tenths of a gram. There was one cut tack fragment with a brass head recovered, and it weighed one and eight tenths of a gram. The brass head is indicative of upholstery hardware. There were two small ring handles that were likely once part of a small tin box recovered, and they weighed a total of one and seven tenths of a gram. The cotter pin hinge and the two small ring handles may have been part of the same container; as they were recovered from units that were in close

proximity to one another. The coordinates of the southeast corner of the one by one meter unit from which the cotter pin hinge was recovered from were 156 North 332 East. The coordinates of the southeast corner of the one by one meter unit from which the small ring handles were recovered were 151 North 329 East. The cotter pin hinge was five meters north and three meters east of the ring handles (see Table 112).

Arms Group

The Arms group consisted of a total of three artifacts, and the only class represented was class number eighteen: gun parts. There was one bullet worm recovered, and the weight for it was not recorded. A bullet worm is a tool that is used to remove a lead projectile from a muzzle loading type firearm. There was one gun tool recovered, and it weighed 33.8 grams. This was likely a combination tool that served as a bullet worm and screw driver, but its deteriorated condition prevented a positive identification. The only other artifact recovered that fit into this group was one rifle sling attachment that weighed eight and four tenths of a gram (see Table 113).

Clothing Group

The Clothing group consisted of a total of 128 artifacts. The classes that are represented in the clothing group are buckles, buttons, scissors, and other. The un-numbered class is an expansion on Stanley South's list of classes, and it was deemed necessary due to the fact that the artifacts included in it were limited in number and diverse in type.

The buckles class consisted of a total of 101 artifacts. There were six buckle fragments recovered, and they weighed a total of 22.5 grams. There was one buckle that was in the shape of a half circle, and it weighed three and one half gram (see Figure 53).

There were 39 miscellaneous buckles recovered, and the total weight for them was not determined. There was one multi-tanged buckle fragment recovered, and it weighed one and one tenth of a gram. There was one buckle recovered that exhibited one rounded side recovered, and it weighed three and nine tenths of a gram (see Figure 126). There were 24 single tang buckles recovered (see Figure 132). There was one single tang buckle fragment recovered, and it weighed eight and one tenths of a gram. There was one single tang buckle with a brass guard recovered; it weighed two grams (see Figure 127). There was one small buckle recovered weighing 29 grams (see Figure 55). There was one small buckle fragment recovered. There was one buckle tang recovered, and it weighed three and six tenths of a gram. There were fourteen buckles with three tangs recovered (see Figures 54, 125,128, and 131). There were seven buckles with two tangs recovered (see Figures 129 and 130). There were two fragments of buckles that had two tangs recovered, and they weighed a total of six and six tenths of a gram. There was one buckle with a brass cross bar recovered; it weighed three and one tenths of a gram (Table 114).

The buttons class consisted of a total of eleven artifacts. There were two buttons with four holes in them recovered; they weighed a total of four and nine tenths of a gram. There was one fragment of a button that had four holes in it recovered; it weighed six tenths of gram. There were two button fragments recovered; they weighed a total of one and seven tenths of a gram. There were four miscellaneous buttons recovered; they weighed a total of five and eight tenths of a gram. There were two buttons that had shanks on them recovered; they weighed a total of six and seven tenths of a gram. It should be noted that these classifications includes only those buttons recovered that were

made of iron (see Table 115). This style of button reflects the typical button for the work uniform of the American Military from the War of 1812 period.

The scissors class consisted of a total of four artifacts. There were two scissor fragments recovered; they weighed a total of fourteen and eight tenths of a gram. There were two whole scissors recovered (see Figure 42); they weighed a total of 42.7 grams (see Table 116). There were twelve other miscellaneous artifacts of various types in the clothing group. There was one belt holder fragment recovered; it weighed one and one tenths of a gram. There were eight eyes that were once part of hook and eye fasteners recovered; a total weight for these was not determined (see Figures 63-69). There was one fragment of what was possibly a sewing needle recovered; it weighed one tenths of a gram. There were two whole sewing needles recovered; they weighed a total of seven tenths of a gram (see Table 117).

Personal Group

The Personal group consisted of a total of 65 artifacts. The classes represented in this group are: class number 28: keys and class number 29: personal items. The keys class consisted of a total of 18 artifacts. There were nine key fragments recovered (see Figure 95). There were nine whole keys recovered (see Figure 44 and 137-141) (see Table 118). One of these keys was very large, and it may have been the key to one of the large gates of the forts (see Figure 44). The personal items class consisted of a total of 47 artifacts. There was one pen nib recovered; it weighed two and eight tenths of a gram. There was one pocket knife that exhibited a bone handle and two blades recovered; it weighed 49 grams (see Figures 46 and 47). There was one pocket knife that exhibited a bone handle recovered; it weighed 26.1 grams. There were 21 pocket knife fragments recovered (see

Figure 113). There were twelve fragments of pocket knife frames recovered; they weighed a total of thirteen and one half gram (see Figure 112). There was one pocket knife that was listed as a possible folding knife; it weighed eighteen and eight tenths of a gram. There were six whole pocket knives recovered. Three had bone handles (see Figure 143), while three did not exhibit any indications of the laminate used on the handles such as bone or wood (see Figures 114 and 144). There was one fragment of what was likely the blade of a straight razor recovered; it weighed 29.7 grams. There was one straight razor blade recovered; it weighed 35.9 grams. There were two straight razor blade fragments recovered (see Figure 115); they weighed a total of 30.10 grams (see Table 119).

Activities Group

The Activities group consisted of a total of 467 artifacts. The classes represented in this group are construction tools, farm tools and agricultural related artifacts, toys, storage items, stable and barn, miscellaneous hardware, other, and military objects. The construction tools class consisted of eleven artifacts. There was one awl that was possibly a scratch awl or scribe recovered; it weighed eight and two tenths of a gram. There was one whole brace bit recovered; it weighed eleven and three tenths of a gram (see Figure 147). There was one chisel of an undetermined sub-type recovered; it weighed eighteen grams. There was one fragment of a triangular file recovered; it weighed four and eight tenths of a gram. There was one modern file recovered; it weighed 209.8 grams. There was one flat file that exhibited some modification recovered; it weighed 162.4 grams (see Figure 19). This file shows signs of both upsetting and hot cutting. Upsetting is “the technique of thickening BAR IRON in cross-section anywhere along its length” (Light

2007:152). There was one whole triangular file recovered; it weighed seventeen and three tenths of a gram. There was one possible log dog fragment with three links of chain attached recovered (see Figure 124). A log dog is a tool used to hold a log stationary while one hews the log to a desired shape. There were two screw drivers/tools recovered (see Figures 118 and 167). There was one tack hammer head recovered; it weighed 122.9 grams (see Table 120).

The farm tools and agricultural related artifacts class consisted of four artifacts. It should be noted that for this study, the farm tools class has been expanded to include agricultural related artifacts as well. Modern barbed wire fragments were recovered from the site, but they were not considered in this study due to their recent age. There was one hoe fragment recovered (see Figures 152 and 153). There was one small hatchet head recovered. There was one plow blade part recovered; it weighed 247.4 grams. There was one wedge recovered; it weighed eight grams (Table 121). The toys class consisted of two artifacts. There were two whole Jew's harps recovered (see Figures 90, 91, and Table 122).

The storage items class consisted of 121 artifacts. There were 17 barrel band fragments recovered; they weighed a total of 47 grams. There were two fragments of small bands and one band fragment with a hole through it. There were four narrow fragments of bands recovered, two very thin band fragments recovered, and 80 large barrel band fragments. There was one barrel band fragment that was possibly cut iron recovered, three barrel band fragments that exhibited a portion of their lengths that were both smaller in width and perforated with nail holes, six barrel band fragments that contained three nails in each recovered, and one barrel band fragment that may have been

merely an iron strip recovered. Additionally, one large fragment of a barrel band was recovered, one worked barrel band fragment recovered, one fragment of barrel wire recovered, and finally, one cut iron strip that may have been a barrel band recovered (see Table 123).

The stable and barn class consisted of 33 artifacts. There were two fragments of horse bits recovered (see Figure 154). These appear to be curb bits with chain mouth pieces. There were five fragments of horse shoes recovered, which weighed a total of 414.15 grams. There was one half of a horse shoe with two nails in it recovered; it weighed 90.5 grams. There were two whole horse shoes with nails in them recovered; they weighed a total of 598.8 grams (see Figure 136). There were 11 whole horse shoes recovered (see Figure 135). These are all open heeled, Fullered shoes. There was one iron ring that was possibly from a singletree recovered (see Figure 89). There was one large ring that was twisted open recovered (see Figure 20). There was one half of an ox shoe recovered (see Figure 156). Ox shoes "appear to be half horseshoes. They are, in fact, parts of the divided branches of shoes for oxen" (Hume 1970:239). There was one ring that was part of a harness recovered. There were three singletree hooks recovered (see Figures 21, 22, 23, and162). There was one sled runner shoe with a portion of the chain attached recovered (see Figures 163 and 164). There were two fragments of stirrups recovered (see Figures 48, 165, and 166). There was one artifact that was labeled as a tree ring recovered. This artifact was most likely a ring from a singletree. There was one piece of wagon equipment that included a ring and a hook recovered (see Table 124).

The miscellaneous hardware class consisted of 73 artifacts. There was one fragment of a bone handle recovered. There was one broken chain link recovered (see

Figure 52). There were two interlocked chain links recovered. There was one jack chain link recovered (see Figure 116). A jack chain is "a light wire chain whose links are set at right angles to each other resembling a figure eight or having the end of each loop bent round to meet the end of the other loop"(Webster's Third New International Dictionary). There were two fragments of chain links recovered. There was one chain link from a wagon recovered. There were two chain repair links recovered (see Figures 24 and 34). The diagnostic indicators on chain repair links are: the shape, the open end, and the presence of scarfs. A scarf is defined as a "beveled end ready for welding" (Blandford 1988:355). There were three individual chain links recovered, and one length of small chain recovered which included seven links. There was one small chain link recovered, one whole grommet recovered, and one large square nut recovered. There was one additional square nut recovered and one nut recovered that did not have a sub-type listed. There was one podal support recovered that was likely a support for an andiron (see Figure 157). There was one large rivet fragment recovered. There were two whole pull pins recovered (see Figures 134 and 158). There was one retainer recovered (see Figure 146). There was one screw that ranged from zero to one half inch in length recovered and one screw that ranged from fifty one hundreds of an inch to one inch in length, two screws that ranged from one and one hundredths of an inch to one and one half inch in length recovered, one screw that ranged from one and fifty one hundredths of an inch to two inches in length recovered, and three screws that ranged from two and one hundredths of an inch to two and one half inch in length recovered (see Table 125). There were 23 screw fragments recovered, one screw fragment with two washers attached, one large screw recovered, one screw with an accompanying nut recovered, and one bolt with

a square nut recovered (see Figure 51). There were three whole screws recovered, and two whole shims recovered (see Figures 159, 160, and 161). A shim is "a thin piece of metal placed between two parts to make a fit. It may be held by pressure or be part of a weld" (Light 2007:139). There was one spring that did not have a sub-type listed for it recovered, one stake fragment recovered, one strap bolt fragment recovered (see Figures 49 and 50), two washers that did not have a sub-type listed, one hand-made winged nut (see Figures 25 and 26), and finally, three wire hook fragments recovered (see Table 125).

Class number 41 was labeled "other", and it consisted of 102 artifacts. There were two pieces of blacksmith's scrap recovered (see Figure 35). There were 95 slag fragments recovered (see Figures 27 and 39). Slag is "the mixture of metal impurities, SCALE, and FUEL impurities that collect in the bottom of the fire during FORGING" (Light 2007:141). There were three pieces of bar stock recovered; they weighed a total of 22.6 grams. There was one tool fragment recovered and one whole tool recovered; it weighed eight and three tenths of a gram (see Table 126). Both of these tools were most likely gun tools; the deteriorated condition of each prevented a positive identification.

The military objects class consisted of 75 artifacts. There were two canister bases recovered; they weighed a total of 88.4 grams. Canister shot is "encased shot for close-range artillery fire consisting of a large number of balls in a light cylindrical case fitting the gun's bore and bursting by the force of the firing charge" (Webster's Third New International Dictionary). There was one cannon ball recovered (see Figure 28). There was one fragment of a socket bayonet recovered (see Figure 29). This was likely an American made, British style, spike bayonet from the time of the War of 1812. There was

one golf ball sized shot recovered; it weighed 124.7 grams (see Figure 119). There were 67 smaller grape shot balls recovered (see Figures 82-84 and 86-87). There were two impacted grape shot balls recovered; they weighed a total of 60 grams (see Figures 87 and 85). There was one fragment of a possible knife/dirk recovered; it weighed 48.85 grams (see Table 127).

Miscellaneous Group

Artifacts that were problematic with regards to categorization into Stanley South's functional groups were placed in the Miscellaneous group. The Miscellaneous group consisted of a total of 1,275 artifacts represented by three classes: the general class, the fragment class, and the knife class. These classes were not assigned numbers because they represent an expansion of the classes listed by Stanley South.

The general class consisted of 151 artifacts. There was one block of iron that exhibited signs of being worked recovered; it weighed 44.4 grams. There was one cap that did not have a sub-type listed for it recovered; it weighed thirteen and eight tenths of a gram. There was one miscellaneous cut item recovered; it weighed twelve and two tenths of a gram. There was one handle fragment recovered, two whole handles recovered (see Figure 88). The remaining artifacts from this group were modern and were not considered in this study. All artifacts represented by this group are listed in Table 128.

The fragments class was added to take into account the numerous fragments of iron that were not easily identified as being part of a discernible object. This class consisted of 1,089 artifacts. All of these appear to be modern and not considered by this study. All artifacts from this group are listed in Table 129.

The knife class was added to this study to take into account the various portions of knives that could not be readily discerned with regards to original intended use. These knives may include, but are not necessarily limited to hunting knives, kitchen knives, pocket knives, dirks, daggers, fighting knives, butter knives, butcher knives, trade knives, and so forth. In each case, there was either not enough of the knife to discern the original intended use, or what remained of the knife was so badly deteriorated that a positive identification was not possible. It should also be noted that knives were tools that often served multiple uses, and in many cases, people living on the frontier were often limited with regards to both a ready supply of specialized tools and the means to obtain them. Indeed, "virtually any class of artifacts can be seen to possibly serve a variety of purposes within the past cultural context" (South 1977:96).

The knife class consisted of 35 artifacts. There was one knife blade, one blade and partial handle, and 12 blade fragments recovered (see Figures 96-102, 104-105, and 155). There was one blade fragment that may have been from a pocket knife, one blade fragment that included the tang, one blade that may instead have been a fragment of flat and thin iron, and one bone and iron knife handle recovered (see Figure 106). There were 14 knife fragments that exhibited no notable characteristics beyond being parts of knives, one knife fragment in the form of the lower part of the blade with a portion of the handle less the bone/wood scale, one large knife with a bone handle that was likely a hunting knife, one notched knife fragment (see Figure 103), and finally, one possible knife blade recovered (see Table 130).

CHAPTER 8: DATA ANALYSIS

In this chapter, I take a look at the data presented for all the iron recovered from the excavations at the Fort Mitchell site. I break down the data by several variables including totals and percentages for: feature vs. non-feature, functional group, classes within the functional groups and functional group percentages from the features associated exclusively with the three occupation periods. As stated in Chapter 1, I predict that the iron assemblage from Fort Mitchell will fit South's Frontier Pattern; thus, I am looking for a high Architectural Group to Kitchen Group artifact ratio.

There existed a large difference in the percentages of the total iron artifacts recovered when compared to the number recovered from the general excavations to that recovered solely from the features. There were 51,724 iron artifacts recovered from the excavations at Fort Mitchell. Of those, 46,005 were recovered from the general excavations; they represented 88.94% of all the iron artifacts recovered. There were 5,719 artifacts recovered from the features; they represented 11.06% of all the iron artifacts recovered (see Figure 5). This is important, because prior to this study, "an analysis of the artifacts from the general excavation" did not exist (Cottier 2004:35).

The percentages of artifacts in each functional group compared to the total number of iron artifacts recovered from the site can begin to reveal patterns such as Stanley South's frontier pattern. The Activities Group consisted of 421 artifacts or 0.81% of the total. The Architecture Group consisted of 48,739 artifacts or 94.23% of the total. The Arms Group consisted of three artifacts; this was 0.01% of the total. The Clothing

Group consisted of 128 artifacts; this was 0.25% of the total. The Furniture Group consisted of four artifacts; this was 0.01% of the total. The Kitchen Group consisted of 1,089 artifacts; this was 2.11% of the total. The Miscellaneous Group consisted of 1,275 artifacts; this was 2.47% of the total. The Personal Group consisted of 65 artifacts; this was 0.13% of the total. The Architecture group contained an overwhelming majority of the total (see Figure 6). In this, we can begin to recognize Stanley South's frontier pattern, but it would be difficult to clearly define that pattern based on the iron artifacts alone.

The percentages of the artifact classes within the functional groups are as follows: the Activities Group consisted of eight artifact classes: construction tools, farm tools/agricultural related artifacts, toys, storage items, stable and barn, miscellaneous hardware, other, and military objects. There were 421 artifacts in this group. The Construction Tools class consisted of eleven artifacts; this number represented 2.61% of the total. The Farm Tools and Agricultural Related Artifacts class consisted of four artifacts; this number represented 0.95% of the total. The Military Objects class consisted of 75 artifacts; this number represented 17.81% of the total. The Miscellaneous Hardware consisted of 73 artifacts; this number represented 17.34% of the total. The Other class consisted of 102 artifacts; this number represented 24.23% of the total. The Stable and Barn class consisted of 33 artifacts; this number represented 7.84% of the total. The Storage Items class consisted of 121 artifacts; this number represented 28.74% of the total. The Toys class consisted of two artifacts; this number represented 0.48% of the total (see Figure 7).

The Architecture group consisted of three artifact classes: Construction Hardware, Nails, and Spikes. There were 48,739 artifacts in this group. The Construction Hardware class consisted of 84 artifacts; this number represented 0.17% of the total. The Nails class consisted of 47,607 artifacts; this number represented 97.68% of the total. The Spikes class consisted of 1,048 artifacts; this number represented 2.15% of the total (see Figure 8).

The Arms group consisted of only the Gun Parts Class, and there were only three artifacts in this group. The Clothing Group consisted of four artifact classes: Buckles, Buttons, Other, and Scissors. There were 128 artifacts in this group. The Buckles class consisted of 101 artifacts; this number represented 78.91% of the total. The Buttons class consisted of 11 artifacts; this number represented 8.59% of the total. The Other class consisted of twelve artifacts; this number represented 9.38% of the total. The Scissors class consisted of four artifacts; this number represented 3.13% of the total (see Figure 9).

The Furniture Group consisted of only the Furniture Hardware class, and there were only four artifacts in this group. The Kitchen Group consisted of two classes: Kitchenware, and Tableware. There were 1,089 artifacts in this group. The Kitchenware class consisted of 1,067 artifacts; this number represented 97.98% of the total. The Tableware class consisted of 22 artifacts; this represented 2.02% of the total (see Figure 10).

The Miscellaneous Group consisted of three artifact classes: Fragment, General, and Knife. There were 1,275 artifacts in this group. The Fragment class consisted of 1,089 artifacts; this number represented 85.41% of the total. The General class consisted

of 151 artifacts; this number represented 11.84% of the total. The Knife class consisted of 35 artifacts; this number represented 2.75% of the total (see Figure 11).

The Personal group consisted of two artifact classes: Keys and Personal Items. There were 65 artifacts in this group. The Keys class consisted of eighteen artifacts; this number represented 27.69% of the total. The Personal Items class consisted of 47 artifacts; this number represented 72.31% of the total (see Figure 12). The low artifact count for this group may be accounted for in that personal items would most likely have been taken with the person who owned them when they left the site.

The features associated exclusively with the first fort, Indian Factory, and the second fort presented the clearest temporal distinction between the occupation periods of the site. There were a total of 1,838 iron artifacts recovered from the features associated exclusively with the first fort. The Activities Group consisted of 37 artifacts; this represented 2.01% of the total. The Architecture Group consisted of 1,568 artifacts; this represented 85.31% of the total. The Arms Group consisted of 2 artifacts; this represented 0.11% of the total. The Clothing Group consisted of 5 artifacts; this represented 0.27% of the total. The Furniture Group consisted of 1 artifact; this represented 0.05% of the total. The Kitchen Group consisted of 90 artifacts; this represented 4.90% of the total. The Miscellaneous Group consisted of 134 artifacts; this represented 7.29% of the total. The Personal Group consisted of 1 artifact; this represented 0.05% of the total (see Figure 13).

There were a total of 417 artifacts recovered from the features associated exclusively with the Indian Factory. The Activities Group consisted of 6 artifacts; this represented 1.44% of the total. The Architecture Group consisted of 352 artifacts; this represented 84.41% of the total. The Clothing Group consisted of 1 artifact; this

represented 0.24% of the total. The Kitchen Group consisted of 1 artifact; this represented 0.24% of the total. The Miscellaneous Group consisted of 56 artifacts; this represented 13.43% of the total. The personal Group consisted of 1 artifact; this represented 0.24% of the total (see Figure 14).

There were a total of 1,447 artifacts recovered from the features associated exclusively with the second fort. The Activities Group consisted of 44 artifacts; this represented 3.04% of the total. The Architecture Group consisted of 1,226 artifacts; this represented 84.73% of the total. The Clothing Group consisted of 7 artifacts; this represented 0.48% of the total. The Furniture Group consisted of 1 artifact; this represented 0.07% of the total. The Kitchen Group consisted of 1 artifact; this represented 0.07% of the total. The Miscellaneous Group consisted of 165 artifacts; this represented 11.4% of the total. The Personal Group consisted of 3 artifacts; this represented 0.21% of the total (see Figure 15).

The lowest percentage of Activities Group artifacts were those recovered from the time of the Indian Factory. This may be accounted for in that the factory was operated on a small budget and that the goods sold to the Indians were removed from the site at the time of purchase. Also, it was there for a short time, and the population during that period was small. The percentage of Activities Group artifacts from the time of the second fort was slightly higher than from the first fort. This may reflect the fact that the regular United States Army who built the second fort was better supplied than the Georgia militia who built the first fort. The Architecture Group artifact percentages were the highest of all the group percentages from each occupation period. This is typical of Stanley South's frontier pattern. Only the first fort occupation features produced iron artifacts from the

Arms Group, and these percentages are not high enough to aid in pattern recognition. The percentage of Clothing Group artifacts from the time of the second fort was nearly twice that of the first fort and the Indian factory. This likely reflected the fact that the Army at the second fort was better funded and better supplied. The percentages of Furniture Group artifacts recovered from the features associated with the three occupation periods were not high enough to be diagnostic. The highest percentage of Kitchen Group artifacts were from the time of the first fort. The majority of these were Kettle or Dutch Oven fragments. The quality of cast iron from the first fort would generally be expected to be inferior to that of that later periods due to the fact that the cast iron implements from the factory and the second fort were supplied by the United States government while those of the first fort would have included more items purchased at the expense of the militia members. The fact that metallurgy skills improved rapidly throughout the 19th century would indicate that the iron of the later period may have been better quality. No diagnostic statement could be made concerning the percentages of the Miscellaneous Group artifacts because the majority of these were fragments of iron that the original use was not determined. The percentage of Personal Group artifacts from the first fort was lower than those of the factory and the second fort. This may reflect the increased availability of goods in the later periods.

CHAPTER 9: DISCUSSION AND CONCLUSIONS

Fort Mitchell was an important part of the history of Alabama. The Georgia Militia built the first fort to serve as a base in the First Creek War. The United States government constructed a trading house (factory) on the site after the first fort was abandoned. Finally, the United States Army built the second fort to serve as a base in the Second Creek War. There is no doubt to the significance of the data that represents the artifacts recovered from the Fort Mitchell site. Prior to this project, only the iron artifacts from the features had been studied. The iron artifacts from the general excavations represented a large majority of the total iron artifacts recovered from the site, and they are included in this study. There is much that we may discern from the iron alone; in it, we may see how a scarce resource was used.

I expected that Stanley South's Frontier pattern could be discerned by an examination of the iron artifacts alone. A higher Architecture group to Kitchen group artifact percentage ratio is indicative of the Frontier Pattern. This was evident in not only an examination of the overall artifact count, but the pattern was also observed in the functional group percentage distributions from the features associated exclusively with the three principle occupations of the site.

Most work with iron in the 19th century was done by a blacksmith. Sometimes iron goods would be bought from a manufacturer, but the item would inevitably have to have been repaired by a blacksmith from time to time. Nails were produced by machines

to a large extent, but supplies were often scarce on the frontier. Nails would have been reused as well as made into other items by a blacksmith. Most hardware on the frontier would have been made by a local blacksmith. There were artifacts recovered that attest to the presence of a blacksmith on the Fort Mitchell site. The unused chain repair links, the unused rings for singletrees, and the repaired horseshoes recovered suggest the presence of a forge because their use would have required welding. Due to the extreme heat required, welding could only have been done in a forge at that time. A horseshoe with nails bent in a manner consistent with the shoe's removal from a hoof with a hammer suggests that a blacksmith serviced horses at the site. The fragments of slag indicate the presence of a blacksmith because of the fact that they must have come from a coal fire. Coal would not likely have been used for heating because of the abundance of fuel for fire in the immediate environs and the fact that they would have had to bring coal to the site. A highly modified file was recovered; it was bent, upset, and the end was cut off. This would have required an anvil and forge, and thus, it indicates the presence of a blacksmith. A hand wrought meat hook made from square bar stock was recovered. It exhibited an ornamental twist on its shank and an eye that had been punched through its end with a hot punch. Both of these characteristics are indicative of the work of a blacksmith. There were handmade hinge pintles recovered. Some of these exhibited barbs cut into their shanks by a hot chisel; this would have been done by a blacksmith. There was a strap hinge recovered that exhibited an ornamental tulip on its end; this and the hand wrought nails recovered are also indicative of the presence of a blacksmith.

No blacksmith shop was located at the Fort Mitchell site. I believe that a permanent structure for blacksmithing would most likely have been associated with the

first fort, because the Georgia Militia would not have had the funding to pay for a portable forge or blacksmith wagon. It was likely that the blacksmith shop would have been outside of the fort walls, and it would have been a simple shed to house the forge and tools. The danger of the blacksmith shop catching fire in close proximity to a powder magazine would have been a serious consideration for both the militia and the United States Army. A portable forge or blacksmith wagon may have been used instead of a permanent shop at both forts, but I believe that the United States Army who garrisoned the second fort would have been better funded and would have been more likely to have access to one.

I expected to see the high percentage of Architecture group artifacts because the Frontier pattern has "been found to characterize artifact collections taken from inside the area of a ruin" (South 1978:43). This was the case with Fort Mitchell; the excavations concentrated primarily on the area of the ruins of the forts. I had expected to find a larger percentage of artifacts from the Arms and Activities groups as well. The low number of artifacts in the Arms group may be because the arms were taken from the site when the soldiers abandoned it. The low number of Activities group artifacts may be because most of the secondary refuse produced in the activities occurring in and around the forts may have been disposed of in the dump area. I did not expect to find such a low number of artifacts from the construction hardware class. This may be due to the reuse of hardware and the disposal of broken hardware in the dump area. I also did not expect that the nails class would present such an overwhelming majority of the artifacts from the Architecture group. Most of these were machine cut nails, and this suggests that despite the supply

problems indicated in the historical records, nails were bought in bulk and were available for use at the site in large numbers.

Dating the artifacts recovered from Fort Mitchell was complicated by the limited physical space occupied and the limited time spanned by the three occupations. This left little in the way of stratigraphy. The distribution of artifacts across the site was also affected by the presence of a dumping area used by the soldiers at the fort. This undoubtedly lowered the artifact count on the site proper. The deteriorated conditions of the iron made dating and identifying the artifacts difficult. The methods used in this study are limited in that they concentrate mainly on broad cultural patterns. While this is useful for comparisons of behavior on similar sites, it is less useful in reconstructing the life ways particular to the history of this site (South 1977:31). A drawback to using South's categories is that the nature of some artifacts prevents South's categories from being consistently mutually exclusive (South 1977:94). This creates a degree of difficulty in placing artifacts in categories.

Stanley South used his methods on similar sites, but this study is unique in that the iron alone is examined. On a similar site, the nails from Michilimackinac have been differentiated by means of a Chemical and Statistical Analysis. In the future, all the artifacts could be included with the iron presented in this study and classified in the same manner. This would allow for comparison between this site and other frontier fort/trading post sites via a cluster analysis to show how closely related this site might be to other similar sites of the period. Further exploration of the area surrounding the forts may reveal any out structures which might include a permanent blacksmith shop. Exploration of the fort dump area might produce a pattern that more closely resembles the Carolina

Artifact Pattern, which has a high Kitchen to Architecture artifact ratio. In this study, I have demonstrated that Iron was a valuable commodity on the frontier in the 19th century. I have shown that Stanley South's Frontier Pattern may be recognized by looking at solely the iron recovered from this site, I have shown that the Frontier pattern is evident in the artifact percentage distributions from all of three major occupations of this site, I have presented physical evidence to attest to the presence of a blacksmith at this site, and finally, I have shown that there was no blacksmith shop built within the walls of either of the forts.

Bibliography

Andrews, Jack
1994 New Edge of the Anvil A resource Book for the Blacksmith. Ocean Pines: Skipjack Press.

Ashmore, Wendy and Robert J. Sharer
2000 Discovering Our Past: A Brief Introduction to Archaeology. 3rd edition. Mountain View: Mayfield Publishing Company.

Bassett, John S., ed.
1926 Correspondence of Andrew Jackson. Carnegie Institute Publication Washington D.C.:371.

Bealer, Alex W.
1995 The Art of Blacksmithing. New Jersey: Castle Books.

Benn, Carl, and Daniel Marston
2006 Liberty or Death: Wars That Forged a Nation. Oxford: Osprey Publishing Ltd.

Benton, Jeffery C.
1998 The Very Worst Road: Travellers' Accounts of Crossing Alabama's Old Creek Indian Territory 1820-1847. Eufaula: Historic Chattahoochee Commission.

Blandford, Percy W.
1988 Practical Blacksmithing and Metalworking. 2nd edition. New York: TAB Books.

Borneman, Walter, R.
2004 1812: The War that Forged a Nation. New York: Harper Collins Publishers Inc..

Browne
1997 Encyclopedia of the War of 1812. *In* Ghent, Treaty of. David S. Heidler and Jeanne T. Heidler, eds. Pp. 208-210. Santa Barbara: ABC-CLIO, Inc..

Chambers, Nella J.
1960 The Creek Indian Factory at Fort Mitchell. *In* The Alabama Historical Quarterly Peter A. Brannon ed. Pp. 15-54 Historical papers of the State Department of Archives and History, 21. Alexander City, AL. The Alabama Department of Archives and History.

Chase, David W.
1974 Fort Mitchell: An Archaeological Exploration in Russell County Alabama. Moundville: The Alabama Archaeological Society.

Chase, May Ida
1936 "The Old Federal Road in Alabama." Unpublished M.A. Thesis, Birmingham Southern College.

Chesterman, Charles W.
1978 The Audubon Society Field Guide to North American Rocks and Minerals. Kingsport: Kingsport Press.

Coker, William S. and Thomas D. Watson
1986 Indian Traders of the Southeastern Spanish Borderlands: Panton, Leslie, and Company 1783-1847. Pensacola: University of West Florida Press.

Cottier, John W.
2004 An Analysis of the Fort Mitchell Features Vol. 1. Report on file at Auburn University.

Cottier, John W., Cameron W. Gill, and William Lowe
2008 A Phase II Investigation of a Rural House Site. Unpublished report on file at Auburn University.

Cottier, John W. and Gregory A. Waselkov
1985 The First Creek War: Twilight of Annihilation. *In* Clearings in the Thicket: An Alabama Reader. Jerry Elijah Brown, ed. Pp. 21-38. Macon: Mercer University Press.

Crane, Verner W.
1964 The Southern Frontier 1670-1732. Michigan and Toronto: The University of Michigan Press.

Cremer, David E.
2004 "Faunal Remains From Fort Mitchell (1RU102), Russell County, Alabama." Unpublished M.A. Thesis, Department of Anthropology, Florida State University, Tallahassee.

Edgar, Walter
1998 South Carolina: A History. Columbia: University of South Carolina Press.

Ellisor, John T.
2010 The Second Creek War: Interethnic Conflict and Collusion on a Collapsing Frontier. Lincoln: University of Nebraska Press.

Elting, John R.
1991 Amateurs, to Arms: A Military History of the War of 1812. Chapel Hill: Algonquin Books of Chapel Hill.

Fewster, Joseph M.
1988 The Jay Treaty and British Ship Seizures: The Martinique Cases. The William and Mary Quarterly, Third Series, 45 (3):426-452.

Foreman, Grant
1934 The Five Civilized Tribes. Norman:The University of Oklahoma Press.

Frurip, David J., Russell Malewicki, and Donald P. Heldman
1983 Colonial Nails From Michilimackinac: Differentiation by Chemical and Statistical Analysis. Archaeological Completion Report Series, Number 7. Mackinac Island: Mackinac State Park Commission.

George, Noah Jackson.
1986 [1815] A Memorandum of the Creek Indian War. 2nd edition. William Stanley Toole, ed. Tuscaloosa: Confederate Publishing Company.

Gordon, Robert B.
1996 American Iron 1607-1900. Baltimore and London: The John Hopkins University Press.

Graham, Joseph
1814 Graham Letter Book: Joseph Graham Paper. North Carolina State Archives.

Grinde, Donald A. Jr.
2001 Indian Removal Act. *In* The Oxford Companion to United States History. Paul S. Boyer, Melvyn Dubofsky, Eric H. Monkkonen, Ronald L. Numbers, David M. Oshinsky, and Emily S. Rosenberg, eds. Pp. 378-379. Oxford: Oxford University Press, Inc..

Haas, Irvin
1979 Citadels Ramparts and Stockades: America's Historic Forts. New York: Everest House Publishers.

Halbert, Henry S. and Timothy H. Ball
[2009] 1895. The Creek War of 1813 and 1814. Facsimile of the 1st ed.,Whitefish: Kessinger Publishing, LLC.

Hanson, Charles E. Jr.
1982 The Northwest Gun. Publications in Anthropology Lincoln: Nebraska State Historical Society.

Hickey, Donald R.
1990 The War of 1812: A Forgotten Conflict. Chicago: The University of Illinois Press.
1995 The War of 1812: A Short History. Chicago: The University of Illinois Press

Hillstrom, Kevin and Laurie Collier Hillstrom, eds.
2005 Industrial Revolution in America, Vol. 1: Iron and Steel. Santa Barbara. ABC-CLIO, inc.

Hirsch, Mark
2009 Thomas Jefferson Founding Father of Indian Removal. American Indian, Summer 2009.

Hitchcock, Walter Bertram Jr.
1985 Telling Observations: Early Travelers in East-Central Alabama. *In* Clearings in the Thicket: An Alabama Reader. Jerry Elijah Brown ed. Pp. 39-62. Macon: Mercer University Press.

Horsman, Reginald
1967 Expansion and American Indian Policy 1783-1812. Lansing: Michigan State University Press.
1972 The War of 1812. New York: Alfred A Knopf Inc.
1975 The Causes of the War of 1812. New York: Octagon Books.

Hume, Ivor Noël
1970 A Guide to Artifacts of Colonial America. New York: Alfred A. Knopf Inc..

Kane, Sharyn and Richard Keeton
1997 Fort Benning: The Land and the People. United States Army Infantry Center Directorate of Public Works, Environmental Management Division. Fort Benning, Georgia.

Lewis, David W.
1986 Iron and Steel in America. Meriden: The Meriden Gravure Company.

Light, John D.
2007 A Dictionary of Blacksmithing Terms. Journal of Historical Archaeology 41 (2):84-157.

Lossing, Benson J.
2001 The Pictorial Field-Book of the War of 1812, vol. 2: Or, Illustrations, by Pen and Pencil, of the History, Biography, Scenery, Relics, and Traditions of the Last War for American Independence. Gretna: Pelican Publishing Company.

Mahon, Stephen K.
1972 The War of 1812. New York: Da Capo Press.

McDaniel, Randy.
2004 A Blacksmith Primer: A course in Basic and Intermediate Blacksmithing. Minneapolis: Hobar Publications.

McRaven, Charles
2004 The Blacksmith's Craft: A Primer of Tools and Methods. North Adams: Storey Publishing.

Motte, Jacob R.
1953 Journey Into Wilderness: An Army Surgeon's Account of Life in Camp and Field During the Creek and Seminole Wars, 1836-1838. Gainesville: University of Florida Press.

Mulholland, James A.
1981 A History of Metals in Colonial America. Tuscaloosa: The University of Alabama Press.

Oatis, Steven J.
2004 A Colonial Complex: South Carolina's Frontiers in the Era of the Yamasee War, 1680-1730. Lincoln and London: The University of Nebraska Press.

Orser, Charles E.
2004 Historical Archaeology. 2nd edition. New Jersey: Pearson Education, Inc..

Oswalt, Wendell H.
2002 This Land Was Theirs: A Study of Native Americans. 7th edition. Boston: McGraw-Hill Conpanies Inc..

Owsley, Frank Lawrence Jr.
2000 Struggle for the Gulf Borderland: The Creek War and the Battle of New Orleans. Tuscaloosa: The University of Alabama Press.

Perkins, Bradford
1953 Lord Hawkesbury and the Jay-Grenville Negotiations. The Mississippi Valley Historical Review 40(2):291-304.

Peterson, Harold L.
1964 Forts In America. New York: Charles Scribner's sons.

Polhemus, Richard R.
1977 Archaeological Investigations of the Tellico Blockhouse Site (40MR50): A Federal Military and Trade Complex. Knoxville: Tennessee Valley Authority.

Prucha, Francis Paul
1966 A Guide to the Military Posts of the United States 1789-1895. Milwaukee: The North American Press.

Ramsey, William L.
2008 The Yamasee War: A Study of Culture, Economy, and Conflict in the Colonial South. Lincoln and London: University of Nebraska Press.

Russell, Carl P.
1979 Firearms, Traps, and Tools of the Mountain Men. Albuquerque: University of New Mexico Press.

Scruggs Jr., J. H.
N.d. Alabama Postal Roads with Maps: Also Early Forts-First Lines of Communication 1733-1744-1812. N.p.

Soanes, Catherine and Angus Stevenson ed.
2004 Concise Oxford English Dictionary 11th ed. New York: Oxford University Press.

South, Stanley
1977 Method and Theory in Historical Archeology. New York: Academic Press Inc..
1978 Research Strategies for Archaeological Pattern Recognition on Historic Sites: Theme Issue, "Field Techniques and Research Design," World Archaeology 10(1): 36-50.

Southerland, Henry Deleon Jr. and Jerry Elijah Brown
1989 The Federal Road: through Georgia, the Creek Nation, and Alabama 1806-1836. Tuscaloosa: University of Alabama Press.

Stickler, Justin C.
2004 "Plant Utilization at Fort Mitchell (1RU102), 1813-1840: An Archaeobotanical Analysis." Unpublished M. S. thesis, Department of Anthropology, Florida State University, Tallahassee.

Swank, James M.
1965 [1892] History of The Manufacture of Iron in all Ages: And Particularly in the United States From Colonial Times to 1891 Also a Short History of Early Coal Mining in the United States and a Full Account of the Influences Which Long Delayed the Development of all American Manufacturing Industries. American Classics of History and Social Science, Series 6. New York: Burt Franklin.

Temin, Peter
1964 Iron and Steel in 19th Century America: An Economic Inquiry. Cambridge: The MIT Press.

Tremont Nail Company
2006 The History of Nails: A Sample Set. Electronic Document, http://www.tremontnail.com/sampleset.html. Accessed December 6, 2006.

Valliere, Kenneth L.
1979 The Creek War of 1836: A Military History. The Chronicles of Oklahoma 57(4):463-485

Walthall, John A.
1980 Prehistoric Indians of the Southeast. Tuscaloosa: University of Alabama Press.

Waselkov, Gregory A.
2006 A Conquering Spirit: Fort Mims and the Redstick War of 1813-1814. Tuscaloosa: The University of Alabama Press.

Watson, Aldren A.
2000 The Blacksmith: Ironworker and Farrier. New York: W.W. Norton and Company.

Webster's Third New International Dictionary of the English Language Unabridged. ed. Philip Babcock Gove, Ph.D. (Springfield: G. and C. Merriam Company), s.vv. "canister," "jack chain," "spike."

Weeks, William Earl
2001 War of 1812. *In* The Oxford Companion to United States History. Paul S. Boyer et al, eds. Pp. 814-815. Oxford: Oxford University Press, Inc..

Weygers, Alexander G.
1997 The Complete Modern Blacksmith. Berkeley: Ten Speed Press.

Appendix 1.1: First Fort Artifact Tables by Feature

Feature 25		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	3	
1.01in.-1.50in.	14	
1.51in.-2.00in.	6	
2.01in.-2.50in.	1	
2.51in.-3.00in.	3	
Total	**27**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	2	0.416, 0.53
1.01in.-1.50in.	4	0.6, 0.64, 0.78, 0.49
1.51in.-2.00in.	1	1.25
2.01in.-2.50in.	2	1.11, 1.14
Total	**9**	
		Weight (g.)
Cut Nail Fragment	44	N/A
Whole Un-Cinched Cut Tacks	4	N/A
Miscellaneous		**Weight (g.)**
Eye Hook	1	1.4
Flat Fragment	3	1.6
Slag Fragment	1	0.1

Table 1: Iron Artifacts From Feature 25

Feature 26		
Type	**Quantity**	
Whole Un- Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	10	
1.51in.-2.00in.	5	
2.01in.-2.50in.	4	
2.51in.-3.00in.	3	
Total	**23**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	3	0.60, 0.61, 0.657
1.51in.-2.00in.	1	1.042
2.01in.-2.50in.	1	1.08
2.51in.-3.00in.	1	1.4
Total	**6**	
		Length Between Head and Cinch (in.)
Cinched Cut Nail Fragments	1	
Whole Cinched Cut Tack	1	0.94
Un-Cinched Cut Nail Fragment	28	
Whole Un-Cinched Cut Tack	1	
Miscellaneous		**Weight (g.)**
Cut Fragment	1	3.7

Table 2: Iron Artifacts From Feature 26

Feature 28	
Type	**Quantity**
Cut Nail Fragment	1

Table 3: Iron Artifacts From Feature 28

Feature 29		
Type	**Quantity**	
Whole Un-Cinched Cut Nails		
1.01in.-1.50in.	3	
1.51in.-2.00in.	5	
2.01in.-2.50in.	4	
2.51in.-3.00in.	4	
Total	**16**	
Whole Cinched Cut Nails		**Length Between Head and Cinch (in.)**
2.01in.-2.50in.	3	2.07, 0.70, 2.00
2.51in.-3.00in.	3	2.07, 0.50, 2.00
Total	**6**	
Cut Nail Fragments	33	
		Weight (g.)
Whole Un-Cinched Cut Tacks	3	5.2

Table 4: Iron Artifacts From Feature 29

Feature 31		
Type	**Quantity**	
Whole Un-cinched Cut Nails		
0.51in.-1.00in.	1	
1.01in.-1.50in.	1	
1.51in.-2.00in.	5	
2.01in.-2.50in.	3	
2.51in.-3.00in.	5	
Total	**15**	
Whole Cinched Cut Nails		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	2	0.825, 1.05
1.51in.-2.00in.	2	1.05, 1.45
2.51in.-3.00in.	1	0.83
Total	**5**	
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	1	
Cut Nail Fragment	33	

Table 5: Iron Artifacts From Feature 31

Feature 32		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	7	
1.01in.-1.50in.	12	
1.51in.-2.00in.	9	
2.51in.-3.00in.	2	
Total	**30**	
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	2	
Cut Nail Fragment	26	
Miscellaneous		**Weight (g.)**
Misc. Fragments	22	11.8
Grape Shot	2	59

Table 6: Iron Artifacts From Feature 32

Feature 33		
Type	**Quantity**	
Whole Un-cinched Cut Nail		
0.51in.-1.00in.	4	
1.01in.-1.50in.	5	
1.51in.-2.00in.	1	
2.01in.-2.50in.	1	
2.51in.-3.00in.	2	
Total	**13**	
Cut Nail Fragment	7	
		Weight (g.)
Whole Un-cinched Cut Tack	1	0.5
Small Band Fragment	1	0.2

Table 7: Iron Artifacts From Feature 33

Feature 34	
Type	**Quantity**
Cut Nail Fragment	2

Table 8: Iron Artifacts From Feature 34

Feature 35		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	4	
1.51in.-2.00in.	1	
2.01in.-2.50in.	3	
Total	**8**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	2	0.86, 1.07
Cut Nail Fragment	28	
Miscellaneous		**Weight (g.)**
Pot/Kettle. Fragment	1	16.8
Cut Spike Fragment	1	

Table 9: Iron Artifacts From Feature 35

Feature 36	
Type	**Quantity**
Cut Nail Fragment	4

Table 10: Iron Artifacts From Feature 36

Feature 38	
Type	**Quantity**
Cut Nail Fragment	2

Table 11: Iron Artifacts From Feature 38

Feature 40	
Type	**Quantity**
Cut Nail Fragment	1

Table 12: Iron Artifacts From Feature 40

Feature 51		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	10	
1.51in.-2.00in.	3	
2.01in.-2.50in.	1	
2.51in.-3.00in.	3	
Total	**18**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	4	0.64, 0.75, 0.46,0.58
2.01in.-2.50in.	1	1.79
2.51in.-3.00in.	1	1.52
Total	**6**	
Whole Un-cinched Cut Spike		
3.01in.-3.50in.	2	
Cut Nail Fragment	17	
Miscellaneous		**Weight (g.)**
Wagon Equipment W/Ring & Hook	1	356.3
Knife Blade Frag. W/Tang	1	25.9
Kettle/Dutch Oven Frag.	1	50.9

Table 13: Iron Artifacts From Feature 51

Feature 52		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	4	
1.01in.-1.50in.	30	
1.51in.-2.00in.	22	
2.01in.-2.50in.	5	
2.51in.-3.00in.	10	
Total	**71**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	2	0.84, 1.0
1.51in.-2.00in.	2	1.162, 0.72
2.01in.-2.50in.	2	1.6, 1.3
2.51in.-3.00in.	1	1.32
Total	**7**	
Whole Un-Cinched Cut Spike		**Length (in.)**
4.01in.-4.50in.	1	4.35
Cut Nail Fragments	192	
Miscellaneous		**Weight (g.)**
Large Nail Fragment W/ Head and Part of Shank	1	
Long Staple	1	96.9
Misc. Fragment	1	
Hinge Pintle	1	178.4
Ring/Part of Harness	1	25
Sheet iron Fragment	2	
Short Staple	1	50.4
Slag Fragment	1	0.4
Triangular File	1	17.3

Table 14: Iron Artifacts From Feature 52

Feature 72		
Type	**Quantity**	
Whole Un-Cinched Cut Nails		
1.51in.-2.00in.	1	
2.01in.-2.50in.	1	
Total	**2**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.6
Un-Cinched Cut Nail Fragment	11	
Miscellaneous		**Weight (g.)**
Horseshoe	1	218

Table 15: Iron Artifacts From Feature72

Feature 75		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	4	
1.51in.-2.00in.	2	
2.01in.-2.50in.	3	
Total	**9**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	1	0.5
1.01in.-1.50in.	4	0.8, 0.90, 0.70, 0.70
1.51in.-2.00in.	1	1.1
2.01in.-2.50in.	2	1.3, 1.413
2.51in.-3.00in.	1	0.8
Total	**9**	
		Length Between Head and Cinch (in.)
Whole Double Cinched Cut Nail		
0.51in.-1.00in.	1	0.60, 0.40, 0.50
Un-Cinched Cut Nail Fragment	21	

Table 16: Iron Artifacts From Feature 75

Feature 76		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
1.51in.-2.00in.	1	
2.01in.-2.50in.	1	
Total	**3**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	1	1.1
Un-Cinched Cut Nail Fragment	1	

Table 17: Iron Artifacts From Feature 76

Feature 93		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	2	
2.01in.-2.50in.	1	
Total	**3**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.51in.-3.00in.	1	1.51
Miscellaneous		
Misc. fragment	1	

Table 18: Iron Artifacts From Feature 93

Feature 101		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	8	
1.51in.-2.00in.	9	
2.01in.-2.50in.	7	
2.51in.-3.00in.	2	
Total	**27**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.01in.-2.50in.	1	0.69
Cinched Cut Nail Fragment	1	
Un-Cinched Cut Nail Fragment	24	
Miscellaneous		**Weight (g.)**
Folded Sheet Fragment	1	7.8
Kettle fragment	5	3.1

Table 19: Iron Artifacts From Feature 101

Feature 103		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.51in.-2.00in.	7	
2.51in.-3.00in.	5	
Total	**12**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	2	0.839, ???
1.51in.-2.00in.	4	0.543, ???, ???. ???
2.01in.-2.50in.	2	???, ???
2.51in.-3.00in.	3	???, ???, ???
Total	**11**	
Un-Cinched Cut Nail Fragment	18	
Miscellaneous		**Weight (g.)**
Large Cut Sheet Fragment	1	77.5

Table 20: Iron Artifacts From Feature 103

Feature 106		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.63in.
2.51in.-3.00in.	1	0.89in.
	2	
Un-Cinched Cut Nail Fragment	2	

Table 21: Iron Artifacts From Feature 106

Feature 107	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	1

Table 22: Iron Artifacts From Feature 107

Feature 109	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
0.51in.-1.00in.	1

Table 23: Iron Artifacts From Feature 109

Feature 124	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	1

Table 24: Iron Artifacts From Feature 124

Feature 125		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	6	
1.01in.-1.50in.	13	
1.51in.-2.00in.	11	
2.01in.-2.50in.	7	
2.51in.-3.00in.	1	
Total	**38**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	2	0.9, 0.67
1.51in.-2.00in.	1	1.222
2.01in.-2.50in.	2	1.3, 0.85
2.51in.-3.00in.	2	1.43, Unknown
Total	**7**	
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	2	
3.51in.-4.00in.	1	
Total	**3**	
Un-Cinched Cut Nail Fragment	33	
Miscellaneous		**Weight (g.)**
Buckle Fragment	1	10.1
Folded Fragment	1	21.7
Grapeshot	2	63.8
Horseshoe Fragment	1	93.75
Miscellaneous Fragment	2	1.4
Pen Nib	1	2.8
Possible Slag Fragments	10	0.1
Rifle Sling	1	8.4
Sewing Needle	1	0.4
Sheet Fragment	14	6.1
Sheet/Possible Kettle Fragment	65	33.6
Slag Fragment	1	205.9
Small Sheet Iron Mass	1	35.8
Tinned Iron	2	11

Table 25: Iron Artifacts From Feature 125

Feature 126		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.51in.-2.00in.	2	
Whole Dbl. Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.51in.-3.00in.	1	to 1st cinch= 0.73, B/W 1st and 2nd cinch= 1.57
Miscellaneous		**Weight (g.)**
Grapeshot	1	28

Table 26: Iron Artifacts From Feature 126

Feature 133		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	10	
1.01in.-1.50in.	13	
1.51in.-2.00in.	6	
2.01in.-2.50in.	23	
2.51in.-3.00in.	1	
Total	**53**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	2	1.02, 1.17
1.51in.-2.00in.	3	0.79, 1.0, 0.59
2.01in.-2.50in.	5	???, ???, 1.48, 1.48, 1.525
2.51in.-3.00in.	2	1.52, 1.5
Total	**12**	
Whole Cinched Cut Spike		**Length Between Head and Cinch (in.)**
3.01in.-3.50in.	1	0.887
Un-Cinched Cut Nail Fragment	62	
Miscellaneous		**Weight (g.)**
Cotter Pin Hinge from Small box	1	9.9
Grapeshot	1	29.1
Horseshoe W/Intact Tacks	1	316.9
Miscellaneous Fragment	8	13.5
Whole Un-Cinched Cut Tack	1	Unknown

Table 27: Iron Artifacts From Feature 133

Feature 134		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1.00	0.5
2.01in.- 2.50in.	1.00	0.7
Total	**2.00**	
Un-Cinched Cut Nail Fragment	11	

Table 28: Iron Artifacts From Feature 134

Feature 136		
Type	**Quantity**	
Whole Un-Cinched Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	8	
1.51in.-2.00in.	4	
2.01in.-2.50in.	2	
2.51in.-3.00in.	2	
Total	**17**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.01in.-2.50in.	1	1.732in.
Un-Cinched Cut Nail Fragment	31	

Table 29: Iron Artifacts From Feature 136

Feature 137		
Type	**Quantity**	
		Weight (g.)
Un-Cinched Cut Nail Fragment	7	11.4

Table 30: Iron Artifacts From Feature 137

Feature 139		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.51in.-2.00in.	1	
2.01in.-2.50in.	1	
2.51in.-3.00in.	3	
Total	**5**	
Whole Un-Cinched Cut Tack		
0.00in.-0.50in.	1	
Whole Double Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.01in.-2.50in.	1	B/W head & 1st= 0.96 B/W 1st & 2nd= 0.58
Un-Cinched Cut Nail Fragment	38	

Table 31: Iron Artifacts From Feature 139

Feature 140		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
2.51in.-3.00in.	1	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	1	0.75
1.01in.-1.50in.	2	1.25, 1.25
Total	**3**	
		Weight (g.)
Un-Cinched Cut Nail Fragment	38	128.8

Table 32: Iron Artifacts From Feature 140

Feature 141	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	1

Table 33: Iron Artifacts From Feature 141

Feature 142		
Type	**Quantity**	
Whole Double Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	1	0.583, 1.3
		Weight (g.)
Un-Cinched Cut Nail Fragment	5	5.7

Table 34: Iron Artifacts From Feature 142

Feature 145		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.51in.-2.00in.	2	
Un-Cinched Cut Nail Fragment	1	
Miscellaneous		**Weight (g.)**
Iron Cap	1	13.8

Table 35: Iron Artifacts From Feature 145

Feature 146	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	2

Table 36: Iron Artifacts From Feature 146

Feature 147		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	2	
1.51in.-2.00in.	3	
2.01in.-2.50in.	6	
2.51in.-3.00in.	1	
Total	**13**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.51in.-3.00in.	2	1.9, 1.4
Total	**2**	
Whole Cinched Cut Spike		**Length Between Head and Cinch (in.)**
3.01in.-3.51in.	1	2.587
Un-Cinched Cut Nail Fragment	14	
Cut Tack Fragment	1	
Miscellaneous		**Weight (g.)**
Plate W/Screw hole	1	21.6

Table 37: Iron Artifacts From Feature 147

Feature 151		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	5	
1.01in.-1.50in.	17	
1.51in.-2.00in.	18	
2.01in.-2.50in.	9	
2.51in.-3.00in.	7	
Total	**56**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	4	1.1, .98, .38, .70
1.51in.-2.00in.	2	1.03, 1.14
2.01in.-2.50in.	3	.70, .67, .67
2.51in.-3.00in.	3	1.43, 1.83, 1.53
Total	**12**	
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	2	
3.51in.-4.00in.	1	
Total	**3**	
Un-Cinched Cut Nail Fragment	62	
Whole Hooked Cut Nail		**Overall Length**
1.01in.-1.50in.	2	1.18, 1.17
1.51in.-2.00in.	1	1.64
Total	**3**	
Miscellaneous		**Weight (g.)**
Arm of Latch	1	22.9
Cut Fragment	1	3.5
Wire Fragment	1	Unknown
Large Barrel Band Fragment	1	125.2
Miscellaneous Fragment	6	21.3
Poss. Knife/Dirk Fragment	1	48.85
Sewing Needle	1	0.3
Sheet Fragment	18	8.3
Slag Fragment	2	0.85
Small Band Fragment	1	0.8
Cut Tack Fragment	1	Unknown
Tack Hammer Head	1	122.9
Triangular File Fragment	1	4.8
Whole Two Tined Fork	1	18.7

Table 38: Iron Artifacts From Feature 151

Feature 172	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
1.51in.-2.00in.	1

Table 39: Iron Artifacts From Feature 172

Feature 175	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
1.01in.-1.50in.	2
2.51in.-3.00in.	1
Total	**3**
Un-Cinched Cut Nail Fragment	1

Table 40: Iron Artifacts From Feature 175

Feature 179		
Type	**Quantity**	
Whole Un-Cinched Cut Nails		
1.01in.-1.50in.	14	
1.51in.-2.00in.	4	
2.01in.-2.50in.	4	
2.51in.-3.00in.	2	
Total	**24**	
Whole Cinched Cut Nails		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	1	0.94
2.51in.-3.00in.	1	1.07
	2	
Whole Un-Cinched Cut spike		
3.01in.-3.50in.	1	
Whole Un-Cinched Cut Tack	1	
Un-Cinched Cut Nail Fragment	30	
Miscellaneous		**Weight (g.)**
Cut Rod Fragment	1	35.7

Table 41: Iron Artifacts From Feature 179

Feature 181		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	4	
1.01in.-1.50in.	20	
1.51in.-2.00in.	5	
2.01in.-2.50in.	9	
2.51in.-3.00in.	12	
Total	**50**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	1	0.35
1.01in.-1.50in.	1	0.905
1.51in.-2.00in.	1	1.034
2.01in.-2.50in.	1	1.208
2.51in.-3.00in.	1	1.629
Total	**5**	
Whole Cinched Cut Spike		**Length Between Head and Cinch (in.)**
4.01in.-4.50in.	1	3.17
Whole Double Cinched Cut Spike		
3.01in.-3.50in.	1	1.707, 1.311
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	3	
Un-Cinched Cut Nail Fragment	52	
Miscellaneous		**Weight (g.)**
Buckle	1	2.7
Bullet Worm	1	Unknown
Cannon Ball	1	Unknown
Cut Fragment	29	93.1
Eye Hook	3	0.7, 0.5, 1.2
Horse Shoe	1	Unknown
Kettle Fragments	17	19.4
Possible Log Dog Fragment W/3 Links of Chain	1	Unknown
Sheet Fragment	2	Unknown
Small Buckle	1	29
Whole Un-Cinched Cut Tack	3	Unknown
Wedge	1	8

Table 42: Iron Artifacts From Feature 181

Feature 185		
Type	**Quantity**	
Whole Un-cinched Cut Nail		
1.01in.-1.50in.	3	
1.51in.-2.00in.	1	
2.51in.-3.00in.	3	
Total	**7**	
Un-Cinched Cut Nail Fragment	19	
Miscellaneous		**Weight (g.)**
Sheet Fragments	14	6.3

Table 43: Iron Artifacts From Feature 185

Appendix 1.2: Indian Factory Artifact Tables by Feature

Feature 49		
Type	**Quantity**	
Whole Un-Cinched Cut Nails		
0.51in.-1.00in.	2	
1.01in.-1.50in.	16	
1.51in.-2.00in.	6	
2.01in.-2.50in.	3	
2.51in.-3.00in.	2	
Total	**29**	
Whole Cinched Cut Nails		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.9
2.01in.-2.50in.	1	1.45
Total	**2**	
Whole Double Cinched Cut Nail		
2.01in.-2.50in.	1	0.927in - 0.602in.
2.51in.-3.00in.	1	0.991in. - 0.523in.
Total	**2**	
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	3	
Cut Nail Fragments	63	
Miscellaneous		**Weight (g.)**
Sheet Fragment	45	68.6
Misc. Fragment	10	3.8
Two Tine Fork	1	18.8
Possible Folding Knife	1	18.8
Slag Fragment	1	3.6

Table 44: Iron Artifacts From Feature 49

Feature 56		
Type	**Quantity**	
Whole Un-cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	3	
1.51in.-2.00in.	3	
2.01in.-2.50in.	5	
2.51in.-3.00in.	5	
Total	**17**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.46
1.51in.-2.00in.	1	1.1
2.01in.-2.50in.	1	1.7
2.51in.-3.00in.	1	0.98
Total	**4**	
		Length Between Head and Cinch (in.)
Cinched Cut Nail Fragment	3	0.86in.; 0.76in; ???
Whole Un-cinched Cut Spike		
3.01in.-3.50in.	3	
Un-Cinched Cut Nail Fragment	57	
Miscellaneous		**Weight (g.)**
Buckle W/Brass Cross Bar	1	3.1
Large Hook	1	24.1
Large Hinge Pintle	1	121.1

Table 45: Iron Artifacts From Feature 56

Feature 67		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	4	
1.51in.-2.00in.	7	
2.01in.-2.50in.	4	
2.51in.-3.00in.	1	
Total	**17**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	2	0.657, 0.733
1.51in.-2.00in.	1	1.2
Total	**3**	
Whole Cinched Cut Spike		**Length Between Head and Cinch (in.)**
3.01in.-3.50in.	1	2.798
Un-Cinched Cut Nail Fragment	43	
Miscellaneous		**Weight (g.)**
Bottom of Canister	1	4.2
Slag Fragment	1	0.4

Table 46: Iron Artifacts From Feature 67

Feature 70		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
1.51in.-2.00in.	2	
2.01in.-2.50in.	2	
2.51in.-3.00in.	1	
Total	**6**	
Un-Cinched Cut Nail Fragment	6	
Miscellaneous		**Weight (g.)**
Cut Fragment	1	3.8

Table 47: Iron Artifacts From Feature 70

Feature 71		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	2	
1.51in.-2.00in.	4	
2.51in.-3.00in.	1	
Total	**7**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	1	1.5
2.01in.-2.50in.	2	0.70, 0.90
Total	**3**	
Cut Nail Fragments	12	
Whole Cinched Cut spike		**Length Between Head and Cinch (in.)**
3.01in.-3.50in.	1	0.9

Table 48: Iron Artifacts From Feature 71

Feature 98	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	2

Table 49: Iron Artifacts From Feature 98

Feature 108		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
1.51in.-2.00in.	2	
2.01in.-2.50in.	1	
Total	**4**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.65
2.51in.-3.00in.	1	0.56
Total	**2**	
Un-Cinched Cut Nail Fragment	8	
Miscellaneous		**Weight (g.)**
Awl	1	8.2

Table 50: Iron Artifacts From Feature 108

Feature 118		
Type	**Quantity**	
Whole Nails		
1.51in.-2.00in.	1	
Un-Cinched Cut Nail Fragment	9	
Miscellaneous		**Weight (g.)**
Slag Fragment	1	475.3

Table 51: Iron Artifacts From Feature 118

Feature 119	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	5

Table 52: Iron Artifacts From Feature 119

Feature 128		
Type	**Quantity**	
		Weight (g.)
Un-Cinched Cut Nail Fragment	1	0.9

Table 53: Iron Artifacts From Feature 128

Feature 184		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
2.51in.-3.00in.	1	
Whole Un-cinched Cut Spike		
3.01in.-3.50in.	1	
Miscellaneous		**Weight (g.)**
Un-Cinched Cut Nail Fragment	16	7.3
Barrel Band Fragment	1	31.6

Table 54: Iron Artifacts From Feature 184

Appendix 1.3: Second Fort Artifact Tables by Feature

Feature 14		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
2.01in.-2.50in.	1	
Total	**2**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.01in.-2.50in.	1	1.789
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	1	
Cut Nail Fragment	14	
Miscellaneous		**Weight (g.)**
Single Tang Buckle	1	5.8
Pocket Knife (Whole W/Bone Handle)	1	35.2
Total	**2**	**41**

Table 55: Iron Artifacts From Feature 14

Feature 39		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	5	
1.01in.-1.50in.	4	
1.51in.-2.00in.	3	
2.01in.-2.50in.	5	
2.51in.-3.00in.	1	
Total	**18**	
Whole Cinched Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	4	0.92, 0.73, 0.58, 0.42
1.01in.-1.50in.	2	0.9, 0.97
1.51in.-2.00in.	2	0.95, 1.28
2.01in.-2.50in.	1	1.09
2.51in.-3.00in.	1	1.26
Total	**10**	
		Weight (g.)
Cut Nail Fragment	34	45.5
Miscellaneous		**Weight (g.)**
Perforated Plate	1	340.4
Staple	1	5.5
Barrel Band	1	10

Table 56: Iron Artifacts From Feature 39

Feature 43		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	2	
1.01in.-1.50in.	1	
1.51in.-2.00in.	3	
2.01in.-2.50in.	2	
2.51in.-3.00in.	4	
Total	**12**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	1.168
2.51in.-3.00in.	1	1.76
Total	**2**	
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	7	
Whole Cinched Cut Spike		**Length Between Head and Cinch (in.)**
3.51in.-4.00in.	1	1.344
Cut Nail Fragment	72	
Miscellaneous		**Weight (g.)**
Sheet	1	1.1
Misc. fragment	60	44.1
Buckle	1	5.4

Table 57: Iron Artifacts From Feature 43

Feature 58		
Type	**Quantity**	
Whole Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	10	
1.51in.-2.00in.	15	
2.01in.-2.50in.	3	
2.51in.-3.00in.	2	
Total	**31**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	3	0.80, 1.16, 1.3
2.01in.-2.50in.	1	0.85
Total	**4**	
Cut Nail Fragments	113	
Miscellaneous		**Weight (g.)**
Belt Holder Fragment	1	1.1
Buckle	3	26.8
Cut Fragment	14	18.9
Grapeshot	1	31.6
Fragment (Mass)	1	10.6
Sheet Fragment	1	0.2

Table 58: Iron Artifacts From Feature 58

Feature 62	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	4

Table 59: Iron Artifacts From Feature 62

Feature 92		
Type	**Quantity**	
Whole Un-cinched Cut Nail		
1.01in.-1.50in.	1	
1.51in.-2.00in.	2	
2.01in.-2.50in.	1	
2.51in.-3.00in.	2	
Total	**6**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	2	0.7, 0.7
1.51in.-2.00in.	1	0.5
Total	**3**	
Un-Cinched Cut Nail Fragment	24	

Table 60: Iron Artifacts From Feature 92

Feature 99	
Type	**Quantity**
Whole Un-Cinched Cut Spike	
4.01in.-4.50in.	1
5.51in.-6.00in.	1

Table 61: Iron Artifacts From Feature 99

Feature 102		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	5	
1.51in.-2.00in.	9	
2.01in.-2.50in.	1	
2.51in.-3.00in.	1	
Total	**16**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	1	0.5
1.01in.-1.50in.	3	0.6, 1.00, 0.89
1.51in.-2.00in.	3	1.16, 1.27, 0.682
2.01in.-2.50in.	1	1.42
2.51in.-3.00in.	2	1.424, 1.00
Total	**10**	
Un-Cinched Cut Nail Fragment	48	
Miscellaneous		**Weight (g.)**
Buckle Fragment	1	1.6
Misc. fragment	1	1.3
Pocket Knife	1	32.2
Sheet Iron fragment	2	0.5

Table 62: Iron Artifacts From Feature 102

Feature 110		
Type	**Quantity**	
Whole Un-Cinched Cut Nails		
0.51in.-1.00in.	5	
1.01in.-1.50in.	20	
1.51in.-2.00in.	32	
2.01in.-2.50in.	33	
2.51in.-3.00in.	27	
Total	**117**	
Whole Cinched Cut Nails		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	1	0.84
2.01in.-2.50in.	4	1.20, 0.74, 0.71, 1.31
2.51in.-3.00in.	2	1.52, 1.38
Total	**7**	
Whole Un-cinched Cut Spike		
3.01in.-3.50in.	14	
3.51in.-4.00in.	1	
Total	**15**	
Whole Cinched Cut Spike		**Length Between Head and Cinch (in.)**
3.01in.-3.50in.	1	1.04
???	2	0.81, 2.28
Total	**3**	
Un-Cinched Cut Nail Fragment	178	
		Weight (g.)
Whole Un-Cinched Cut Tack	1	0.9
Miscellaneous		**Weight (g.)**
Barrel Band Fragment	1	33.8
Spike Head	1	4.6
Wire Fragment	1	2.5

Table 63: Iron Artifacts From Feature 110

Feature 111	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	1

Table 64: Iron Artifacts From Feature 111

Feature 113	
Type	**Quantity**
Whole Un-Cinched Cut nail	
1.01in.-1.50in.	1
Un-Cinched Cut Nail Fragment	3

Table 65: Iron Artifacts From Feature 113

Feature 116		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	2	
2.01in.-2.50in.	3	
2.51in.-3.00in.	1	
Total	**6**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	2	0.98, 0.77
1.51in.-2.00in.	1	1.4
2.51in.-3.00in.	1	1.01
Total	**4**	
		Length Between Head and Cinch (in.)
Whole Double Cinched Cut Nail		
2.01in.-2.50in.	1	0.75, 0.81
Un-Cinched Cut Nail Fragment	23	
Miscellaneous		**Weight (g.)**
Curved Sheet Fragment	6	2.3
Misc. Fragment	33	4.6

Table 66: Iron Artifacts From Feature 116

Feature 117		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	7	
1.51in.-2.00in.	3	
2.01in.-2.50in.	3	
2.51in.-3.00in.	1	
Total	**15**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.62
Un-Cinched Cut Nail Fragment	34	
Cut Tack Fragment	1	
Miscellaneous		**Weight (g.)**
Cut fragment	1	122.9
Knife Fragment: Lower part of blade w/portion of handle less the bone/wood inlay	1	11.4
Large Hook	1	67.1
Narrow Band Fragment	4	8.8
Sheet	7	6

Table 67: Iron Artifacts From Feature 117

Feature 123		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	2	
1.51in.-2.00in.	5	
2.51in.-3.00in.	3	
Total	**11**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	3	Unknown
1.51in.-2.00in.	4	Unknown
Total	**7**	
Whole Cinched Cut Spike		**Length Between Head and Cinch (in.)**
3.01in.-3.50in.	1	0.913
Un-Cinched Cut Nail Fragment	37	
Un-Cinched Cut Spike Fragment	1	
Miscellaneous		**Weight (g.)**
2 Blade Pocket Knife W/Bone Handle	1	49
Circular Cut Fragment	2	13
Sheet Fragment	7	2.2

Table 68: Iron Artifacts From Feature 123

Feature 127		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
2.01in.-2.50in.	2	
2.51in.-3.00in.	2	
Total	**5**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.51in.-3.00in.	1	1.975
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	1	
Un-Cinched Cut Nail Fragment	28	
Slag Fragment	34	
Miscellaneous		**Weight (g.)**
Large Staple	1	36.7

Table 69: Iron Artifacts From Feature 127

Feature 129		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	3	
1.01in.-1.50in.	6	
1.51in.-2.00in.	6	
2.01in.-2.50in.	4	
2.51in.-3.00in.	2	
Total	**21**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	6	1.00, 0.60, 0.675, 1.001, 0.50, 1.0
1.51in.-2.00in.	1	1.147
Total	**7**	
Un-Cinched Cut Nail Fragment	54	
Miscellaneous		**Weight (g.)**
Shot Canister Base	1	84.2
Folded Cut Sheet Fragment	1	11.6
Fork Handle	1	54.1
Misc. fragment	11	2.8
Sheet Iron	2	6.2
Cut Tack Fragment W/Brass Head	1	1.8

Table 70: Iron Artifacts From Feature 129

Feature 161		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	2	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.52
Un-Cinched Cut Nail Fragment	3	

Table 71: Iron Artifacts From Feature 161

Feature 162	
Type	**Quantity**
Whole Un-cinched Cut Nail	
1.01in.-1.50in.	1
1.51in.-2.00in.	2
2.01in.-2.50in.	2
Total	**5**
Un-Cinched Cut Nail Fragment	7

Table 72: Iron Artifacts From Feature 162

Feature 164		
Type	**Quantity**	
Whole Un-cinched Cut Nail		
0.51in.-1.00in.	2	
1.01in.-1.50in.	11	
1.51in.-2.00in.	16	
2.01in.-2.50in.	5	
2.51in.-3.00in.	2	
Total	**36**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.51in.-3.00in.	1	1.105
Un-Cinched Cut Nail Fragments	46	
Miscellaneous		**Weight (g.)**
Fragment	9	44.3
Grape shot	1	36.9
Wire Fragment	1	4.2

Table 73: Iron Artifacts From Feature 164

Feature 165		
Type	**Quantity**	
Whole Un-cinched Cut Nail		
1.01in.-1.50in.	1	
Un-Cinched Cut Nail Fragment	4	
Miscellaneous		**Weight (g.)**
Unidentified Object	1	17.2

Table 74: Iron Artifacts From Feature 165

Feature 166	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
1.01in.-1.50in.	1
1.51in.-2.00in.	5
2.01in.-2.50in.	2
Total	**8**
Un-Cinched Cut Nail Fragment	2

Table 75: Iron Artifacts From Feature 166

Feature 168	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
1.01in.-1.50in.	1

Table 76: Iron Artifacts From Feature 168

Feature 170		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	2	
1.01in.-1.50in.	1	
1.51in.-2.00in.	1	
2.01in.-2.50in.	1	
Total	**5**	
Un-Cinched Cut Nail Fragment	8	
Miscellaneous		**Weight (g.)**
Nail Hook	1	2.5
Small Band Fragment	1	2.2

Table 77: Iron Artifacts From Feature 170

Feature 177		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
2.51in.-3.00in.	2	
Total	**3**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	1	0.61
Un-Cinched Cut Nail Fragment	7	

Table 78: Iron Artifacts From Feature 177

Feature 178	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
2.01in.-2.50in.	1

Table 79: Iron Artifacts From Feature 178

Appendix 1.4: First and Second Fort Artifact Tables by Feature

Feature 182		
Type	**Quantity**	
Whole un-Cinched Cut Nail		
0.51in.-1.00in.	38	
1.01in.-1.50in.	57	
1.51in.-2.00in.	49	
2.01in.-2.50in.	27	
2.51in.-3.00in.	19	
Total	**190**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	5	0.6, 0.7, 0.8, 0.5, 0.6
1.01in.-1.50in.	10	0.6, 1.74, 1.0, 0.9, 0.5, 0.74, 0.9, 0.5, 0.9, 0.7
1.51in.-2.00in.	14	1.2, 0.88, 1.27, 1.27, 1.10, 0.94, 1.38, 1.56, 0.81, 0.43, 1.2, 1.2, 1.5, 1.7
2.01in.-2.50in.	11	1.37, 1.2, 1.3, 1.5, 1.6, 1.5, 0.8, 1.2, 0.9, 1.2, 1.0,
2.51in.-3.00in.	4	1.35, 0.7, 1.6, 1.0
Total	**44**	
Whole Un-Cinched Cut Spike		
Unknown	1	
3.01in.-3.50in.	10	
3.51in.-4.00in.	1	
Total	**12**	
		Length Between Head and Cinch (in.)
Whole Cinched Cut Tack	1	0.5
Un-Cinched Cut Nail Fragment	298	
Dutch Oven Fragment	3	
Kettle Fragment	693	
Sheet Fragment	81	
Slag Fragment	5	
Small Hatchet	1	
Small Cut Spike Fragment	3	
Whole Un-Cinched Cut Tack	5	
Tool Fragment	1	
Miscellaneous		**Weight (g.)**
Whole 2-Tine Fork	1	20.6
Barrel Band Fragment	8	42.6
Buckle	1	17.8
Cut Iron/Kettle Fragment	69	124.6
Dutch Oven Lid Fragment	1	114.3
Whole Hinge Pintle	1	106.1
Hinge Pintle Fragment	1	110.7
Possible Large Rivet	1	17.6
Possible Needle Fragment	1	0.1
Plow Part	1	247.4

Table 80: Iron Artifacts From Feature 182

Appendix 1.5: Undetermined Temporal Association Artifact Tables by Feature

Feature 41		
Type	**Quantity**	
Whole un-Cinched Cut Nail		
0.51in.-1.00in.	2	
1.01in.-1.50in.	3	
Total	**5**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	1	0.91
Cut Nail Fragments	33	

Table 81: Iron Artifacts From Feature 41

Feature 42		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	3	
1.01in.-1.50in.	3	
1.51in.-2.00in.	1	
Total	**7**	
Cut Nail Fragments	39	
Miscellaneous		**Weight (g.)**
Pieces of Bar Stock	3	22.6

Table 82: Iron Artifacts From Feature 42

Feature 44	
Type	**Quantity**
Barrel Band Fragment	4

Table 83: Iron Artifacts From Feature 44

Feature 46	
Type	**Quantity**
Whole Un-cinched Cut nail	
1.01in.-1.50in.	1

Table 84: Iron Artifacts From Feature 46

Feature 50	
Type	**Quantity**
Cut Nail Fragment	2

Table 85: Iron Artifacts From Feature 50

Feature 53		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.51in.-2.00in.	2	
2.51in.-3.00in.	2	
Total	**4**	
Cut Nail Fragments	4	
Miscellaneous		**Weight (g.)**
Mass	1	10.60
Grapeshot	1	31.60

Table 86: Iron Artifacts From Feature 53

Feature 54		
Type	**Quantity**	
		Weight (g.)
Nail Fragments	3	5.8

Table 87: Iron Artifacts From Feature 54

Feature 74		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
2.51in.-3.00in.	1	
Miscellaneous		**Weight (g.)**
Split Spike/Nail	1	28.7

Table 88: Iron Artifacts From Feature 74

Feature 78		
Type	**Quantity**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.56
		Weight (g.)
Un-Cinched Cut Nail Fragment	1	2.3

Table 89: Iron Artifacts From Feature 78

Feature 91	
Type	**Quantity**
Whole un-Cinched Cut Nail	
1.01in.-1.50in.	1

Table 90: Iron Artifacts From Feature 91

Feature 96		
Type	**Quantity**	
Whole Un-cinched Cut Nail		
1.01in.-1.50in.	5	
1.51in.-2.00in.	1	
2.01in.-2.50in.	6	
Total	**12**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	1	0.662
1.01in.-1.50in.	3	0.796, 0.72, 0.88
2.01in.-2.50in.	2	0.684, 1.16
2.51in.-3.00in.	1	0.758
Total	**7**	
Un-Cinched Cut Nail Fragment	29	

Table 91: Iron Artifacts From Feature 96

Feature 97	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
2.51in.-3.00in.	1

Table 92: Iron Artifacts From Feature 97

Feature 104		
Type	**Quantity**	**Weight (g.)**
Un-Cinched Cut Nail Fragment	1	1.8

Table 93: Iron Artifacts From Feature 104

Feature 114	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	2

Table 94: Iron Artifacts From Feature 114

Feature 130	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
1.01in.-1.50in.	3
1.51in.-2.00in.	1
Total	**4**
Un-Cinched Cut Nail Fragment	2

Table 95: Iron Artifacts From Feature 130

Feature 131	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	2

Table 96: Iron Artifacts From Feature 131

Feature 132	
Type	**Quantity**
Un-Cinched Cut Nail Fragment	1

Table 97: Iron Artifacts From Feature 132

Feature 143		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
2.01in.-2.50in.	2	
Un-Cinched Cut Nail Fragment	1	
Miscellaneous		**Weight (g.)**
Wire fragment	13	5.7

Table 98: Iron Artifacts From Feature 143

Feature 144	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
1.51in.-2.00in.	1
2.01in.-2.50in.	1
Total	**2**

Table 99:Iron Artifacts From Feature 144

Feature 148		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	1	
1.51in.-2.00in.	1	
Total	**2**	
Un-Cinched Cut Nail Fragment	9	
Miscellaneous		**Weight (g.)**
Possible Knife Blade	1	12.6

Table 100: Iron Artifacts From Feature 148

Feature 159	
Type	**Quantity**
Whole Un-Cinched Cut Nail	
1.51in.-2.00in.	1
2.01in.-2.50in.	3
Total	**4**
Un-Cinched Cut Nail Fragment	3

Table 101: Iron Artifacts From Feature 159

Feature 163		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	2	
Un-Cinched Cut Nail Fragment	2	
Miscellaneous		**Weight (g.)**
Miscellaneous Fragment	7	2.6
Sheet Fragment	2	4.1

Table 102: Iron Artifacts From Feature 163

Feature 180		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.51in.-2.00in.	1	
2.01in.-2.50in.	2	
Total	**3**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
2.51in.-3.00in.	1	1.28
Un-Cinched Cut Nail Fragment	2	

Table 103: Iron Artifacts From Feature 180

Appendix 1.6: Indian Factory and Second Fort Artifact Tables by Feature

Feature 85		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
1.01in.-1.50in.	4	
1.51in.-2.00in.	6	
2.01in.-2.50in.	3	
Total	**13**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	3	0.712, 0.365, 1.107
1.51in.-2.00in.	1	1
Total	**4**	
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	**1**	
		Length Between Head and Cinch (in.)
Cinched Cut Nail Fragment	1	Undetermined
Un-Cinched Cut Nail Fragment	14	
Miscellaneous		**Weight (g.)**
Round Hollow Tube	1	2.1

Table 104: Iron Artifacts From Feature 85

Feature 105		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	10	
1.01in.-1.50in.	25	
1.51in.-2.00in.	9	
2.01in.-2.50in.	2	
2.51in.-3.00in.	2	
Total	**48**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
0.51in.-1.00in.	1	0.27
1.01in.-1.50in.	6	0.5, 0.3, 0.73, 0.58, 1.08, 0.84
1.51in.-2.00in.	1	1.19
2.01in.-2.50in.	1	1.71
2.51in.-3.00in.	1	0.94
Total	**10**	
Whole Un-Cinched Cut Spike		
3.01in.-3.50in.	2	
		Weight (g.)
Cut Nail Fragments	43	
Whole Un-Cinched Cut Tack	5	
Miscellaneous		**Weight (g.)**
Grapeshot	1	36.4
Possible razor blade fragment	1	29.7
Sheet Iron with Rivet	1	5.8
Small Chain Link	1	0.1
Small Ring Handle, (Probably for Small Tin Box)	2	1.7
Worked Barrel Band	1	82.4

Table 105: Iron Artifacts From Feature 105

Appendix 1.7: Modern Features Artifact Tables by Feature

Feature 86		
Type	**Quantity**	
Whole Un-Cinched Cut Nail		
0.51in.-1.00in.	1	
1.01in.-1.50in.	24	
1.51in.-2.00in.	16	
2.01in.-2.50in.	7	
2.51in.-3.00in.	1	
Total	**49**	
Whole Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.01in.-1.50in.	1	0.76
1.51in.-2.00in.	1	0.77
2.01in.-2.50in.	5	1.14, 2.31, 0.72, 0.89, 1.23
2.51in.-3.00in.	1	1.25
Total	**8**	
Whole Double Cinched Cut Nail		**Length Between Head and Cinch (in.)**
1.51in.-2.00in.	1	B/W H.& 1st= 0.41, B/W 1s & 2nd= 0.92
Modern Round (wire) Spike		
3.01in.-3.50in.	1	
Whole Modern Round (Wire) Nail		
1.01in.-1.50in.	4	
1.51in.-2.00in.	3	
2.01in.-2.50in.	1	
Total	**8**	
Cinched Cut Nail Fragment	6	
Un-Cinched Cut Nail Fragment	109	
Modern Round (wire) Nail Fragment	29	
Miscellaneous		**Weight (g.)**
Medium Staple	1	
Modern Drinking Can Fragment	1	114.1
Whole Un-Cinched Cut Tack	2	
Unidentified Object	1	
Wire fragment	1	

Table 106: Iron Artifacts From Feature 86

Appendix 1.8 Artifact Tables by Group and Class

Group: Kitchen Class Number 7: Tableware			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Fork	Handle	2	73.0
Fork	Two Tine Fragment	14	N/A
Fork	Two Tine Whole	3	58.1
Fork	Wire/Two Tine	1	N/A
Spoon	Whole	1	27.1
Table Knife	Blade	1	N/A
Total		**22**	**N/A**

Table 107: Kitchen Group Class 7: Tableware

Group: Kitchen Class Number 8: Kitchenware			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Bowl	Fragment (103 Body + 24 Rim)	127	101.2
Bucket	Folded Rim	1	4.9
Bucket	Wire Handle	1	14.4
Cut Iron/Kettle	Fragment	69	124.6
Dutch Oven	Fragment	6	Unknown
Dutch Oven Lid	Fragment	1	114.3
Kettle	Foot	16	Unknown
Kettle	Small Kettle Foot	1	12.9
Kettle	Fragment	769	Unknown
Kettle	Fragment W/Handle (Rim)	1	175.0
Kettle	Rim Fragment	1	11.3
Kettle/Dutch Oven	Fragment	1	50.9
Pot/Kettle	Fragment	1	16.8
Possible Bucket	Handle	1	133.7
Sheet (Poss. Kettle Fragment)	Fragment	65	33.6
Utensil	Handle	1	19.7
Utensil	Handle Fragment	2	Unknown
Utensil	Handle With Bone	1	18.8
Utensil	Handle-Possible Utensil	2	17.0
Total		**1067**	**N/A**

Table 108: Kitchen Group Class 8: Kitchenware

Group: Architecture Class Number 11: Nails		
Type	**Sub-Type**	**Quantity**
Whole Un-Cinched Cut Nail	0.51-1.00	425
Whole Un-Cinched Cut Nail	1.01-1.50	3540
Whole Un-Cinched Cut Nail	1.51-2.00	3578
Whole Un-Cinched Cut Nail	2.01-2.50	3223
Whole Un-Cinched Cut Nail	2.51-3.00	1915
Whole Un-Cinched Cut Nail	Undetermined	38
Whole Cinched Cut Nail	0.51-1.00	31
Whole Cinched Cut Nail	1.01-1.50	415
Whole Cinched Cut Nail	1.51-2.00	550
Whole Cinched Cut Nail	2.01-2.50	601
Whole Cinched Cut Nail	2.51-3.00	459
Whole Cinched Cut Nail	Undetermined	39
Whole Double Cinched Cut Nail	0.51-1.00	1
Whole Double Cinched Cut Nail	1.01-1.50	5
Whole Double Cinched Cut Nail	1.51-2.00	13
Whole Double Cinched Cut Nail	2.01-2.50	24
Whole Double Cinched Cut Nail	2.51-3.00	19
Whole Double Cinched Cut Nail	Undetermined	10
Un-Cinched Cut Nail	Fragment	32530
Cinched Cut Nail	Fragment	84
Double Cinched Cut Nail	Fragment	1
Whole Modern Round (wire) Nail	1.01in.-1.50in.	4
Whole Modern Round (wire) Nail	1.51in.-2.00in.	3
Whole Modern Round (wire) Nail	2.01in.-2.50in.	3
Whole Modern Round (wire) Nail	2.51in.-3.00in.	2
Modern Round (wire) Nail	Fragment	31
Whole Modern Round (wire) Nail Core	2.01in.-2.50in.	8
Coiled Nail	None	1
Hand wrought Cinched Nail	1.51in.-2.00in.	1
Large Nail Fragment	W/Head & Part of Shank	1
Possible Cut Nail	Fragment	1
Whole Hooked Cut Nail	None	3
Whole Un-Cinched Cut Tack	0.00in.-0.50in.	43
Whole Cinched Cut Tack	0.00in.-0.50in.	3
Cut Tack	Fragment	6
Small Tack	Two Prong W/Hole in Head	1
Total		**47612**

Table 109: Architectural Group Class 11: Nails

Class Number 12: Spikes		
Type	**Sub-Type**	**Quantity**
Whole Un-Cinched Cut Spike	3.01in.-3.50in.	678
Whole Un-Cinched Cut Spike	3.51in.-4.00in.	46
Whole Un-Cinched Cut Spike	4.01in.-4.50in.	16
Whole Un-Cinched Cut Spike	4.51in.-5.00in.	6
Whole Un-Cinched Cut Spike	5.01in.-5.50in.	1
Whole Un-Cinched Cut Spike	5.51in.-6.00in.	1
Whole Un-Cinched Cut Spike	6.51in.-7.00in.	1
Whole Un-Cinched Cut Spike	7.51in.-8.00in.	1
Whole Un-Cinched Cut Spike	Unknown	22
Whole Un-Cinched Wrought Spike	4.51in.-5.00in. (Rose Head)	1
Whole Cinched Cut Spike	3.01in.-3.50in.	130
Whole Cinched Cut Spike	3.51in.-4.00in.	7
Whole Cinched Cut Spike	4.01in.-4.50in.	5
Whole Cinched Cut Spike	4.51in.-5.00in.	1
Whole Cinched Cut Spike	Unknown	50
Whole Double Cinched Cut Spike	3.01in.-3.50in.	16
Whole Double Cinched Cut Spike	3.51in.-4.00in.	1
Whole Double Cinched Cut Spike	4.01in.-4.50in.	1
Whole Double Cinched Cut Spike	Unknown	4
Whole Triple Cinched Cut Spike	3.01in.-3.50in.	1
Whole Triple Cinched Cut Spike	3.51in.-4.00in.	1
Un-Cinched Cut Spike	Fragment	52
Cinched Cut Spike	Fragment	2
Whole Modern Round (wire) Spike	3.01in.-3.50in.	3
Whole Modern Round (wire) Spike	7.51in.-8.00in.W/String Tied Around It	1
Total		**1048**

Table 110: Architectural Group Class 12 Spikes

Class Number 13: Construction Hardware			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Meat Hook	None	1	41.9
Bracket	Fragment	1	0.0
Cut & Possibly Folded Iron Strip w/a Spike Head?	Fragment	1	33.0
Eye Hook	None	4	1.4, 0.7, 0.5, 1.2
Hinge	Whole	1	35.4
Hinge Pintle	Fragment	1	110.7
Hinge Pintle	Whole	8	N/A
Hook	Fragment	1	8.1
Hook	Whole	3	122.9
Hook	Door/Gate Latch	2	57.2
Latch	Arm	1	22.9
Pad Lock	Latch	1	23.1
Nail Hook	None	1	2.5
Pad Lock	Fragment	4	244.4
Pad Lock	Hinge	1	35.2
Pad Lock	Whole	1	71.7
Pad Lock	Whole W/Brass Cover	2	303.5
Rod/Spike?	Fragment	1	7.7
"S" Hook	None	1	0.7
Staple	Large	4	N/A
Staple	Long	1	96.9
Staple	Medium	1	N/A
Staple	None	24	N/A
Staple	Short	1	50.4
Staple	Small	15	N/A
Strap Hinge	Whole	1	N/A
Wall Hook	None	1	103.9
Total		**84**	**N/A**

Table: 111: Architectural Group Class 13: Construction Hardware

Group: Furniture Class Number 15: Furniture Hardware			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Cotter Pin Hinge	From Small Box	1	9.9
Cut Tack Fragment	W/Brass Head	1	1.8
Small Ring Handle	Probably for Small Tin Box	2	1.7
Total		**4**	**13.4**

Table 112: Furniture Group Class 15: Furniture hardware

Group: Arms Class Number 18: Gun Parts			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Bullet Worm	None	1	N/A
Gun Tool	None	1	33.8
Rifle Sling	None	1	8.4
Total		**3**	**N/A**

Table 113: Arms Group Class 18: Gun Parts

Group: Clothing Class Number 19: Buckles		
Sub-Type	**Quantity**	**Weight (g.)**
Fragment	6	22.5
Half Circle	1	3.5
Miscellaneous	39	N/A
Multi-Tang Fragment	1	1.1
One Side Rounded	1	3.9
Single Tang	24	N/A
Single Tang Fragment	1	8.1
Single Tang W/Brass Guard	1	2.0
Small	1	29.0
Small Buckle Fragment	1	N/A
Tang	1	3.6
Three Tang	14	N/A
Two Tang	7	N/A
Two Tang Fragment	2	6.6
W/Brass Cross Bar	1	3.1
Total	**101**	**N/A**

Table 114: Clothing Group Class 19: Buckles

Group: Clothing Class Number 21: Buttons		
Sub-Type	**Quantity**	**Weight (g.)**
Four Hole	2	4.9
Four Hole Fragment	1	0.6
Fragment	2	1.7
Miscellaneous	4	5.8
W/.Shank	2	6.7
Total	**11**	**19.7**

Table 115: Clothing Group Class 21: Buttons

Group: Clothing Class Number 22: Scissors		
Sub-Type	**Count**	**Weight (g.)**
Fragment	2	14.8
Whole	2	42.7
Total	**4**	**57.5**

Table 116: Clothing Group Class 22: Scissors

Group: Clothing Class: Other			
Type	**Sub-type**	**Quantity**	**Weight (g.)**
Belt Holder	Fragment	1	1.1
Eye	From Hook & Eye	8	N/A
Possible Needle	Fragment	1	0.1
Sewing Needle	Whole	2	0.7
Total		**12**	**N/A**

Table 117: Clothing Group Class: Other

Group: Personal Class Number 28: Keys		
Sub-type	**Quantity**	**Weight (g.)**
Fragment	9	N/A
Whole	9	209.6
Total	**18**	**N/A**

Table 118: Personal Group Class 28: Keys

Class Number 29: Personal Items			
Type	**Sub-type**	**Quantity**	**Weight (g.)**
Pen Nib	None	1	2.8
Pocket Knife	2 Blades w/Bone handle	1	49.0
Pocket Knife	Bone Handle	1	26.1
Pocket Knife	Fragment	21	N/A
Pocket Knife	Frame Fragment	12	13.5
Pocket Knife	Possible Folding Knife	1	18.8
Pocket Knife	Whole	3	N/A
Pocket Knife	Whole W/Bone Handle	3	110.7
Possible Razor Blade	Fragment	1	29.7
Straight Razor	Blade	1	35.9
Straight Razor	Blade Fragment	2	30.1
Total		**47**	**N/A**

Table 119: Personal Group Class 29: Personal Items

Group: Activities Class Number 31: Construction Tools			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Awl	(possibly a scratch awl)	1	8.2
Brace Bit	Whole	1	11.3
Chisel	None	1	18.0
File	Fragment (Triangular File)	1	4.8
File	Modern	1	209.8
File	Modified Flat	1	162.4
File	Whole (Triangular)	1	17.3
Possible log dog	Fragment W/3 links of chain	1	Unknown
Screw Driver/Tool	None	2	N/A
Tack Hammer Head	None	1	122.9
Total		**11.00**	**N/A**

Table 120: Activities Group Class 31 Construction Tools

Group: Activities Class Number 32: Farm Tools & Agricultural Related Artifacts			
Class	**Variety**	**Quantity**	**Weight (g.)**
Hoe	Fragment	1	N/A
Hatchet	Small	1	N/A
Plow Part	None	1	247.4
Wedge	None	1	8.0
Total		**4**	**N/A**

Table 121: Activities Group Class 32: Farm Tools and Agricultural Related Artifacts

Group: Activities Class Number 33: Toys			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Jew's Harp	(Whole)	2	15.0

Table 122: Activities Group Class 33: Toys

Group: Activities Class Number 37: Storage Items			
Type	**Sub-type**	**Quantity**	**Weight (g.)**
Band	Fragment	17	47.0
Band	Fragment Small-Band	2	23.8
Band	Fragment With hole	1	3.5
Band	Narrow Fragment	4	8.8
Band	Very Thin Fragment	2	0.8
Barrel Band	Fragment	80	Unknown
Barrel Band	Fragment (cut iron)	1	Unknown
Barrel Band	fragment smaller width contains nail holes	3	Unknown
Barrel Band	Fragment W/3 Nails	6	30.4
Barrel Band	Fragment/Iron Strip	1	Unknown
Barrel Band	Large Fragment	1	125.2
Barrel Band	Worked Fragment	1	82.4
Barrel Wire	Fragment	1	6.5
Cut Iron Strip	(Possible Barrel Band)	1	Unknown
Total		**121**	**N/A**

Table 123: Activities Group Class 37: Storage Items

Group: Activities Class Number 39: Stable and Barn			
Type	**Variety**	**Quantity**	**Weight (g.)**
Horse Bit	Fragment	2	N/A
Horse Shoe	Fragment	5	414.15
Horse Shoe	Half W/2 Nails	1	90.5
Horse Shoe	W/Nails	2	598.8
Horse Shoe	Whole	11	N/A
Iron Ring	Possibly From a Singletree	1	N/A
Large Ring	(Twisted Open)	1	59.6
Ox Shoe	Half	1	N/A
Ring	(part of harness)	1	25.0
Singletree Hook	None	3	N/A
Sled Runner	Shoe with Chain	1	N/A
Stirrup	Fragment	2	N/A
Tree Ring	(Possible Singletree)	1	N/A
Wagon Equipment	W/Ring & Hook	1	356.3
Total		**33**	**N/A**

Table 124: Activities Group Class 39 Stable and Barn

Group: Activities Class Number 40: Miscellaneous Hardware			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Bone Handle	Fragment	1	7.5
Chain	Broken Link	1	31.7
Chain	Interlocked Links	2	10.4
Chain	Jack Chain Link	1	5.2
Chain	Link Fragment	2	23.7
Chain	Link (Wagon)	1	39.1
Chain	Repair Link	2	N/A
Chain	Individual Link	3	125.6
Chain	Small Length (7 links)	1	0.6
Chain	Small Link	1	0.1
Grommet	Whole	1	1.0
Nut	Large Square	1	106.7
Nut	Square	1	1.3
Nut	None	1	1.0
Podal Support	None	1	N/A
Possible Rivet	Large	1	17.6
Pull Pin	Whole	2	N/A
Retainer	None	1	N/A
Screw	0.00in.-0.50in.	1	N/A
Screw	0.51in.-1.00in.	1	N/A
Screw	1.01in.-1.50in.	2	N/A
Screw	1.51in.-2.00in.	1	N/A
Screw	2.01in.-2.50in.	3	N/A
Screw	Fragment	23	N/A
Screw	Fragment With 2 Washers Attached	1	25.8
Screw	Large	1	18.5
Screw	W/Nut	1	N/A
Bolt	W/Square Nut	1	16.0
Screw	Whole	3	N/A
Shim	Whole	2	N/A
Spring	None	1	8.2
Stake	Fragment	1	14.5
Strap Bolt	Fragment	1	N/A
Washer	None	2	3.2
Winged Nut	Hand Made	1	36.8
Wire Hook	Fragment	3	1.2
Total		**73**	**N/A**

Table 125: Activities Group Class 40: Miscellaneous Hardware

Group: Activities Class Number 41: Other			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Blacksmith Scrap	None	2	92.1
Slag	Fragment	95	Unknown
Pieces of Bar Stock	None	3	22.6
Tool	Fragment	1	Unknown
Tool	Whole	1	8.3
Total		**102**	**N/A**

Table 126: Activities Group Class 41 Other

Group: Activities Class Number 42: Military Objects			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Canister	Base	2	88.4
Cannon Ball	None	1	N/A
Socket Bayonet	Fragment	1	N/A
Shot	Golf Ball Size	1	124.7
Grape Shot	None	67	N/A
Grape Shot	Impacted	2	60.0
Possible Knife/Dirk	Fragment	1	48.85
Total		**75**	**N/A**

Table 127: Activities Group Class 42 Military Objects.

Group: Miscellaneous Class: General			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Block	Worked	1	44.4
Cap	None	1	13.8
Cut Item	Miscellaneous	1	12.2
Handle	Fragment	1	N/A
Handle	Whole	2	112.4
Modern Drinking Can Fragment	Mass	1	114.1
Object	Unidentified	2	N/A
Paper Clip	None	1	0.5
Plate	Perforated	1	340.4
Plate	W/Screw Hole	1	21.6
Rim	Miscellaneous	1	11.8
Ring	Miscellaneous	6	84.7
Rod	Fragment	6	N/A
Stake Flag Fragment	Red Plastic Flag	7	4.6
Strap	W/Nail Hole	1	2.1
Tube	Round Hollow	1	2.1
Tube	Stainless Steel	1	10.0
Wire	(Flag/Modern)	1	3.4
Wire	Fragment	115	N/A
Total		**151**	**N/A**

Table 128: Miscellaneous Group Class: General

Group: Miscellaneous Class: Fragment		
Sub-Type	**Quantity**	**Weight (g.)**
7.51in.-8.00in.	1	6.0
And Plastic Flag	1	3.5
Curved Sheet	6	2.3
Cut	143	N/A
Cut and Folded	1	5.8
Cut Circular	4	27.5
Cut Small Hole	1	1.8
Cut Strip	4	21.5
Cut/Incased in Sandstone	2	13.7
Flat	3	1.6
Folded	15	79.8
Folded Cut Sheet	1	11.6
Folded Sheet	1	7.8
Large Cut Sheet	1	77.5
Mass	1	10.6
Miscellaneous	593	N/A
Notched	1	N/A
Sheet	294	N/A
Sheet W/Three Holes	1	8.5
Sheet With Rivet	1	5.8
Small Brass Inset	1	5.4
Small Cut Triangle	1	0.3
Small Sheet Mass	1	35.8
Small Strip	2	N/A
Strip W/2 Holes	1	8.0
Strip W/Nails	1	5.3
Thin Cut Strip	3	4.0
Tinned	2	11.0
W/Nail	2	3.5
Total	**1089**	**N/A**

Table 129: Miscellaneous Group Class: Fragment

Group: Miscellaneous Class: Knife			
Type	**Sub-Type**	**Quantity**	**Weight (g.)**
Knife	Blade	1	17.2
Knife	Blade and Partial Handle	1	N/A
Knife	Blade Fragment	11	N/A
Knife	Blade Fragment (pocket?)	1	4.6
Knife	Blade Fragment W/Tang	1	25.9
Knife	Blade/Flat Thin Fragment	1	14.6
Knife	Bone and Iron Handle	1	28.5
Knife	Fragment	14	N/A
Knife	Fragment (Lower part of blade w/portion of handle less the bone/wood inlay)	1	11.4
Knife	Large W/Bone Handle	1	78.0
Knife	Notched Fragment	1	N/A
Possible Knife	Blade	1	12.6
Total		**35**	N/A

Table 130: Miscellaneous Group Class: Knife

Appendix 1.9: Figures

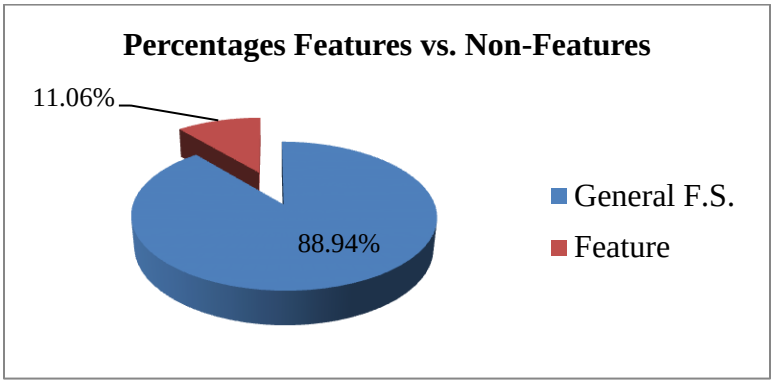

Figure 5: Percentages Features vs. Non-Features

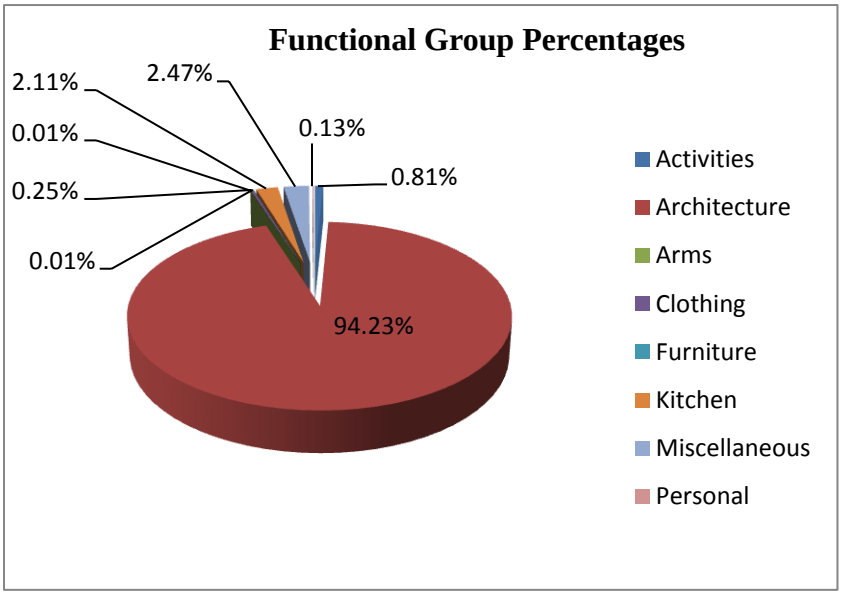

Figure 6: Functional Group Percentages

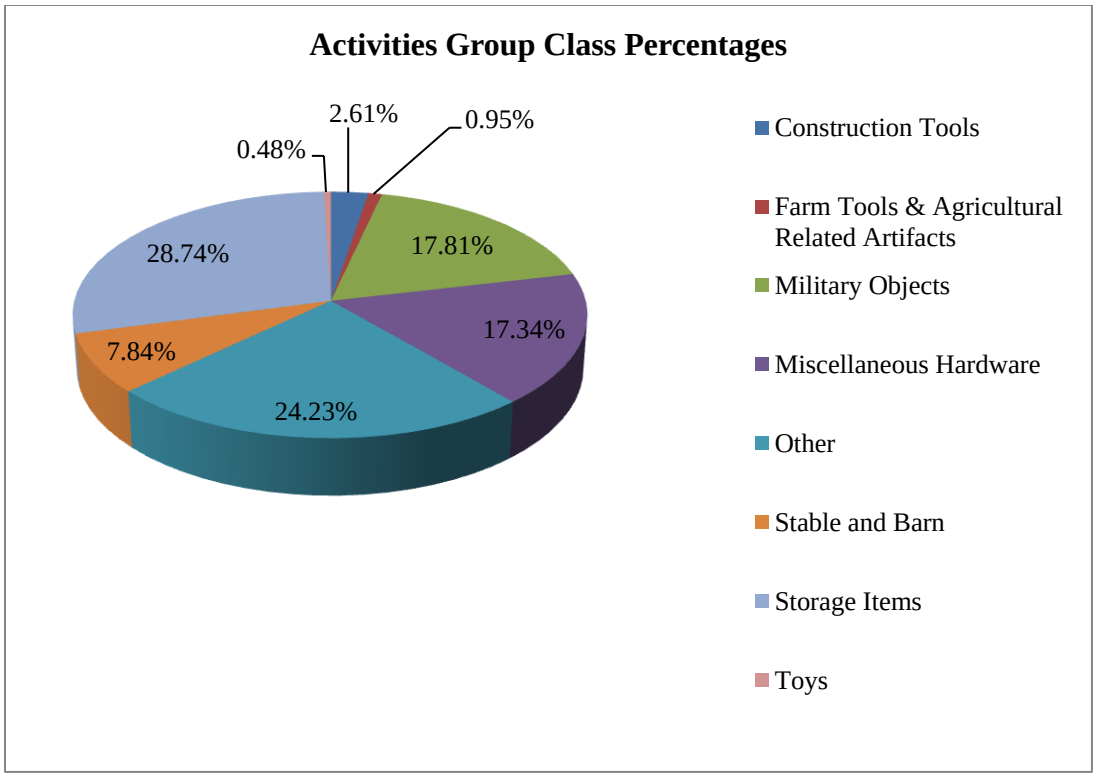

Figure 7: Activities Group Class Percentages

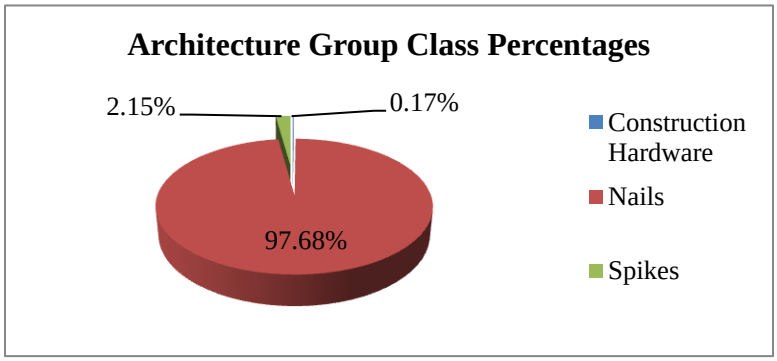

Figure 8: Architecture Group Class Percentages

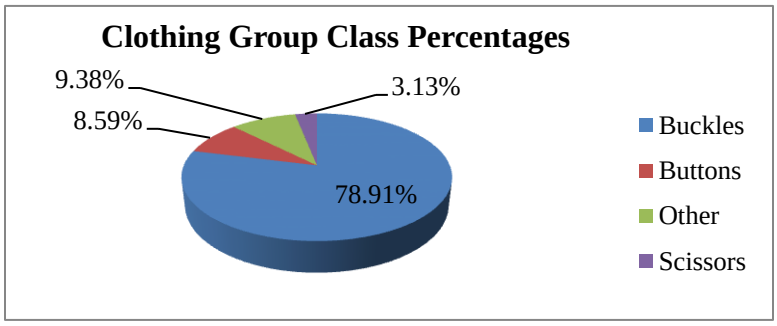

Figure 9: Clothing Group Percentages

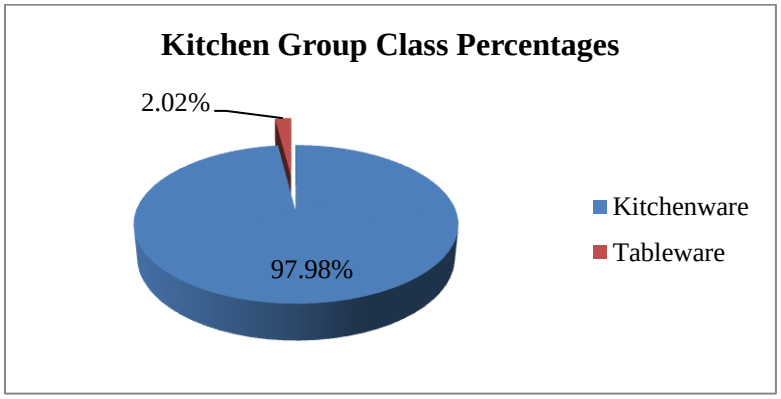

Figure 10: Kitchen Group Class Percentages

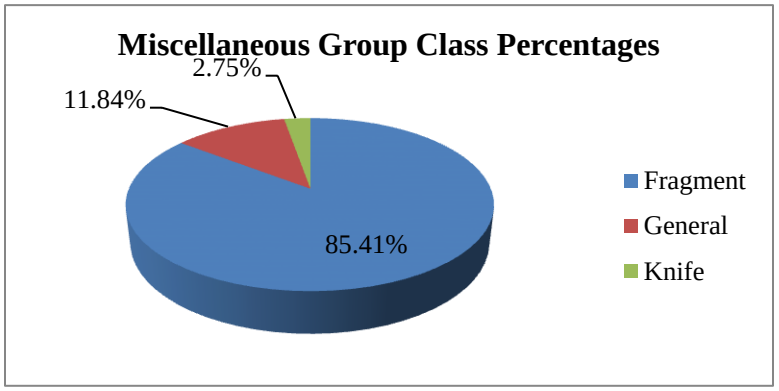

Figure 11: Miscellaneous Group Class Percentages

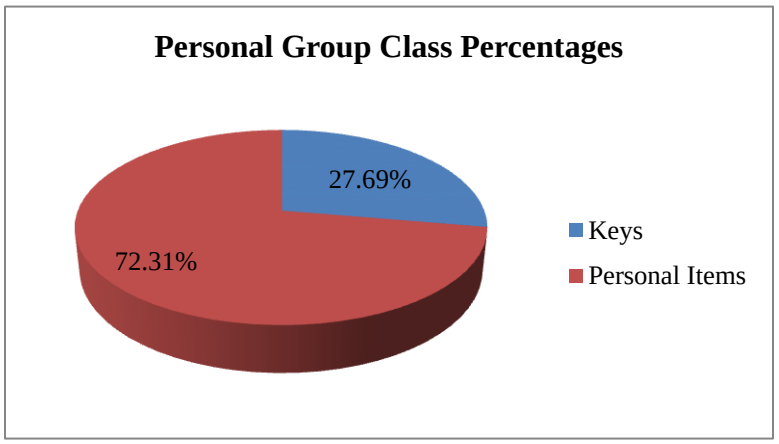

Figure 12: Personal Group Class Percentages

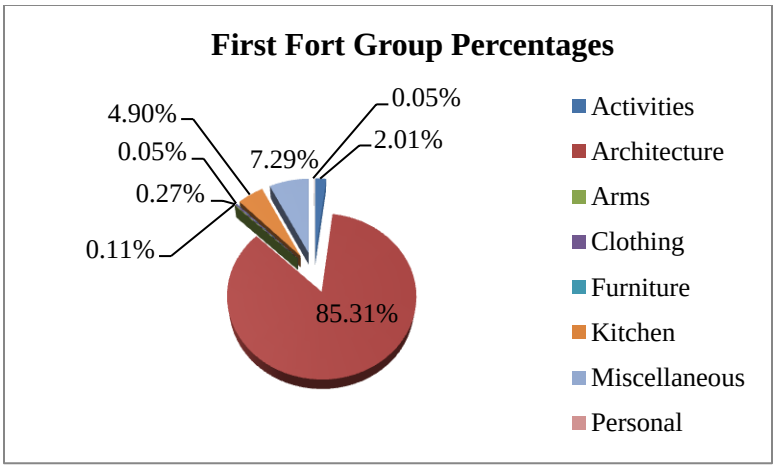

Figure 13: First Fort Group Percentages

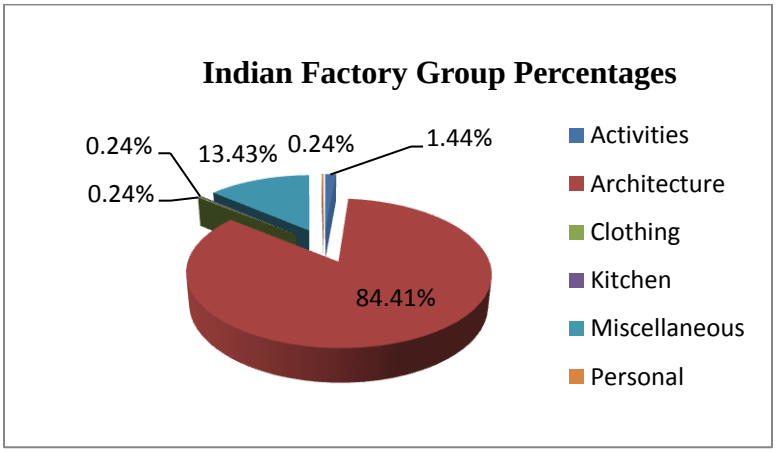

Figure 14: Indian Factory Group Percentages

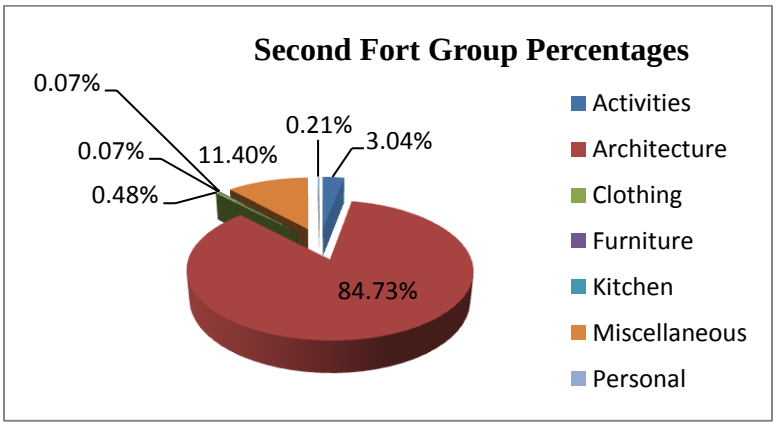

Figure 15: Second Fort Group Parentages

Appendix 1.10: Photographs

Figure 16: Whole Spoon

Figure 17: Hand Wrought Cinched Nail

Figure 18: Meat Hook

Figure 19: Modified File

Figure 20: Iron Ring

Figure 21: Singletree Hook

Figure 22: Singletree Hook

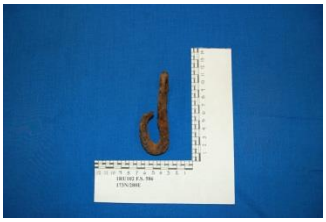

Figure 23: Singletree Hook

Figure 24: Chain Repair Link

Figure 25: Handmade Winged Nut

Figure 26: Handmade Winged Nut

Figure 27 Slag Fragment

Figure 28 Cannon Ball

Figure 29: Socket Bayonet Fragment

Figure 30: Strap Hinge

Figure 31: Strap Hinge

Figure 32: Hinge Pintle

Figure 33: Hinge Pintle

Figure 34: Chain Repair Link

Figure 35: Blacksmith Scrap

Figure 36: Wall Hook

Figure 37: Wall Hook

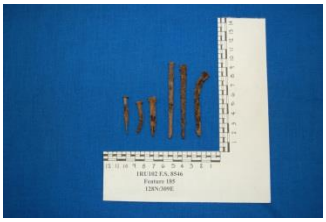

Figure 38: Machine Cut Nails

Figure 39: Slag Fragment

Figure 40: Hinge Pintle Fragment

Figure 41: Hinge Pintle Fragment

Figure 42: Whole Scissors

Figure 43: Pad lock Fragment

Figure 44: Whole Key

Figure 45: Whole Pad lock with Brass Cover

Figure 46: Whole Pocket Knife with Bone Handle

Figure 47: Whole Pocket Knife with Bone Handle

Figure 48: Stirrup Fragment

Figure 49: Strap Bolt

Figure 50: Strap Bolt

Figure 51: Bolt Fragment with Nut

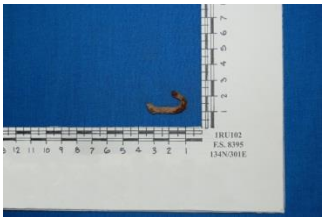

Figure 52: Broken Chain Link

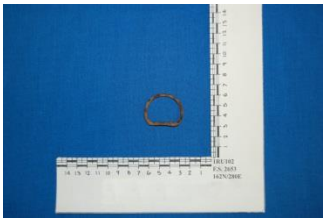

Figure 53: Buckle Half Circle

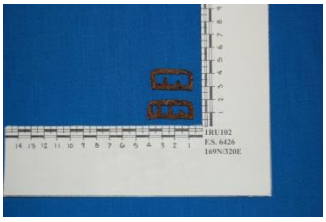

Figure 54: Three Tang Buckles

Figure 55: Small Buckle

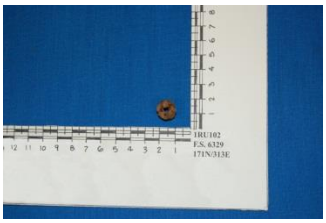

Figure 56: Coiled Nail

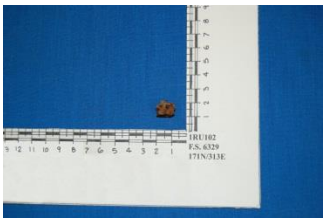

Figure 57: Coiled Nail

Figure 58: Door/Gate Hook

Figure 59: Door/Gate Hook

Figure 60: Staple

Figure 61: Large Staple

Figure 62: Dutch Oven Lid Fragment

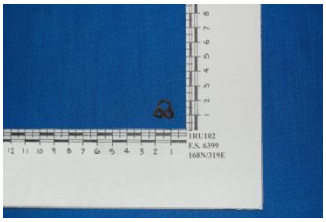

Figure 63: Eye

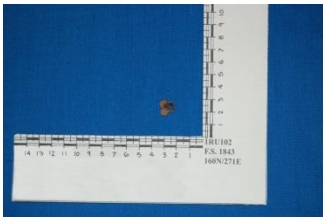

Figure 64: Eye

Figure 65: Eye

Figure 66: Eye

Figure 67: Eye

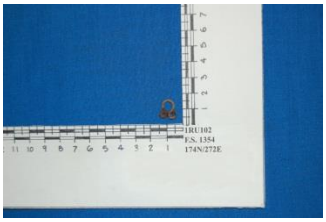

Figure 68: Eye

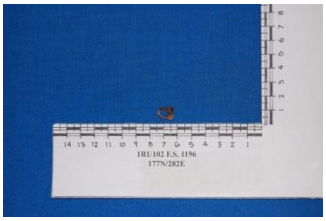

Figure 69: Eye

Figure 70: Two Tine Fork Fragment

Figure 71: Two Tine Fork Fragment

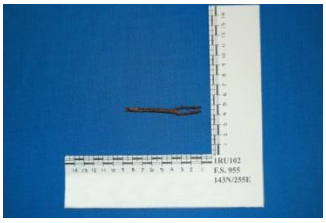

Figure 72: Two Tine Fork Fragment

Figure 73: Two Tine Fork Fragment

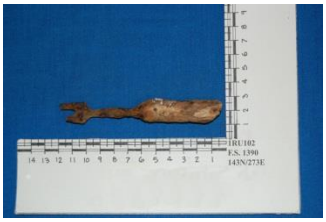

Figure 78: Two Tine Fork Fragment

Figure 83: Grape Shot

Figure 74: Two Tine Fork Fragment

Figure 79: Two Tine Fork Fragment

Figure 84: Grape Shot

Figure 75: Two Tine Fork Fragment

Figure 80: Two Tine Fork Fragment

Figure 85: Impacted Grape Shot

Figure 76: Two Tine Fork Fragment

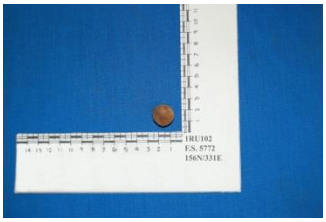

Figure 81: Impacted Grape Shot

Figure 86: Grape Shot

Figure 77: Two Tine Fork Fragment

Figure 82: Grape Shot

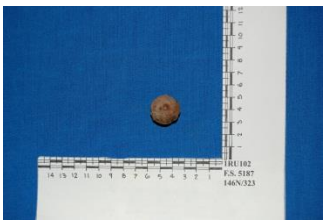

Figure 87: Grape Shot

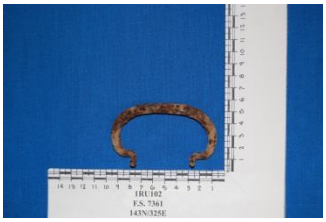

Figure 88: Handle

Figure 93: Kettle Fragment

Figure 98: Blade Fragment

Figure 89: Iron Ring

Figure 94: Kettle Fragment

Figure 99: Blade Fragment

Figure 90: Jew's harp

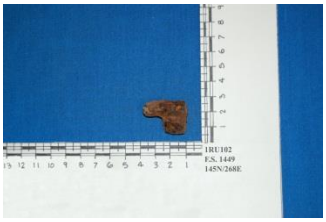

Figure 95: Key Fragment

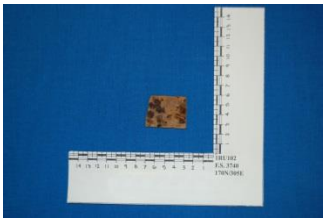

Figure 100:Blade Fragment

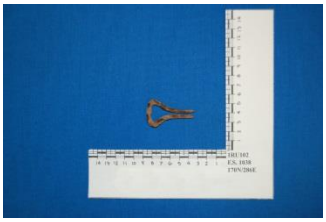

Figure 91: Jew's harp

Figure 96: Blade Fragment

Figure 101:Blade Fragment

Figure 92:Small Kettle Foot

Figure 97: Blade Fragment

Figure 102:Blade Fragment

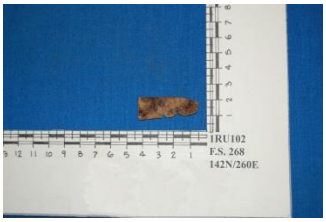

Figure 103: Notched Blade Fragment

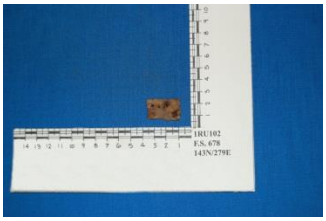

Figure 104: Blade Fragment

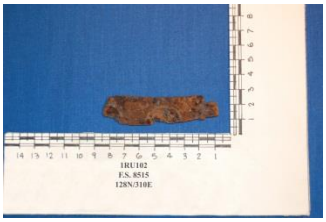

Figure 105: Blade Fragment

Figure 106: Knife Handle

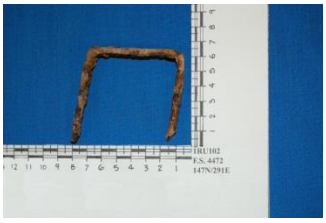

Figure 107: Large Staple

Figure 108: Large Staple

Figure 109: Pad Lock Fragment

Figure 110: Pad lock latch

Figure 111: Pad lock fragment

Figure 112: Pocket Knife Frame Fragment

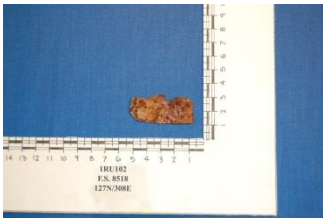

Figure 113: Pocket Knife Fragment

Figure 114: Whole Pocket Knife

Figure 115: Straight Razor Blade Fragments

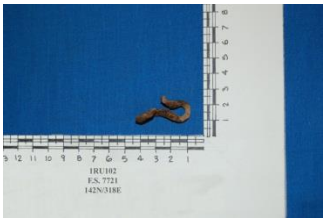

Figure 116: Jack Chain Link

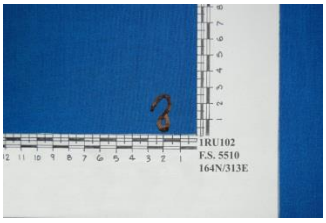

Figure 117: "S" Hook

Figure 118: Screw Driver/Tool

Figure 119: Golf Ball Sized Shot

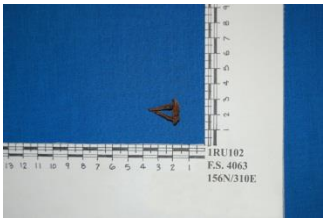

Figure 120: Two Prong Tack with Hole in Head

Figure 121: Spike Fragment

Figure 122: Utensil Handle Fragment

Figure 123: Utensil Handle with Bone

Figure 124: Possible Log Dog Fragment

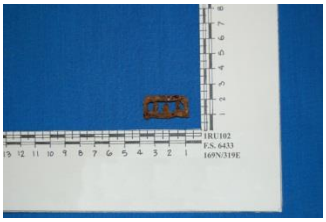

Figure 125: Three Tang Buckle

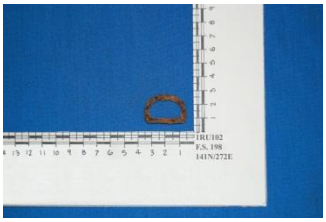

Figure 126: Buckle One Side Rounded

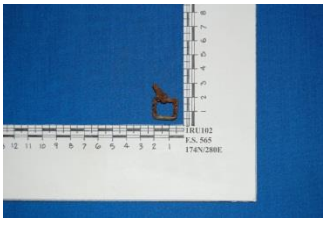

Figure 127: Buckle Single Tang with Brass Guard

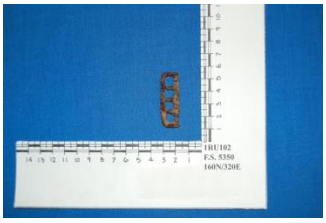

Figure 128: Three Tang Buckle

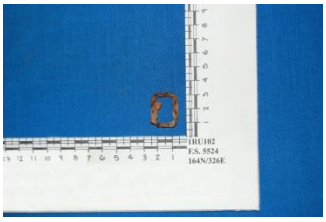

Figure 129: Two Tang Buckle

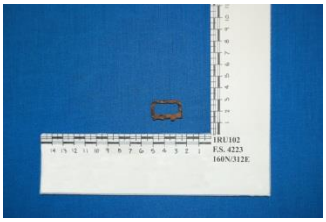

Figure 130: Two Tang Buckle

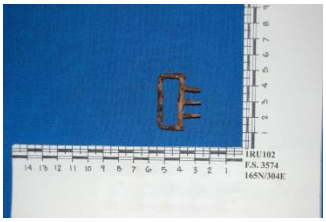

Figure 131: Three Tang Buckle

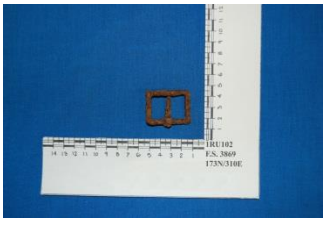

Figure 132: Single Tang Buckle

Figure 133: Whole Hinge

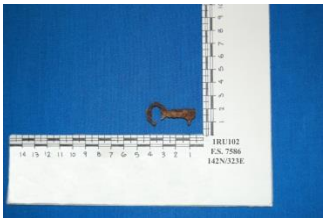

Figure 138: Whole Key

Figure 143: Whole Pocket Knife with Bone Handle

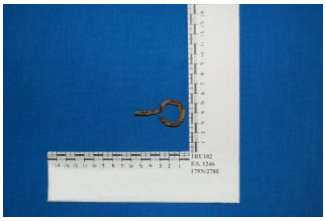

Figure 134: Pull Pin

Figure 139: Whole Key

Figure 144: Whole pocket knife

Figure 135: Whole Horse Shoe

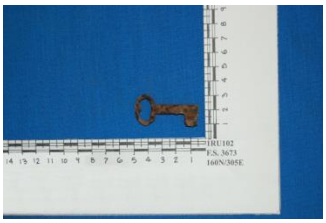

Figure 140: Whole Key

Figure 145: Whole Wrought Rose Head Spike

Figure 136: Horse Shoe W/Nails

Figure 141: Whole Key

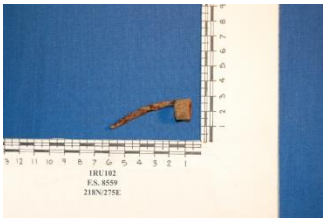

Figure 146: Retainer

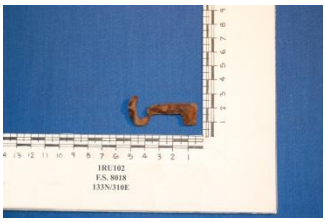

Figure 137: Whole Key

Figure 142: Pad Lock Fragment

Figure 147: Brace Bit

Figure 148: Hinge Pintle

Figure 149: Hinge Pintle

Figure 150: Hinge Pintle

Figure 151: Hinge Pintle

Figure 152: Hoe Fragment

Figure 153: Hoe Fragment

Figure 154: Horse Bit Fragment

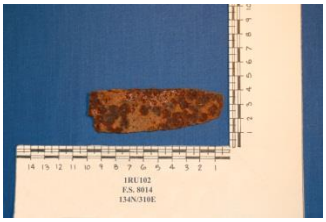

Figure 155: Blade Fragment

Figure 156: Ox Shoe Half

Figure 157: Podal Support

Figure 158: Pull Pin

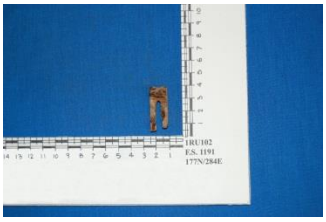

Figure 159: Shim

Figure 160: Shim

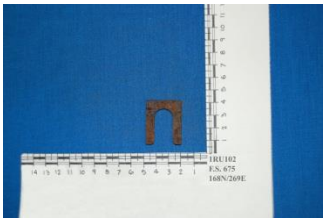

Figure 161: Shim

Figure 162: Singletree Hook

Figure 163: Sled Runner Shoe

Figure 164: Sled Runner Shoe

Figure 165: Stirrup Fragment

Figure 166: Stirrup Fragment

Figure 167: Screw Driver/Tool

Figure 168: Table Knife Blade

Figure 169: Two Tine Wire Fork

Appendix 1.11: Excavation Map

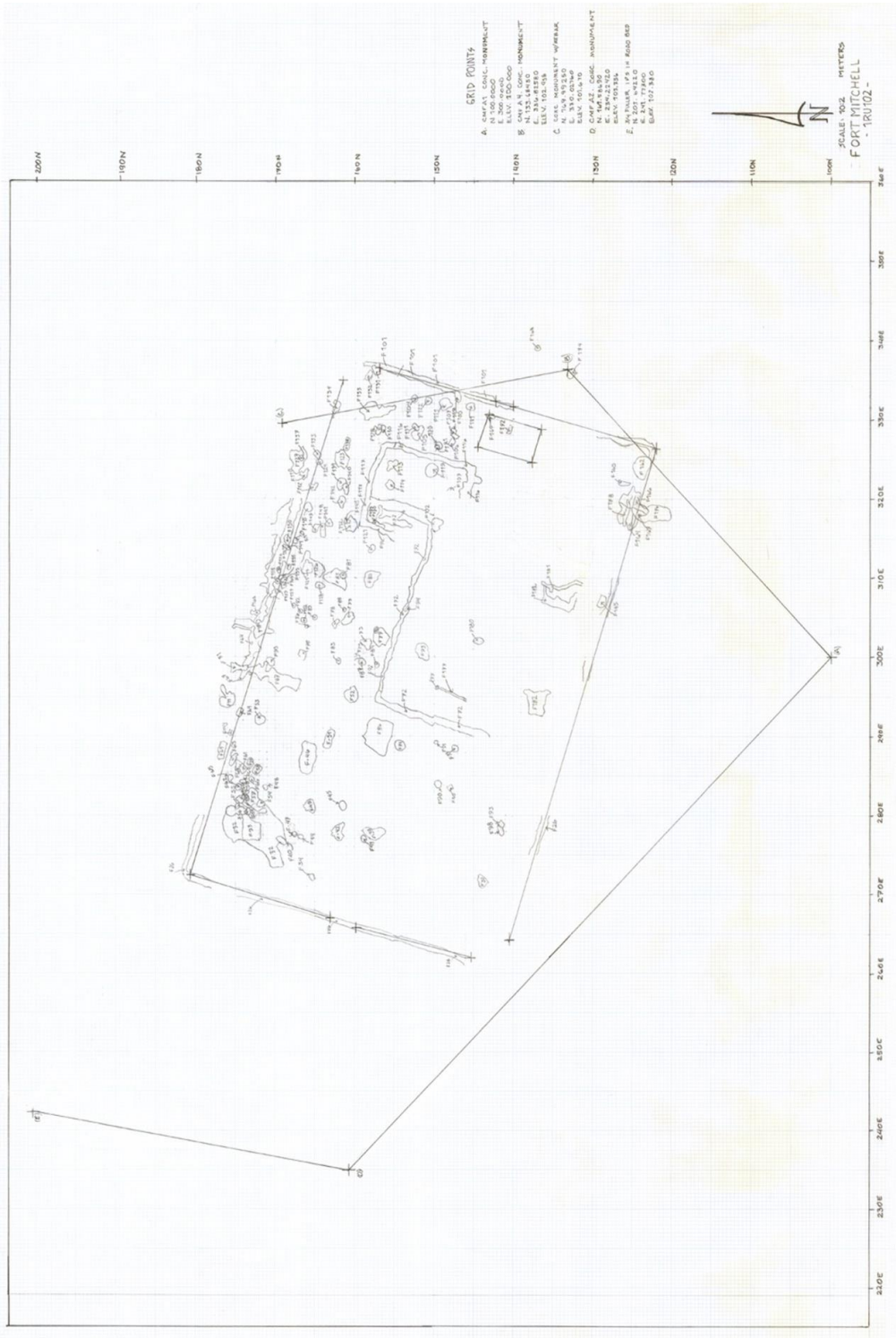

Figure 170: Excavation Map